

WAVES 2016

International Conference

Scientific Aspects of Vedic Knowledge

वैदिक ज्ञान के वैज्ञानिक पक्ष

SOUVENIR

BHARATIYA VIDYA BHAVAN, NEW DELHI

World Association for Vedic Studies (WAVES)
(A Multidisciplinary Academic Society—Tax Exempt in the US)
Wider Association for Vedic Studies (WAVES)
(A Multidisciplinary Academic Society, Regd. in India)
in collaboration with
Bharatiya Vidya Bhavan, New Delhi

WAVES 2016
12TH INTERNATIONAL CONFERENCE
&
20TH INDIA CONFERENCE

on

Scientific Aspects of Vedic Knowledge
वैदिक ज्ञान के वैज्ञानिक पक्ष

Abstracts of Papers

Edited by:

Prof. Shashi Tiwari
General Chair, WAVES 2016

Dr. Umesh K. Singh
Jt. Secretary, WAVES India

Prof. R.P. Singh
Co-Chair, WAVES 2016

Dr. Aparna Dhir
Jt. Secretary, WAVES India

December 15-18, 2016

Venue:

Bharatiya Vidya Bhavan
Kasturba Gandhi Marg, New Delhi-110001

WAVES 2016

[12th International & 20th India Conference of WAVES]

Organizing Committee:

- ❖ Mr. Sashi Kejriwal, President, WAVES International, USA
- ❖ Mr. Dharendra Shah, Treasurer, WAVES International, USA
- ❖ Prof. Bal Ram Singh, Director, INADS, Dartmouth, USA
- ❖ Dr. Shashi Tiwari, General Secretary, WAVES, India
- ❖ Prof. R.P.Singh, Philosophy, Jawaharlal Nehru University, India
- ❖ Mr. Ravi Joshi, Member of Board, WAVES International, USA
- ❖ Dr. Candace Badgett, Member of Board, WAVES International, USA
- ❖ Dr. David Scharf, Member of Board, WAVES International, USA
- ❖ Ms. Aditi Banerjee, Member of Board, WAVES International, USA
- ❖ Dr. Ved Mitra Shukla, Delhi University, India
- ❖ Mr. Ashok Pradhan, Director, Delhi Kendra, Bharatiya Vidya Bhavan, India

Local Committee:

- ❖ Dr. Dharma, LB College, Delhi University, India (Certificate)
- ❖ Dr. Pratibha Shukla, Uttarakhand Sanskrit University, Haridwar (Certificate)
- ❖ Dr. Lalita Juneja, Faridabad, Life Member, WAVES India (Certificate)
- ❖ Dr. Aparna Dhir, Delhi, Joint Secretary, WAVES India (Reception)
- ❖ Ms. Suruchi Sharma, Faridabad, Member, Tarun Tarang WAVES (Reception)
- ❖ Ms. Preeti Verma, Member, Tarun Tarang, WAVES (Reception)
- ❖ Dr. Umesh Kumar Singh, Joint Secretary, WAVES (Technical)
- ❖ Dr. Ranjit Behera, President, Tarun Tarang, WAVES (Photograph)
- ❖ Mr. Tahasin Mondal, Aligarh Muslim University (Photograph)
- ❖ Dr. Bharati Sharma, Roorkee, Life Member, WAVES India (Report)
- ❖ Dr. Aruna Shukla, Hoshiarpur, Life Member, WAVES India (Report)
- ❖ Dr. Kalpana Sharma, ARSD College, Delhi University (Report)
- ❖ Dr. Rishiraj Pathak, SPM College, Delhi University (Cultural)
- ❖ Mr. Prem Deoli, Sanskrit, Delhi University (Banner)
- ❖ Ms. Geeta Rani, I.P. College, Delhi University (Invocation)
- ❖ Dr Sushma Chaudhary, KNC Delhi University (Invocation & Canteen)
- ❖ Dr. Vedwati Vaidik, Sri Aurovindo College, Delhi University (Canteen)
- ❖ Dr Kailash Chandra, Former Researcher, Delhi University (Youth group)

Conference Coordinator:

Prof. Shashi Tiwari

Ph: 09810690322 (M); Email : shashit_98@yahoo.com

Swagatam & Abhinandanam to all Delegates

Introduction of the Conference

‘WAVES 2016’ International conference is organized at Bhartiya Vidya Bhavan of New Delhi to deliberate upon the various aspects of *Bharatiya Vidya*–Vedic learning and ancient Intellectual traditions, which are quite significant today for observant civilization and also for being proud of our great literary heritage. The theme of the conference ‘*Scientific aspects of Vedic knowledge*’, indicates that advancement of science and the transcendent thought of Veda are complimentary to each other. Our hearts desire newness and appreciate modern technology, while our brains feel enormous pride when acquainted with traditional values. Ancient knowledge of our ancestors should not be a subject of history, but must be studied regularly to improve ourselves in current times. The conferences of WAVES provide us an opportunity to study, discuss and think upon the various views of ancient Indian thinkers and Sanskrit texts.

From time immemorial it is well accepted by all that Vedas are the repositories of all knowledge–‘*Vedo akhilo dharmamūlam*’. Vedic seers were great visionaries as they could visualize the truth of life and universe. What they envisaged they revealed it in the *mantras*. That is why Vedic seers are called *Sākṣātkṛtadharmāṇah*, observers of Dharma, the eternal truth. Indian traditions believe that Vedic *mantras* communicate to us real knowledge and express authentic principles of cosmic order.

Vedic seers either state explicitly or give good hints in their *mantras*, which may sound highly enigmatic, but they themselves were in least doubt about the observations. They claim to have experiences in realms that are not accessible to us. They could have had knowledge that we, despite our proud technological progress and centuries of philosophical speculation cannot attain. Therefore they could state simply after crystallizing their observance of a succession of instances, of how the many relate to or arise from One, and that the One has become all (and everything).

*Eka evāgnir bahudhā samiddha ekaḥ sūryo viśvamanu prabhūtaḥ/
Ekaivoṣāḥ sarvamidaṃ vibhātyekaṃ vā idaṃ vi babhūva sarvam// RV 8.58.2*

‘Being one, Agni (fire) is kindled variously in-many-places; the sun being one has prevailed over all; being one, indeed, the Dawn illumines this all (creation); the One has variously (*vi*) become all this and everything’.

Here, the poet states that the entire creation has evolved out of the One, an unidentified original Power, and illustrates this with instances of common experience. Vedic seers are very sure about their statements. They never doubt what they say or experience, because they are experiencing truths during meditation through higher state of consciousness. They did not learn science in laboratories by doing research. A careful examination of the Vedas shows that Vedic poet-seers’ declarations about creation, destruction, life, cosmos etc. are their experiences not speculations. Similarly secrets of human life and after life were also revealed to them which are presented in the *mantras* directly or indirectly.

Science is defined as a systematic enterprise that builds and organizes knowledge in the form of testable explanations and predictions about the universe and beings. Vedic life style, guidance, strategies, observations, and rituals all have been found to be fully validated by modern science. The observations made by Vedic *R̥ṣis*, the seers, are thus convincing enough to confirm that they were indeed great ‘Scientists’. When we talk about science in Vedas, we should not expect Vedas to constitute a text book or handbook of science as understood in modern education, but should appreciate the scientific approach and higher vision put in there.

In the International conference entitled ‘WAVES 2016’ a number of renowned scholars from USA, France, Israel, Belgium, Canada, Trinidad and Tobago are taking part, along with many Indian scholars coming from all parts of India in various capacities. Prof. John Kineman, Colorado, USA; Dr. Koenraad Elst, Mortsels, Belgium; Prof. Robert H. Schneider, Fairfield, USA; Dr. Madan Lal Goel, Florida, USA; Prof. Narayanan M. Komerath, Atlanta, USA; Prof. Michael Sternfeld, Fairfield, USA; Prof. Ved P. Nanda, Denver, USA; Prof. Jeffrey Armstrong, Vancouver, Canada; Prof. Indrani Ram Prasad, Trinidad and Tobago; Prof. B.N. Narahari Achar, Memphis, USA; Prof. Nilesh Oak, Atlanta, USA; Dr. Rajiv Malhotra, Princeton, NJ, USA; Dr. Ramen Nandi, NJ, USA; Prof. Bal Ram Singh, Dartmouth, USA; Dr. Kumar Nochur, Boston, USA; Dr. Joydeep Bagchee, NY, USA; Dr. Come Carpentier de Gourdon, France; Dr. Daniel Raveh, Israel, are few important overseas delegates. Among eminent National Scholars Prof. S.R. Bhatt, Delhi; Prof. Bhudev Shrama, Noida; Dr. M.V. Jagannadham, Hyderabad; Dr. Bhakti Niskama Shanta, Bangalore; Dr. Bhakti Vijnana Muni, Bangalore; Dr. Shilpi Saxena, Delhi; Prof. Bhaskarnath Bhattacharya, Kolkata; Dr. Asha Rani Tripathi, Lucknow; Prof. Ram Sewak Dubey, Allahabad; Dr. Radhey Shyam Kaushal, Delhi; Dr. C.L. Prabhakar, Bangalore; Dr. Saroj Bala, Gurgaon; Prof. Lallan Prasad, Noida; Dr. Shakuntala, Assam; Prof. Ganesh Dutt Sharma, Ghaziabad; Prof. Ram Gopal, Jodhpur; Dr. Soma Basu, Kolkata; Prof. R.P. Singh, JNU, Delhi and many other are going to participate. About 121 abstracts of papers to be presented are included in the souvenir of WAVES 2016. Messages published here in the souvenir are from the prominent persons of the three organizing institutes which address about the sincerity and spirit of the conference.

I am hopeful that through this conference we will be successful to show that Vedas contain very deep understanding of social, physical and spiritual sciences, and how Vedic directives are inherently based on modern scientific research.

On behalf of WAVES, I convey my gratefulness to all chairpersons, presenters, delegates and committee-members of the conference and wish them success for their fruitful deliberations.

Prof. Shashi Tiwari
General Chair, WAVES 2016;
General Secretary, WAVES India, Delhi;
Director, WAVES International, USA;
Former Faculty, Sanskrit, M C, University of Delhi.
Shashit_98@yahoo.com

Editorial Note

World Association for Vedic Studies, WAVES, is going to organize 12th International and 20th India conference on the theme *Scientific Aspects of Vedic Knowledge* on December 15-18, 2016, at New Delhi. The respond to WAVES 2016 has been overwhelming. Many well-known academicians and scholars from India and abroad have contributed papers to the conference. We have received, after twice peer review, over 100 abstracts and full papers from academicians and professionals, teachers and students, representatives from academic institutions and voluntary/social organizations, cultural and civilizational bodies, film and media which have covered the range of Vedic philosophical theorizing. Contributors have dealt with most of the concepts, theories and principles on the theme i.e. scientific aspects of Vedic knowledge advocated and developed by Vedic saints and sages. In addition, there are papers which have sought to achieve a thorough going synthesis of Indian tradition comprising of *purushārthas*, *āshramas*, *varnas* and *Yoga* for peace and world order, technology and ecology, human rights and human emancipation, civilizational and cultural crises, and so forth. Even the more recondite sources of Indian spiritual heritage embedded in the *Upanishads*, *Gītā*, *Jainism* and *Buddhisim* have also been highlighted in some papers.

The most striking and impressive feature of Vedic wisdom is to have given the insight to the foundations of science or scientific knowledge. It could be presented in three-fold manner in the following:

1. The pre-eminence of the unmanifest over the manifest: It is expressed in the *Nāsadiya Sūkta* of Rg Veda, 10th *Māṇḍala*, *Rishi* Dirghatamas says— At first was neither Being nor Nonbeing. There was not air nor yet sky beyond. What was its wrapping? Where? In whose protection? Was water there, unfathomable and deep? There was no death then, nor yet deathlessness; of night or day there was not any sign. Who really knows? Who can presume to tell it? Whence was it born? Whence issued this creation? Even the gods came after this emergence. Then who can tell from whence it came to be? That out of which creation has arisen, whether it held it firm or it did not, He who surveys it in the highest heaven, He surely knows—or may be He does not know!

It is said that all came from unmanifest to the manifest in a cyclical manner. At the beginning of a cycle, *Akāsha* is motionless, unmanifested. Then *Prāṇa* comprising of all forces including gravitation, attraction, repulsion, life, etc. begins to act, more and more, creating grosser and grosser forms out of *Akāsha*—plants, animals, men, stars, and so on. After an incalculable time this evolution ceases and involution begins, everything being resolved back through finer and finer forms into the original *Akāsha* and *Prāṇa*, when a new cycle follows. Now there is something beyond *Akāsha* and *Prāṇa*. Both can be resolved into a third thing called *Mahat*—the Cosmic Mind. This Cosmic Mind does not create *Akāsha* and *Prāṇa*, but changes itself into them. All this is manifested in *Ṛta*.

2. The features that remain constant or that which occur on regular basis is seen to be a manifestation of the power of *Rta* in physical cosmos, the cosmic order and of taking into account the occurrence that takes place within it as doing so with a kind of causal necessity. Nature is a gift from *Rta*. *Rgveda* advocates *Rta* which stands for whole cosmic order, moral order and god Varuna as its guardian. It is known as *sat*, *param*, *mahān*, unmanifest, *sangathan*, *vilay*, order, system, nature, it is there since creation. The concept of *Rta* has also been frequently associated with many deities, such as *Brhaspati* who is referred to as possessing a powerful bow with '*Rta* as its string' and as one prepared to 'mount the Chariot of *Rta*', deity *Agni* is described as one who is 'desirous of *Rta*', one who is '*Rta*-minded' and as he who 'spread heaven and earth by *Rta*'; the *Maruts* are referred to as 'rejoicing in the house of *Rta*' and as 'knowers of *Rta*'; *Ushās* is described as having been 'placed at the root of *Rta*'; *Varuṇa* is praised as 'having the form of *Rta*' and along with *Mitra*, as *Mitra-Varuṇa* as 'destroying the foes of *Rta*' and as professing *Rta* by *Rta*.

Rta is the path of morality to be followed by men; it signifies law of righteousness, i.e., *Dharma* and deeds of the individuals to lead the path of righteousness, i.e., *Karma*. The concept of *dharma* is invariably associated with the concept of *Rta*, 'committing one's own actions to the governance of *Rta*, referred to as its *dharma*, and was therefore understood as imperative in ensuring one's own well-being'. *Rta* is referred to *dharma* or law of righteousness to remind individual of their duties towards the society. It is the law operating between *karma* and its *phala*. The duty of the *Purush* is to protect the cosmic order because there is essential unity/harmony between sentient and non-sentient beings, relation *vyasṭi* (human), *samaṣṭi*, *sriṣṭi*, *mahān*, etc. Nobody except humans can violate *Rta*. Humans are protectors or destroyers of *Rta*, if humans protect *Rta*, *Rta* will protect humans, like *Dharmo rakṣti rakṣitaḥ* or *Dharmo viśvaya jagataḥ pratiṣṭhā*. (*Mahābhārata*, *vanaprava*) It is an obligation for humans to protect *Rta*. The transition from *Rta* to *dharma* is the same as the transition from *Vedas* to *Upaniṣads*.

3. The *Mundakopaniṣad* tells us that there is knowledge which is *parā* or higher and another as *aparā* or lower. Of these, the lower knowledge is the knowledge of the *Vedas*, of grammar, of etymology, of metres, of the science of the heavens; while the higher knowledge is that which alone reaches the imperishable Being. The difference between them is not of kinds but of degrees. The world of experience may be studied in details and also under the aspect of some principles or laws. While philosophers, generally speaking, use the terms like *concepts* and *categories*, scientists prefer such expressions as *laws* and *theories*. The categories of philosophy and the laws of science are instantiable and concretizable.

The same typical distinction between the way of knowledge and the way of realization is brought out in a dialogue between Narada and Sanatkumar, where Narada, the spiritual disciple, goes to his teacher to learn the science of realization. Asked to say what branches of knowledge he has hitherto studied, Narada tells Sanatkumar that he has studied all the *Vedas*, as well as all history and mythology; he has studied the science of manes, mathematics, the science of portents, the science of time, logic, ethics, the science of gods, the science of

Brahman, the science of demons, the science of weapons, astronomy, as well as the science of charms and fine arts. But he tells his master that grief fills him that so much knowledge is not competent to land him beyond the ocean of sorrow. He has studied only the different *mantras*; but he has not known the self. He has known erstwhile from persons revered like his Spiritual Teacher that he alone is able to go beyond the ocean of sorrow who can cross it by the saving bund of *Ātman*. Would his spiritual teacher enable him to cross over the ocean of ignorance and grief? This passage brings out between lower and higher knowledge. Finally the extremely practical character of the *Upaniṣad* seers towards the problem of Self-realization is exhibited in the *Kenopaniṣad*, where we are told that the end of life may be attained only if the self were to be realized even while the body lasts; for if self-knowledge does not come while the body lasts, one cannot even so much as imagine what ills may be in store for him after death. The same idea is urged with a slightly different emphasis in the *Kathopaniṣad*, where we are told that unless a man is able to realise Self while the body lasts, he must need to go from life to life through a series of incarnations.

What lies as the foundation of science is the conception of matter or material entities/elements. In *Brhadāranyaka Upaniṣad* (II.4.12), there is a dialogue between Yājñavalkya and his wife Maitreyī. Yājñavalkya formulates the notion of body and organic matter whose destruction is the destruction of consciousness. In fact this view appears to be irreconcilable with the position Yājñavalkya presents elsewhere particularly in the context of *Ātman*. However, the materialist import of the Yājñavalkya's above-mentioned statement is very clear. Many statements in *Upaniṣads* are about *Anna* (food) as the source of life. Food depends on water, water on fire and so on. He reaches up to *ātman*. But he mentions at the end that purity of food is responsible for purity of mind. In *Chāndogya Upaniṣad* Chapter VI, Uddālaka Aruṇi tells his son Śvetaketu that mind is formed out of the subtle part of food. In *Taittirīya Upaniṣad* Chapter II *Ātman* is described as *annarasamaya* (constituted by the juices of food). There is importance given to 5 gross elements—earth, water, fire, air and ether. These are regarded as primary on which consciousness depends or the living body requiring organic food depends. The material elements with spiritual goal are the foundation of scientific knowledge in the Vedas. It is instrumental and emancipatory at the same time.

I take the opportunity to thank Mr. Sashi Kejriwal, President WAVES International, Prof. Ram Karan Sharma, President, WAVES India, Prof. Shashi Tiwari, General Chair, WAVES 2016 and Conference Co-ordinator, members of the Organizing Committee specially Prof. Bal Ram Singh who has been the moving spirit behind the whole event. I appreciate and acknowledge the receipt of the messages from the dignitaries. I am profoundly grateful to each and everybody who has contributed paper to the content and intent of the event besides Cultural Bodies and Youth Forums. Number of Institutions specially Bharatiya Vidya Bhavan, Foundations and Social Organizations has come forward to support and sponsor the event. I thank them all.

Prof. Raghwendra Pratap Singh

Co-Chair, WAVES 2016;

Professor, Centre for Philosophy, School of Social Sciences,

Jawaharlal Nehru University, New Delhi-110067

E-mail: rpsinghgnu@yahoo.com, rpsingh@jnu.ac.in

Message from BVB

I am very happy to know that the World Association for Vedic Studies has organized its 12th International and 20th India Conference–WAVES 2016 in India this year.

The theme of the Conference–“Scientific Aspects of Vedic Knowledge” is extremely relevant today. There is considerable ignorance and doubts about the validity of scientific aspects of the Vedic scriptures.

I am sure the Conference will not only demystify many misconceptions but also encourage the intellectuals and Sanskrit scholars to delve and explore the scientific aspects of the Vedas and allied literature with logical approach and open mind.

Ashok Pradhan, I.A.S. Retd.
Director, Delhi Kendra, Bharatiya Vidya Bhavan;
Formerly Secretary to Govt. of India;

Address:Bharatiya Vidya Bhavan,
Mehta Sadan, Kasturba Gandhi Marg,
New Delhi-110001

28th November, 2016

Welcome Message

I am very excited to welcome everyone for this combined 12th Biennial International WAVES and 20th Annual WAVES-India conference being held at Bharatiya Vidya Bhavan in the heart of Delhi. After eleven conferences held in the Americas since the first one in Atlanta in 1996, WAVES is glad to finally have its conference right in the center of the location of the Vedic Civilization itself.

For a couple of centuries at least, the academic discourse on Vedic knowledge has been pioneered and controlled by institutions far from this center of the Vedic Civilization (India) and by scholars that are outsiders to the practice of the Vedic religion (Hinduism). This conference therefore is unique in that it brings the discussion by scholars from the world over, to the epicenter of the geographical area that to this day practices Vedic philosophy and religion.

The main theme of this conference '*Scientific Aspects of Vedic Knowledge*' is also very appropriate since it is believed by many scholars that due credit has not been given to the source of many original scientific inventions and discoveries that took place in the region inhabited by Vedic practitioners.

It is our hope that young scholars are inspired enough by this international WAVES conference and choose to take up the field of Vedic Studies in India. WAVES International hopes to be the bridge that connects the traditional knowledge systems still present in India to those that study Vedic knowledge systems in the West, so as to reduce the bias and distortion that exists amongst Western Indologists due to the field being unduly influenced by Eurocentric bias amongst western scholars.

WAVES International has added tremendous value through its eleven conferences to date, by bringing together scholars from many continents over the years, and providing a platform to discuss varied topics related to Vedic Studies. Besides conducting these bi-annual international conferences, WAVES is also striving to build a larger team to add other activities like blogs, mini conferences, occasional panel discussions and remote presentations. We hope that more scholars come forward and join us in this noble endeavour. We are grateful to our colleagues in WAVES-India, who have done tremendous job of continuing scholarly activities on a regular basis, for joining hands for WAVES 2016 Conference.

Have a great Conference in New Delhi.

Mr. Sashi Kejriwal

President, WAVES International, USA;

Entrepreneur in Dallas Texas, USA;

Address: 1900 Surveyor Blvd Carrollton, Texas 75006 USA.

Email: sashi@metint.com

Susvagatam

I am glad to know that the World Association for Vedic Studies (WAVES) and Wider Association for Vedic Studies (WAVES) are organizing the Twelfth International Conference with twentieth India Conference in collaboration with Bharatiya Vidya Bhavan, New Delhi, I commend all of the organizers who have arranged, so far, successful conferences at different places in India and USA on various topics of ongoing interest to Vedic scholars. I appreciate the association of Bharatiya Vidya Bhawan this time which indicates that the appeal of Indian intellectual traditions is universal.

The only way to achieve the intent of life is by studying and following the principles of Vedic wisdom, as they intrinsically provide solutions that improve the quality of life through sacred ideas designed to develop mind, body and spirit. Vedic culture is based on universal truths that are applicable to anyone in the world, and this message can be spread through conferences such as 'WAVES.'

On behalf of the Board members of WAVES, I would like to take a moment to congratulate authors and all those volunteers who worked tirelessly to make this particular conference a success. Our 2016 academic event could not have taken place if it was not the endeavor of organizing team, whose dedication has made it all possible. Thanks to Professor Shashi Tiwari, General Secretary, WAVES for her all efforts to keeping the wheel of WAVES moving. *Yojakas tatra durlabhah*. Once again, I would like to extend my deepest gratitude to all those who have supported this conference.

I, on behalf of the WAVES as well as on my personal behalf, have the pleasure and privilege of welcoming you all learned scholars coming from various parts of our country and abroad in order to interact on Vedic principles.

I offer my humble *Susvagatam* to all eminent scholars participating in this International Conference of WAVES.

Prof. Ram Karan Sharma
President, WAVES-India, Delhi;
Former Vice- Chancellor, Sanskrit Universities, Varanasi & Darbhanga;
Former President, International Association of Sanskrit Studies.
Email: ramkaransharma@yahoo.com

Message for Change and Progress

Since its inception in 1996, WAVES, a lone multi-disciplinary academic organization, has promoted research and studies in Vedic and ancient Indian traditions across the globe. WAVES has published earlier conference proceedings on several topics including the Saraswati civilization, Ayurveda, science and mathematics of the ancient Indian civilization.

Whereas WAVES will continue its present activities in the academic field, the monumental work done by WAVES in various fields of Indian civilization should be used to empower the Indian youths. While India from time immemorial has made significant contributions to the world civilization in all spheres of human endeavor, most of these contributions even today remain unknown to the world including in India and in many cases distorted and unacknowledged. The present Indian psyche has been highly influenced by nearly one thousand years of foreign domination and the resultant distortion of the Indian history by Western and Marxist historians.

Beyond temples, festivals and social habits, people do not understand how Vedic Dharma, culture and traditions contributed to world knowledge. This has made the Indian youths self-alienated, ignorant and confused resulting in loss of self-esteem.

Creating such awareness about India's ancient achievements and contributions amongst the young Indians should be given the first priority by the present NDA government led by the most dynamic and result oriented prime minister, Shri Narendra Modi if his dreams of making India as one of the most powerful countries in the world has to materialize in the next 20 years. WAVES can play a useful role in helping create case study papers as part of social science/history curriculum for schools and colleges on several topics on the Indian contributions and get them translated into all Indian vernacular languages.

My best wishes to all delegates of 'WAVES 2016'.

Mr. Dhirendra A. Shah

Treasurer, World Association for Vedic Studies, USA;
Director, Board, World Association for Vedic Studies, USA

Address: 780 Ullswater Cove, Alpharetta, GA 30022, USA

Email: siaram@aol.com

Message with Wishes

Ancient wisdom is one of the most valuable heritage of human society .Vedic philosophical traditions rituals, value systems, love for all objects of nature, flora and fauna, birds and animals and concept of world as a family are important for peace, prosperity and harmony in today's world faced with terrorism, pollution and environmental degradation, religious and regional barriers and conflicts, economic disparity ad poverty in large part of world in spite of impressive developments in science and technology.

'Wider Association for Vedic studies' provides opportunities to philosophers, thinkers, scientists, academicians, researchers and people in different walks of life to deliberate, discuss and disseminate Vedic knowledge for welfare of humanity.

I wish success to 'WAVES 2016' International Conference on the theme 'Scientific Aspects of Vedic Knowledge' being organized jointly with Bharatiya Vidya Bhavan, New Delhi.

Prof. Lallan Prasad

Vice President, WAVES India;

President, Kautilya Foundation;

Vice-President, Society for Inter'al Development, India chapter;

Former Dean, Dept. of Business Economics, University of Delhi;

Director APJ Institute of Technology & Management, Noida &

Vice-Chancellor, Jaipuria University.

Email: lallanpd@gmail.com

My Good Wishes to WAVES

Dear Shashi ji! Thanks for informing me about the '12th International and 20th India conference of the twin WAVES.' First let me congratulate the organizers of the twin association for their decision to hold it in India. The Fifth Announcement that you enclosed speaks of it going to be strongly built conference with about 20 participants from outside India and a real strong contingent from places in India.

Having remained its 'Founder President' and thus an active part of thoughts behind it and structure for it during formative years, WAVES in USA was formed to build a strong base of scholars and scholarly activities world wide. After about half a century of independence around 1996, the year in which WAVES was founded; India and Indians were emerging as a big group of rich ancient culture and human values.

WAVES, I think, is the only organization of its type. With its activities in USA and other countries, as well as in India, it has succeeded, at least partly in its mission. However it has a long way to go.

A look at the proceedings of the first three International Conferences, that I edited, any one will see the participation of eminent scholars from Australia, Austria, Belgium, Canada, England, India, Mauritius, Mexico, Nepal, Nepal, Surinam, and Trinidad. From USA itself, there came participants from universities in Arkansas, Cleveland, Ohio, Florida, Georgia, Illinois, Hawaii, Louisiana, Michigan, New Mexico, New York, Texas, and California.

The WAVES-India initially started as a branch in 1997, and later developed as a registered society in its own right. It has several chapters, and has been holding yearly conferences in different parts of India, as also one in Nepal, and publications. This has happened mainly under the General Secretary, Dr. Shashi Tiwari, who has a strong support of young and seasoned academics.

The present persons on helm of the affairs, particularly in USA, have inherited a strong association with wide base. I am sure they have effective plans and projects to add - some more things to its structure. One thing that comes to mind is creation of Institutes or Centres - one in USA and other in India.

With great appreciation and greater hope, I send my good wishes for success of the conference.

Sincerely,

Prof. Bhu Dev Sharma

Founder & Former President, WAVES, USA;

Former Professor of Mathematics, Clark Atlanta University, Atlanta, USA;

Former Professor of Mathematics, JIIT, Noida, & University of Delhi, India

Address: 6/16, Chiranjiv Vihar, Ghaziabad, UP 201002, India

Email: bhudev_sharma@yahoo.com

Best Wishes for WAVES Vision

Dear Dr. Tiwari! I would like to congratulate you and your team for organizing the 12th Biennial International Conference of the World Association for Vedic Studies (WAVES) and the 20th Annual Conference of the Wider Association for Vedic Studies–India (WAVE-India) together as WAVES 2016 Conference, December 15-18, 2016, in collaboration with the Bharatiya Vidya Bhavan, Delhi on a very timely theme of Scientific Aspects of Vedic Knowledge.

Maryada Foundation's major mission is to promote and advance science and education. Its vision is to create a world free of prejudices and misunderstandings. From Foundation's perspective there couldn't be any activity better than a conference on Vedic knowledge that contains eternal principles not only for humanity but for the entire planet, indeed the whole universe.

Personally, it is an honor for me to be associated WAVES for more than 16 years. WAVES is the only organization currently in the world with the mission of academic scholarship on Vedic traditions, values, knowledge, and practices. It is widely appreciated for its conferences and other activities, including publications and seminars in India and abroad. In fact, there is a need for expansion of its activities particularly encouraging more young scholars globally.

The knowledge embodied in Vedas are known to originate from empirical and experiential observations of sages made from detached state of mind, and are expounded with due interrogation by self, peers, and even students. This is an ideal condition for developing scientific knowledge. The world today needs a reminder of this process, and of the wisdom from the fountain of Vedic knowledge. We hope the Conference will bring forth discussion on topics which will serve esoteric quest as well as practical needs of the modern society.

With the very best wishes for the success of the conference,

Sincerely,

Prof. Bal Ram Singh, Ph.D.

President and Founder, Maryada Foundation for Science and Education,

Add: 11 Back River Drive, North Dartmouth, MA 02747, USA;

Professor and Director, Botulinum Research Center, Institute of Advanced Sciences

Add: 86-410 Faunce Corner Mall Road, Dartmouth, MA 02747, USA;

Director, Board, World Association for Vedic Studies, USA

Email: bsingh@inads.org

Our Association with WAVES

Infinity Foundation has been associated as a sponsor and strong supporter of WAVES since its inception. Credible, peer-reviewed, insider perspective scholarship regarding India's civilizational knowledge systems whose foundation lies in the Vedas is still scant. WAVES was started precisely to build that corpus of work. The etic lens used in deconstructing India's Vedic heritage has played havoc with the portrayals of Hinduism in academia which then spill over into popular discourse. It is necessary to mount a challenge against this biased scholarship which is exacerbating existing fault lines and creating new ones when it is exported to India as study material in humanities disciplines.

Infinity Foundation and WAVES have recognised this danger to Bharatiya civilization and collaborated to conduct biennial conferences with an expanding global membership. In these conferences, papers have been presented in multi-disciplinary activities of research including India's history, philosophy, science, psychology, literature, scriptures, linguistics, archaeology and so on. WAVES has consistently worked over the years to promote scholars from India and abroad, including those who may not be well-versed in English and those non-academics whose primary field of study is not the humanities. The criteria however has been an uncompromising commitment to rigour in the scholarship that is promoted. These conferences have also become the platform where voices which would normally be kept out from mainstream academia would be heard.

Infinity Foundation in its journey has helped bring into existence a sister organisation that is India based, called Infinity Foundation India (IFI). One of the main activities of IFI is the conduct of a series of Swadeshi Indology (SI) conferences. As the name suggests, the aim of these conferences is to provide counters to the flawed theories of the foremost exemplars of certain schools of thought from the etic camp on the one hand and to build the grand narrative of India on the other. IFI intends to create a pool of at least 108 scholars of SI who will be able to challenge the etic narrative regarding India that is currently prevalent and replace it with the more authenticemic one.

IF and IFI are therefore in alignment with the aims of WAVES and hope that together, we would be able to build the Grand Narrative of India.

IF and its sister organisation IFI wish WAVES every success in the conduct of the current edition of its biennial conference on the "Scientific Aspects of Vedic Knowledge".

Dr. Rajiv Malhotra

(A world renowned Author, Thinker and Orator of Indology)

Founder, Infinity Foundation USA;

Mentor/Advisor, Infinity Foundation India;

Director, WAVES International, USA.

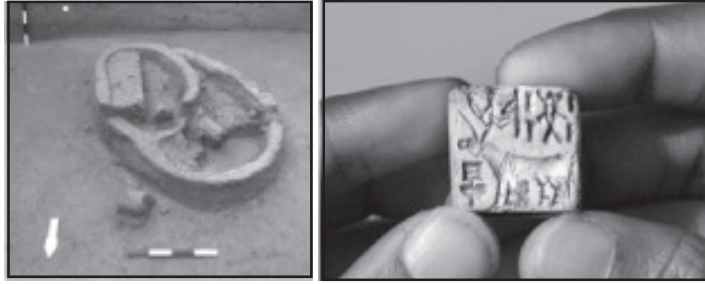
Email: rajivmalhotra2007@gmail.com

Message with a New Discovery

अष्टाश्रियूप in a यज्ञकुण्ड : Binjor dated to ca. 2500 BCE. Significance of the Discovery for Vedic and Civilization Studies

My prayers to *paramaatman* for a successful WAVES conference! World Association for Vedic Studies (WAVES) has been a pioneering effort to promote Vedic studies all over the world. This effort is a stellar contribution to study of ancient knowledge systems which are of eternal relevance since they contribute to the affirmation of value systems for *abhyudayam*, general welfare and *nihśreyas* 'identification of *aatman* with the *paramaatman*'. My sincere *namaskaram* to and seeking the *āśīrvād* of scholars and savants who have contributed to the advancement of objectives of WAVES.

A breath-taking discovery has been reported in April 2015 by students of Institute of Archaeology, National Museum, New Delhi which has profound implications for Vedic and civilization studies.



Binjor seal, अष्टाश्रियूप in a यज्ञकुण्ड

The discovery is a अष्टाश्रियूप in a यज्ञकुण्ड of archaeological site Binjor (4MSR) dated to ca. 2500 BCE. The location of Binjor is significant. It is on the banks of Vedic River Sarasvati close to Anupgarh, about 7 kms. from the border of Pakistan. Together with the अष्टाश्रियूप 'octagonal pillar', a seal has also been found with Harappa (Indus) Script signifying metalwork. The presence of अष्टाश्रियूप 'octagonal pillar' is consistent with the details provided in ancient Vedic texts of Rigveda, Taittiriya Samhita and Satapatha Brahmana describing the *caṣṭā* (which also signifies snout of a boar, *varāha*), *asgodhumaatop* the Yupa as the Vajra which carburizes (infuses carbon into) the soft metal and makes the smelted metal hard. This discovery has profound implications for 1. Veda traditional continuum in Bharat and even in East Borneo, 2. the definitive Vedic cultural framework of over 2000 civilizational sites on the banks of Vedic River Sarasvati, and 3. decipherment of Harappa (Indus) Script as a data archive of metalwork catalogues along a Seafaring Maritime Tin Route from Hanoi to Haifa which existed at least 2 millennia before the Silk Road.

Dr. S. Kalyanaraman,

Director, Sarasvati Research Centre, Chennai;

Former President, WAVES–India;

Director, Board, WAVES International, USA;

Email: kalyan97@yahoo.com

SCHEDULE OF SESSIONS–WAVES 2016

First Day—December 15, 2016

Registration (From 02.00 p.m. onward on venue)

Tea: 03.00 p.m. to 03.30 p.m.

Inaugural Session (Conference Hall): 03.30 p.m. to 06.00 p.m.

Youth Interaction Session: 06.15 p.m. to 7.30 p.m.

Dinner: 07.30 p.m. to 08.30 p.m.

Second Day—December 16, 2016

Tea: 8.30 a.m. to 9.00 a.m.

Plenary Session I—09.00 a.m. to 11.00 a.m.

Tea Break: 11.00 a.m. to 11.30 a.m.

Academic Session-I A (Seminar Room I): 11.30 a.m. to 01.30 p.m.

Academic Session-I B (Seminar Room II): 11.30 a.m. to 01.30 p.m.

Academic Session-I C (Seminar Room III): 11.30 a.m. to 01.30 p.m.

Lunch: 01.30 p.m. to 02.30 p.m.

Academic Session-II A (Seminar Room I): 02.30 p.m. to 04.00 p.m.

Academic Session-II B (Seminar Room II): 02.30 p.m. to 04.00 p.m.

Academic Session-II C (Seminar Room III): 02.30 p.m. to 04.00 p.m.

Tea Break: 04.00 p.m. to 04.15 p.m.

Plenary Session II—04.15 p.m. to 05.30 p.m.

Panel Discussion I—05.30 p.m. to 06.30 p.m.

Cultural program: 06.30 p.m. to 7.30 p.m.

Dinner: 07.30 p.m. to 08.30 p.m.

Third Day—December 17, 2016

Tea: 8.30 a.m. to 9.00 a.m.

Plenary Session III—09.00 a.m. to 11.00 a.m.

Tea Break: 11.00 a.m. to 11.30 a.m.

Academic Session-III A (Seminar Room I): 11.30 a.m. to 01.30 p.m.

Academic Session-III B (Seminar Room II): 11.30 a.m. to 01.30 p.m.

Academic Session-III C (Seminar Room III): 11.30 a.m. to 01.30 p.m.

Lunch: 01.30 p.m. to 02.30 p.m.

Academic Session-IV A (Seminar Room I): 02.30 p.m. to 04.00 p.m.

Academic Session-IV B (Seminar Room II): 02.30 p.m. to 04.00 p.m.

Academic Session-IV C (Seminar Room III): 02.30 p.m. to 04.00 p.m.

Tea Break: 04.00 p.m. to 04.30 p.m.

Poster Session—04.30 p.m. to 05.00 p.m.

Plenary Session IV—05.00 p.m. to 06.30 p.m.

Yoga Film : 06.30 p.m. to 7.30 p.m.

Dinner: 07.30 p.m. to 08.30 p.m.

Fourth Day—December 18, 2016

Tea: 8.30 a.m. to 9.00 a.m.

Plenary Session V—09.00 a.m. to 11.00 a.m.

Tea Break: 11.00 a.m. to 11.30 a.m.

Valedictory Session (Conference Hall): 12.00 noon to 01.45 p.m.

Lunch: 01.45 Onwards

Index

I

- Introduction of the Conference,
Prof. Shashi Tiwari
- Editorial Note,
Prof. Raghwendra Pratap Singh
- Message from BVB,
Mr. Ashok Pradhan
- Welcome Message,
Mr. Sashi Kejriwal
- Susvagam,
Prof. Ram Karan Sharma
- Message for Change and Progress,
Mr. Dharendra A. Shah
- Message with Wishes,
Prof. Lallan Prasad
- My Good Wishes to WAVES,
Prof. Bhu Dev Sharma
- Best Wishes for WAVES Vision,
Prof. Bal Ram Singh
- Our Association with WAVES,
Dr. Rajiv Malhotra
- Message with a New Discovery,
Dr. S. Kalyanaraman
- Schedule of Sessions–WAVES 2016

II

ENGLISH ABSTRACTS

- 1 Abani Sonowal
- 2 Amit Kumar Dey
- 3 Anamul Hoque
- 4 Anjali Das
- 5 Aparna Dhir
- 6 Arifa Ara Begum

- 7 Arun Jaganathan V.R.
- 8 Arup Jyoti Sharma
- 9 Asha Lata Pandey
- 10 Asha Rani tripathi
- 11 B.N. Narahari Achar
- 12 Bal Ram Singh
- 13 Bal Ram Singh
- 14 Bhakti Niskama Shanta
- 15 Bhakti Vijnana Muni
- 16 Bharati Sharma
- 17 Bhaskarnath Bhattac
- 18 Bhu Dev Sharma
- 19 C.L.Prabhakar
- 20 Chand Bhardwaj
- 21 Chanda Jha
- 22 Chander Khanna
- 23 Come Carpentier
- 24 Daniel Raveh
- 25 Divya Tripathi
- 26 Gauranga Das
- 27 Gururaj Mutalik
- 28 Indrani Rampersad
- 29 Ish Narang
- 30 Jan Mohammad Lone and
Hossein Kohandel
- 31 Jayanta Baruah
- 32 Jeffrey Armstrong
- 33 John J. Kineman
- 34 Joydeep Bagchee
- 35 Jutika Devi
- 36 K.Srinivas

37 Kamlesh Kapur
38 Koenraad Elst
39 Kumar S. Sharma
40 M.V. Jagannadham
41 M.M. Bajaj
42 M.S.Sheeba
43 Madan Lal Goel
44 Madhu Sharma
45 Michael Sternfeld
46 Mitali Bhagabati
47 Narayanan M. Komerathand &
Padmavathy P. Komerath
48 Nilesh Nilkanth Oak
49 Nirupama Tripathi
50 Pankaja Kaushik
51 Parmeshwarn Murthiyedath
52 R.P. Singh
53 R.S. Kaushal
54 Rajni Sarin
55 Ram Gopal
56 Ram Sevak Dubey &
Sarvesh Kumar Mishra
57 Ramen Nandi & Pankaj & Hemlata
58 Ravi P. Bhatia
59 Reena Kannojiya
60 Richa Sikri
61 Robert H. Schneider
62 Rumi Baishya
63 S.R. Bhatt
64 S. Rammohan
65 Sambhu Nath Mondal
66 Sandhya Gupta
67 Saroj Bala

68 Sati Shankar
69 Shakuntala
70 Shashi Tiwari
71 Shilpi Saxena
72 Soma Basu
73 Subramanian Chidambaran
74 Sumanta Rudra & Shakuntala M. Gawde
75 T. Seetha Rama Lakshmi
76 Tahasin Mondal
77 Trivedi C.P. & Chauhan S.P.S.
78 V.K. Hampiholi
79 Varanasi Ramabrahmam
80 Ved P. Nanda
81 Vedwati Vaidik
82 Vimallesh Kumar Thakur
83 Vivek Vaidyanathan
84 Y.K. Wadhwa

III

HINDI ABSTRACTS

85 Ajay Jha
86 Anita Khurana
87 Anju Seth
88 Archana Dubey
89 Arjun Chaudhary
90 Aruna Shukla
91 Bhagyashri V Pathak
92 Geeta Rani
93 Jagnarayan Mishra
94 Kalpana Kumari
95 Kamla Bhardwaj
96 Kaushal Pawar
97 Khushboo Bharti

98 Lalita Juneja
99 Laxmishwar Jha
100 Madhukar Mishra
101 Narayan Datt Mishra
102 Neelam Trivedi
103 Nisha Goyal
104 Pooja Mishra
105 Poonam Ghai
106 Pratibha Shukla
107 Rajnish Shukla
108 Ramsevak Dubey
109 Ranjit Behera
110 Rishiraj Pathak
111 Sapna Yadav
112 Shalini Verma

113 Shvetaketu Sharma
114 Suman Sharma
115 Supriya Sanju
116 Sushma Choudhary
117 Syam Sunder Sharma
118 Umesh Kumar Singh
119 V.V. Bhatt
120 Vandana Bhan
121 Yogendra Bharadwaj

IV

ABOUT ORGANISATIONS

- World Association for Vedic Studies
- Wider Association for Vedic Studies
- Bharatiya Vidya Bhavan, New Delhi

समानी व आकूतिः समाना हृदयानि वः ।
समानमस्तु वो मनो यथा वः सुसहासति ॥

—ऋग्वेद 10:191.4

(वः) तुम्हारे (आकूतिः) संकल्प (समानी) समान हो, (वः) तुम्हारे (हृदयानि) हृदय (समाना) परस्पर मिले हुए हों, (वः) तुम्हारे (मनः) मन (समानम्) समान हों (यथा) जिससे (वः) तुम लोग (सह सु असति) परस्पर मिल कर रहो ।



II ENGLISH ABSTRACTS

1

Significance of Karma Yoga in the *Bhagavadgita*— with Reference to Ramanuja's Interpretation

Mr. Abani Sonowal

*Ph. D Scholar, Dept. of Philosophy, North-Eastern Hill University, Shillong (Meghalaya)
Email: sonobani89@gmail.com*

The Bhagavadgita is a book of eighteen discourses which is divided into three groups i.e. karma, jnana and bhakti consisting of six chapters. Gita teaches the gospel of action without any selfish attachment to the fruits of action that one performs. Karma simply means action. Action done in a certain manner or path is called karma yoga. Yoga means integration or path of action or a certain way to reach Highest Reality through activity. But one has no right to the fruits known to be derived from such actions. For actions done with a desire for fruits brings about bondage. But acts done without attachment to fruits form God's worship which become a means for release. Ramanuja in his interpretation of the Bhagavadgita says that 'the ultimate teaching of the Gita is Bhakti alone—which leads to the Liberation or Perfection. And jnana yoga and karma yoga are supplementary to bhakti. But from the study of the Gita it is seen that the teaching is all about karma by which one attains liberation performing action without any attachment to the fruits. Therefore it is said that karma yoga is better than both jnana and bhakti yoga. In this paper I will try to show 'how to reach that karma or action or path of action? What lies in one's life to perform this action or karma according to the Bhagavadgita? Also I will try to find out how Ramanuja's idea of Bhakti to be the ultimate teaching of Gita is consistent with text of the Gita.

2

The Theory of Rebirth in Advaita Vedanta Philosophy (*punarjanmavigyanam*)

Mr. Amit Kumar Dey

*M.Phil Student, Sanskrit Studies, Ramakrishna Mission Vivekananda University, Howrah (WB)
Email: amitkumrdey@gmail.com*

Rebirth is one of cardinal concepts in the tradition of Indian Philosophy. Generally, all Indian systems believe that whatever action is done by an individual leaves behind it some sorts

of potency which has power to determine his or her Suffering or enjoyment in the future according as it is good or bad. And in General day to day sayings “as you sow you reap”. When the fruits of actions are Such that they cannot be enjoyed or suffered in the present life, the individual has to take another birth to suffer or enjoy them. Almost all systems of Indian thoughts except Carvaka materialism, accept this doctrine in one form or the other. The word Rebirth means *punarjanma*, referring to a succession of births. It is believed in Indian philosophical systems that karma is the chain that ties man to the wheel of birth and rebirth. Thus rebirth is understood as the corollary of individual actions. Hence karma without rebirth is incomplete, and rebirth without karma is irrelevant. Both are interrelated. Even though there are many research papers written on reincarnation, we find that those papers deal with on the results of actions and due to that the repeated taking up of new bodies. I did not come across any research paper where I could see a detailed study on—What is the state of the indestructible self after leaving the body? How does the self experience the fruits of its actions? How does it take up a new body at the end of the experience of the fruits of the actions? Therefore, I have tried to present in this paper as to how the self takes up new body after leaving the previous one. Besides this, behind all the essential conclusions of Indian Philosophy, we see a social and scriptural purpose. I will try to highlight this aspect as far as possible.

3

Vedic Religion : A Contemporary Analysis

Mr. Anamul Hoque

Research Scholar, Department of Philosophy, Gauhati University

Email: anamul.hoque0102@gmail.com

Vedic Religion has its origin in Vedic literature. Vedic Hinduism is treated as the predecessor of Hinduism or Modern Hindu Religion. The Vedic period is defined by Vedic literature as consisting of the Brahmanas, Aranyakas, Samhitas and Upanisads. The context of these texts is more religious. The Religion spanning through 1000 years period definitely was not static and in its development, however, it moved in two superficially opposite directions— firstly to an increasingly elaborate, expensive, and specialized system of rituals, secondly, towards abstraction and internalization of the principles underlying rituals and cosmic speculation on them. But the beginning of both trends can be seen in the earlier texts.

The question now is ‘What was the nature of religion in Vedic period?’, ‘How religion was originated and developed in that period?’ Regarding Vedic deities, queries like—‘to whom the Vedic worshipers worshiped?’, ‘Was god a singular or plural concept for Vedic cults?’, ‘What was the role of gods and goddesses in that period?’, and ‘What type of relationship was maintained by the worshiped to the worshippers?’ My attempt is to evaluate the above mentioned concepts and to expound that whether Vedic religion is naturalistic as well as an anthropocentric phenomenon or not.

4

A Study on Nagarjuna's *Sunyata*

Ms. Anjali Das

Asstt. Teacher at Srihati Bathan High School, Kamrup Rural (Assam)

Email: anjalidas0190@gmail.com

Nagarjuna's major focus is on the concept of *Sunyata* or emptiness which brings together other key Buddhist doctrines particularly *anatman* "not self" and *pratityasamutpada* "dependent origination". *Sunyata* refers to the essencelessness of every concept. Nagarjuna's opponents frequently objected that of the ultimate truth, as Nagarjuna says, the emptiness of all entities, then Nagarjuna's teaching in fact destroys all entities. Nagarjuna's position results in nihilism—the view that nothing exists at all. Nagarjuna's response to the criticism is that, it is emptiness which makes possible all entities. Nagarjuna's opponents had misunderstood the meaning of emptiness. Emptiness does not mean the non-existence of the various entities of which it is the emptiness. On the other hand, emptiness means that entities exist as dependent arising, without *svabhava*. Emptiness is, Nagarjuna claims the famous Buddhist middle way between externalism and nihilism. It is true that entities exist, but they exist only in dependence upon conditions. To deny emptiness is to deny that there are such dependently arising entities. Therefore, it is emptiness which explains the existence of all entities.

5

Metaphysical Nature of '*Prajapati*' as Depicted in The *Shatapatha Brahmana*

Dr. Aparna Dhir

Assistant Professor, School of Indic Studies, Institute of Advanced Sciences, Dartmouth,
USA & Joint Secretary, WAVES-India

Email: dhir.aparna@gmail.com, adhir@inads.org

The conception of a supreme, primordial being referred by Vedic poets as *Visvakarman*, *Hiranyagarbhah*, *Purusha*, *Prajapati*, etc. suggests that the word *Prajapati* is of the Vedic origin. In Vedic hymns, usually *Prajapati* regarded as the first cause of creation. The concept of *Prajapati* got much elaborated in the *Brahmana* text of Sukla Yajurveda i.e. *Shatapatha Brahmana*. The *Shatapatha Brahmana* deals in the nature of *Prajapati* and develops the doctrines implicit in identifications. In this presentation, an attempt is to identify *Prajapati* with Year '*Samvatsaro Vai Prajapati*' (3.2.2.4), Agni '*Agnirvai Prajapati*' (2.3.3.18), Food '*Annm Vai Prajapati*' (5.1.3.7), Creation '*Prajnanam Prajapati*' (5.1.3.10), *Brahmana* '*Brahma Vai Prajapati*' (13.6.2.8), Sacrifice '*Prajapatiryajna*' (5.2.1.4) etc and explore its cosmic

representations. Thus in *Shatapatha Brahmana* the nature of *Prajapati* has examined by exemplifying its various features.

(Poster Presentation)

6

The Contemporary Relevance of the Concepts of Karma-Yoga in the Bhagavadgita

Ms. Arifa Ara Begum

Research Scholar, Philosophy, North-Eastern Hill University, Shillong (Meghalaya)

Email: ara.arifa7860@gmail.com

The Bhagavadgita is one of the world's most important text—indeed one of the great books of human culture. It has echoed back and forth across the globe, as a defining document of thought and action which has contemporary relevance. It is said to have been delivered at the battlefield in Kurukshetra according to traditionalist more than 3, 000 years before, but according to modern scholars sometimes in between fifth to second century BCE when the war between the Pandavas and the Kauravas. Krishna was said to have spoken the Bhagavadgita to Arjuna. The Bhagavadgita explores the doctrine of *Karma* that has great significance in our contemporary lives. It was a path taught by Krishna to his friend, Arjuna, in the mythic spiritual dialogue, the Bhagavadgita. This paper will explore the various aspects of *Karma* (action) as explained in the Bhagavadgita. The paper will highlight that the concept of *Karma* (action) is highly relevant in the contemporary society as it motivate the people to carry out their responsibilities and duties to serve humanity. This paper will also analyze that *Yajna* (institution) can be maintained by performing Yajna Karma (institutional action). The principle of *Yajna Karma* present in the Bhagavadgita has timeless relevance applicable to many management, administrative and organizational problems. Paper will be discussed on these keywords—karma, yajna, akarma, lokasangraha, saCkhyā etc

7

The Concept of Tirtha in Indian Tradition, Custom and Practice

Mr. Arun Jaganathan V.R.

Lecturer, Deptt. of Sanskrit Sahitya, Sree Sankaracharya University of Sanskrit, Kalady (Kerala)

Email: arun131286@gmail.com

One of the oldest thread of the Indian tradition is the “locative” strand of Hindu holiness godliness and goodness. Its traditions of ritual and respect are linked primarily to place-to

peaks and rock outcroppings, to the headwaters and flowing together of rivers, to the pools and groves of the forests, and to the boundaries of towns and villages. In this locative form of religiousness, the place itself is the primary locus of devotion, and its traditions of ritual and pilgrimage are usually much older than any of the particular myths and deities which attach to it. In the wider Indian tradition, these places, particularly those associated with waters, are often called as tirthas, and pilgrimage to these tirthas is one of the oldest and still one of the most well-known features of Indian religious life.

A tirtha is a “crossing place”, a “ford”, where one may cross over to the far shore of a river or to the far shore of the worlds of heaven. Hence, tirtha has come to refer to these places of pilgrimage, where the crossing might be safely made. In this paper an attempt is made to study the meanings of the word tirtha in its Vedic and later Puranic literature and the elaboration of the concept of tirtha in the locative ritual traditions of Indian custom and practice also.

8

Eco-centric Moral Views and the Vedic Tradition

Dr. Arup Jyoti Sarma

*Assistant Professor, Philosophy, Tripura University
(Tripura)*

Email: aj_p@tripurauniv.in

Environmental issues are closely connected to man’s relation to nature, especially man’s relation with the environment. The liberal philosophy of the western world has been human-centred, in which the core belief is that only human beings have independent moral status, and only they matter in themselves in all spheres of life. However, there are western critics of the liberal conception of ethics, who have disparaged this view as ‘human chauvinism’.

Such critics have advocated a kind of decentering of the status of the human individual from the sphere of moral space. Humans are not to be seen as occupying the moral centre of the world, and there is more to the moral universe than human beings.

It is definitely a turn in the history of the environmental philosophy from a *shallow* human centred morality to a morally deep universe, which is Cosmo-centric in spirit. Indian scriptural tradition is immensely advocating of this ethico-Cosmo-centric views, particularly the views expressed in the *Srimadbhagavad Gita* and also in the *Shukla Yajurveda*. In this paper, I shall critically examine western ethical views on environment and emphasize that Indian scriptural tradition has a rich heritage of environmental protection.

9

Scientific Relevance of Vedic Rituals with Special Reference to Marriage Ceremony

Dr. Asha Lata Pandey

Former HoD, Sanskrit Department, DPS, R.K.Puram, Delhi

Email: ashapandey7@gmail.com

The 85th hymn in the Xth mandala of the Rigveda is known as Vivaha-Sukta. This particular Sukta is the highest ideal of marriage and conjugal relations. Out of a total of forty seven verses in this hymn some are recited during wedding rituals even today as these are related to their relevance in the wedding rituals, wedding vows, suitable relation between the husband and wife, about happy married life and the birth of able children. This particular hymn refers to a mythical marriage of Surya, the daughter of Savitri with Soma. This kind of literature is not available in any other ancient literature of the world. Marriages, all over India, are celebrated with much fanfare and gaiety along with many rituals. These rituals are not just for show and rejoicing but there are many reasons behind them some being scientific, some being psychologically and sociologically significant. Scientific theories can be noticed in the use of the materials and also how they are used during the wedding. Certain rites like the worship of planets, tying of pratisara-the marriage string or ribbon around the wrist and so on are usual and performed with Vedic mantras. Some of these rituals like—Haridralepanam' (use of turmeric), Yajyopavit (janeu), Kankanabandhanam, Reception at the gate (dwarpuja), Seating in the wedding canopy (mandapa), Madhuparka, Application of vermilion (sindoor), Wearing silver anklets and toe rings, Havan and Saptapadi—have been elaborated here.

It is amazing to note that most of the verses from the Vivah-sukta of the Rigveda and some from the Atharvaveda are still recited during wedding rituals. These show a remarkable continuity for several thousand years from the time of the Rigveda down to modern times and this cannot be without a solid and satisfying scientific reason. This holds special significance for our younger generation which questions everything and will not follow any ritual which is not convincing logically and scientifically.

10

Brihaspati and Vak in Aitareya Aranyaka:

A Scientific Analysis

Dr (Mrs.) A.R. Tripathi

10/58, Indira Nagar, Lucknow (U.P.)

Email: ashatripathi12@yahoo.com

Aitareya Aranyaka belongs to *Aitareya Shakha* of Rigveda. The text of this *Aranyaka* lays more emphasis on portraying the gods like *Brihaspati* and *Vak*. They have been presented

as the gods of light and energy. *Brihaspati* provides movement to *Vak* for the expansion of the universe. *Vak* herself is the manifestation of Pure Consciousness and is the primeval rhythm produced at the dawn of the creation. She is light and energy continuum. She is cosmic energy and extends as far as the manifestation of the creation extends. The whole description pertaining to *Brihaspati* and *Vak* is very close to modern science. The singularity at the beginning of the universe was shattered by the spinning and rippling of types of particles paving the way to the expansion of the universe. Those were the particles containing energy and matter. Both *Brihaspati* and *Vak* might be interpreted as elementary particles responsible for bringing the finite life. Key words: *Aitareya Aranyaka*, *Brihaspati*, *Vak*, light-energy continuum, Singularity, motion, sound, cosmic region, elementary particles.

11

Somayajna and The Structure of Rigveda

Prof. B.N. Narahari Achar

*Professor Emeritus, University of Memphis, Memphis,
TN, USA*

Email: narahari.achar@gmail.com

It is proposed that the ten-*mandala* structure of the Rigveda is related to the structure and performance of the most important *yajna*, somayajna. It is generally assumed that the so called ‘family mandalas’ had been compiled earlier and existed as independent units, and the other *mandalas* were added subsequently; the ninth *mandala* was carved out of the others and the tenth was added last. The present work challenges this evolutionary model. It is shown that the first *mandala* actually appears as a plan for the structure of the entire Rigveda samhita. The ninth *mandala* instead of being a sort of ‘appendix’ according to some scholars, is in reality the ‘hub’ of the samhita and provides the organic unity of the whole text. It is argued that it is not very meaningful to talk about ‘earlier’ and ‘later’ mandalas in a chronological sense. The Rigveda is the work of hundreds of Rishis and is certainly not the work of a single person. There were ancient Rishis and newer Rishis and there were those that belonged to the period in between. The arrangement of the Rigveda into ten *mandalas* and the chronology of the Rigveda are two independent aspects. The soma *yajna* forms the basis of the arrangement and hence the structure of Rigveda. The chronology is the chronology of the Rishis who visualized the suktas. Astronomical methods provide a method of ascertaining the chronology, with supporting evidence coming from archaeology.

The present work explains the structure of Rigveda into *mandalas* as arising from the performance of the somayajna. The first *mandalas* actually lays out the plan for the entire Samhita. Especially it explains why *mandalas* one and ten have exactly the same number of suktas and that too why that number is 191. It also suggests that a reliable chronology can be established on the basis of astronomical information.

12

Vedic Human Science: Biology of Religion, Chemistry of Philosophy, and Physics of Spirituality

Prof. Bal Ram Singh

School of Indic Studies, Institute of Advanced Sciences, Dartmouth, MA, USA

Email: bsingh@inads.org

In modern science, physics tackles such issues as non-perceived realities through theoretical formulations and predictions. However, even physics shies away from describing non-material related entities which may not have direct links to matter. So, energy is considered a major non-material entity in physics but it is clearly connected transformatively to matter. Powerful concepts like probability of finding atomic particles in space are directly linked to energy states as in quantum physics, as are the concepts of randomness (entropy) in thermodynamics. The assumptions and parallels between non-perceivable physical phenomenon and perceivable mind and consciousness can be interrogated to derive scientific understanding of spiritual experiences. For understanding such concepts at the perception level, one needs to create models to understand/realize unknown in terms of known. Chemistry provides a rich system of modeling physics and metaphysics concepts, and at times can lead to understanding of complex biological phenomena and life. Chemistry relates to the study of matter, and provides molecular, atomic and subatomic bases of abstract observations of physical laws, biological phenomena and engineering design.

Ancient knowledge of all inclusive universe propounded through *Vedas* is primarily in abstract form. A modern chemistry-equivalent basis of that knowledge could be helpful not only for its comprehension but also for its application to modern society. Past attempts to relate modern science to *Vedic* knowledge unfortunately has remained limited to look for references of metals, atoms, etc. in the text to somehow justify the validity of the ancient knowledge rather than *vice versa*. In this presentation, an attempt is being made to extract universal knowledge of *Vedic* tradition through chemical interpretations of the elements of substance or *dravya* of *Vaseshik* concept with examples of explaining cause of chemical toxicity, origin and evolution of life, Ayurvedic concept of health, and realization of self as the source of universe and infinity. The ultimate utility of knowledge is in the biological system where spirituality and philosophy condenses into functional matter, and thus can be examined to instrumental analysis. Religious rituals are increasingly being examined through scientific lens, and the neuroscience is providing monitoring of brain to let the process of religious beliefs and practices be described in terms of biological phenomenon. The presentation will attempt to openly explore an integrative approach to the knowledge by applying principles of known physical and biological sciences to religious, philosophical, and spiritual dimensions of human beings, and thus human science.

13

Is Sanskrit a Perfect Language for Creating Sustainable Natural Science?

Prof. Bal Ram Singh

*Director, School of Indic Studies, Institute of Advanced Sciences,
Dartmouth, MA, USA
Email: bsingh@inads.org*

In addition to being the source of technology, science has become a source of sustenance (health) as well as a medium of communication for the modern world. One of the fundamental traits of science is the development of principles of natural laws, which are only created in ideal conditions because the real world is infinitely diverse. Whereas science may not have solved all the problems in the world, the scientific approach has become the universally accepted way of learning and understanding.

The question is whether natural languages are available which express science naturally. A language with provision to express flexible meanings, yet with unmutable rules of grammar and word construction. While science appears complex, fundamental concepts of science are fairly simple. Mathematics has been used as a language of science because of its simplicity and accuracy. However, mathematics is not a spoken language, and the only effective spoken language that can express complex mathematical formulation has been Sanskrit. Sanskrit is a language in which each letter retains part of its original meaning even when used in different types of words with varying meanings.

This concept is similar to chemistry being a language of material science where elemental characteristics are retained even when describing qualitatively different molecules. For Sanskrit to meet conditions of this analogy, the origin of letters, their pronunciations, and rules of their incorporation in words need to be well defined. The Paninian system of grammar for Sanskrit has withstood the test of time for over 2, 500 years, with virtually no deviation. This would be unmatched with any other language of the world. Reference of Sanskrit as Devanaagari also refers to its being a perfect system of language.

The concept of Sanskrit sentences in which the words can be placed in any order without altering the meaning in an intriguing concept that has parallel in the science only if we consider the concept of reversibility and equilibrium. In this presentation, similarities in science and Sanskrit will be explored as the medium of communication of knowledge.

It will also be explored if the basic structure, relativity, and style of Sanskrit lend themselves to an area of linguistics for innovating fundamental science from the language itself.

(Poster Presentation)

Stepping Stones Towards an Authentic Theory of Biology

Dr. Bhakti Niskama Shanta

Gen. Secretary, Sri Chaitanya Saraswat Institute, Bengaluru, Karnataka, India

Email: bns@scsiscs.org, Mobile: +91-9748906907

If the developmental process in living organism were such that every change in genotype resulted in a different phenotype and every different phenotype was the result of a difference in genotype, the study of the origin of organic variation would be greatly simplified. However, it is now very clear from the available evidence that it is not the case. Despite the fact that genetics, genomics, and evolutionary biology came up with some significant achievements in different practical applications since the discovery of the structure of DNA and the knowledge gained from genome sequencing projects, we are still lacking a much needed conceptual understanding of the biological development that leads to the manifestation of different life forms that we observe on our Earth. There is a need for an extensive scientific critique and reconfiguration of the ontological framework of organization, ontogeny, and evolution of organic form that is commonly practiced in modern science. In modern science, it is often blindly presumed that organic forms of different living entities are mechanically determined by a material element (say, DNA), which exists prior to form's appearance in the world. Similarly, it is presumed that a particular selective environment and an uninterrupted linear inheritance of genetically coded developmental program are responsible for traits of organisms. According to this presumed vision, homological traits share uninterrupted vertical inheritance from a single common ancestor and thus, species are nothing but result of exclusive gene flow between conspecifics and vertical genetic inheritance. This view dominates modern scientific thinking and thus following this view scientists blindly presume either informational program of inherited genes or a selective environment as the source of organic forms of different living entities. However, more and more evidence continually forcing biologists go beyond the commonly practiced simplistic framework: 'biological development is a mere unfolding of genetic program and environment'. Modern science needs a sound philosophical approach to arrive at a viable alternative for development of a biological theory worthy of life. The role of "consciousness" cannot be ignored from the factors that mould the organisms over time. Vedantic view explains that life has an immanent self-construction capability and it can be observed empirically where an immanent subjective process within a single cell zygote produces varieties of cells that are necessary for different functions in the body of a particular species. Similarly, Vedanta advocates that different forms originate from the *adi-purusha* or primeval personal Absolute, and in the reflected material sphere, the various species of life are subject to a developing principle of evolution of consciousness. This paper discusses the perplexities of materialistic views of origin of organic form and further advocates the Vedantic view (different organic forms are outcome of life's self-construction capability) as the stepping stones towards an authentic theory of biology.

15

Vedantic Concept of life Biology is irreducible to Mechanics or Chemistry

Dr. Bhakti Vijnana Muni

President, Sri Chaitanya Saraswat Institute, Bengaluru, Karnataka, India

Email: bvm@scsiscs.org

Before the advent of modern education, since time immemorial man had no problem in understanding the deeper concepts of God and Reality. The Vedantic paradigm is wholistic with two perfect axiomatic truths which can be empirically verified, viz., 'Life comes from Life' and 'Matter comes from Life'. These axioms also indicate that the non-dual or the *advaya* concept of Vedanta. The principle of nondualism can be understood in terms of the principle of degrees of self-determination. Plurality is accepted in the Vedantic concept as real. Correspondingly in the western world there were great philosophers like Hegel, Plato and Aristotle who also held a wholistic view of life and came to the conclusion that soul is the first principle of life. Life constitutes a higher logic in nature irreducible to physics and chemistry.

16

Gyan Vigyan in the Mahabharata

Dr. Bharati Sharma

Asst. Professor, English, S.S.D.P.C. Girls (PG) College, Roorkee (Uttarakhand)

Email: drbharatis@yahoo.com

Our Vedas seem to echo with elemental sublimity and advance status in comparison to modern science. Modern Science depends upon electric power while Vedic science, on "Prana Shakti" and more we get advancement in science, more we will be sensitized for our mythologies. Bharat has innumerable reasons to be bestowed with the title of Vishwaguru in ancient times; the oldest grammar book by Maharishi Panini, the oldest dictionary of Synonyms by Amarasimhan, the oldest sex manual by Vatsyayana, oldest language constructed by Hindu saints, largest story book by Somadeva and world's largest epic Mahabharata by Vyasa etc. The present paper is a modest attempt to unravel some mysteries regarding Mahabharata, the longest epic in reference to the advance status of science. Through gyan-vigyan complete image of 'Bhagwan' is achieved and it seems that Maharishi Ved Vyas intends to reflect the scientific development of that time while narrating various episodes of Mahabharata unlocking through the mystery of supernatural aspects and incidents like *virat swaroop* of Lord Krishna. *Alokik* or superhuman status of Gandhari, Kunti, Arujuna, Bheem, Karan, Ghatotcach, Abhimanyu,

Draupadi and so on. Actually, due to the advancement in medical sciences everything is possible. In the present scenario, If we think in the background of surrogacy artificial insemination (Test Tube Babies), Cloning (as we saw in *Rakthabheeja* demon story) stem cell techniques, organ transplantation, Major surgeries or operations etc, *Alokik* really seems *Lokik*.

17

Prakriti or Atmosphere—Our Traditional Concept

Prof. Bhaskarnath Bhattacharyya

*Director, School of Vedic Studies, Rabindra Bharati University,
Kolkata (West Bengal)*

Email: jaymabnb@rediffmail.com

*samudramekhale devi parvatasthanamandale/
visnupatni namastubhyam padasparsam ksamasva me//*

Man lives at the bottom of an ocean of air, where he happens to be an air-breather dependent upon favorable conditions of pressure, temperature and chemical compositions of the atmosphere which surrounds him entirely. From the very dawn of civilization the planet earth is enveloped with a blanket of litho, hydro and gaseous elements called *Prakriti* or Nature or atmosphere. Modern scientists opined that atmosphere means mixture of gases surrounding the earth. But in Sanskrit Literature the word *prakriti* does not connote to the modern meaning of only gaseous sphere of the mother earth, but it encloses a collective consequence of litho, hydro and gaseous spheres of this universe instead of the only gaseous sphere accepted by the modern scientists.

Study of atmosphere, ocean and land requires a continuous application of the principles relating to these three basic states of matter like gaseous state, liquid state and solid state can be explicated as *trigunas* of Indian Philosophical traditions. However like lithosphere or solid state and hydrosphere of the earth, atmosphere is also an integral part of this planet earth. All these three states become visible or touchable to the human society getting inter-mixed with each other.

An earnest endeavor will be done in this present paper to correlate the two words apparently supply the different connotations and to convey the exact venture and initiative were taken by our antecedent.

18

On Origins of Science and Mathematics in Vedic Traditions

Prof. Bhu Dev Sharma

*Former Professor of Mathematics, Clark Atlanta University, USA; JIIT, Noida &
Mathematics Department, University of Delhi
Email: Bhudev.sharma@gmail.com*

The Bhagavad-Gita, in Chapter 7, puts 'gyanam' with 'vigyanam' as essential for perfect knowledge. Vedic traditions call for advancement of 'Vigyana.' Vedic traditions are rich in sciences. We find sufficient material on Science and Mathematics in the form of Vedic stanzas and other sources. Work of U.S. mathematician and historian of mathematics A. Seidenberg, has established origins of Mathematics in *Shatapatha Brahmana*.

In this presentation, we trace origins of Physics and Chemistry in Vaisheshika system, Astronomy in Vedang Jyotish of Lagadha (1300 BC), and Geometry and Mathematics in Atharvaveda and other works. The presentation will also show, how the basic Vedic ideas led to developments of science and mathematics in some fields. In fact these have provided great insight for modern science also. For example noble laureate Erwin Schrodinger has acknowledged Vedanta at the root of his discoveries of quantum theory. Also Robert Oppenheimer at the blast of Atom bomb recited verse 32, Chapter 11 of Gita. In particular, the paper presents contributions of about 10 great mathematicians of yore with their discoveries in mathematics and astronomy.

19

Adoption of Yajurvedic Discipline for Smooth Modern Living

Dr. C.L. Prabhakar

*President, WAVES Bangalore Chapter, Bangalore (Karnataka)
Email: clprabhakar@gmail.com*

Vedic knowledge is a feature of Discipline and excellence and so Acharya Sankara said 'vedo nityamadhiyatam' and 'tadutitamkarmasuanushthiyatam'. Also there is a famous adage that 'nishkaranovedoadhyetavyahdhyapatavyahca'. There are many advantages of each Veda learning. Valmiki said by studying RV one would become docile and the ego will go away (Rigvedavinitah) and by studying and following Yajurveda, One would pick up the power of tolerance and fine memory. These two are the aspects of discipline of these two vedas.

Yajurveda teaches action, activity, work and subsequent scope to reap the desired benefits. Yajurveda aims at providing comfortable life here and hereafter but preached a principle that happiness is here and so one should rejoice that her only (iharatiharamadhvam). Life at any time needs to be smooth and comfortable. This could be obtained due to proper work discipline since the connected Powers would get obliged and provide the rewards. The character of Yajurveda is highly instructive. This veda is known to inculcate the principle that donot always expect rewards from Powers and honour of the deities but you should also offer to them something according as your limitations (yathasakti). Moreover the veda prescribes the standards and quantities but at the same time leaves options and choices. Every mantra is a dialogue with the deity concerned. We mention their abilities and put forth our requests for fulfillment. Yajurveda is a veda of Announcements. You have to tell the other person may be god; priest or anyone handled in the context of sacrifice what you expect and what you are doing. It is knowledge to the deity, Yajamana and the spectators at the sacrifice. For example, Adhvaryu, the priest says; asvambadnami in the mid of sacrifice when he ties the horse to the Post in a sacrifice. All this discipline leaves no fear and misunderstanding. As a result there would be peace and spot. This is true all times. Secrets and suppressions lead to problems and confusion. When we enlist the character of YV in this light we are tempted to adopt these into the routine of daily life and beyond.

In Modern times the frame work of situations and scenes experience changes. Still the methods and measures given in the Veda and other scriptures hold water of relevance unswervingly. We have twelve sacrifices and many ancillary rites and a number of gods and various kinds of gifts and things which are liked and accepted by the powerful and influencing people like gods, Kings, munis and so on. This paper attempts to work out the details of the message in Yaurveda indifferent to the context of times. Life is same at all times It has hundred measures and hundred fold Energies and so needs to be established in ayus (Life span) and indriya (Physical strength) at all times overcoming the challenges and troubles and turmoil. Yajurveda is a sure hope and the same is explored from the formulas of Yajurveda.

20

Modern Vedic Living for Sustainable Humane Transformation

Dr. Chand Bhardwaj

Hon. Gen. Secretery and Founder of SASS & SEED, New Delhi

Email: drckb.2007@gmail.com

Humanity is one, it is one world and it needs one common philosophy for peaceful coexistence based on science and logic to promote inter-cultural values, harmony, and brotherhood. To achieve this, the bases of all the faiths needs to explain the essence of all the religions that is spirituality. Spirituality is not a religion. It is a unifying factor. Saints, Sufis

and Scriptures have dealt with the subject and could not achieve the desired results. Taking consideration of the scientific and logical approach on the subject which is now based on modern scientific education. We have developed the common minimum program based on the values being taught in all the faiths which is the need of the hour. Each of the faiths conveys that the source is one God as a capable force in its radiant form (*Noor, Light, Jyoti-swaroop* etc) with its attributes like love, compassion, mercy, forgiveness, wisdom etc and is the source bestows its graceful attributes to all the visiting souls.

The visiting souls are on a visit to this Time Bound Material Creation. In our paper, we shall be explaining the flow of grace & attributes from the common source to the souls that are through the audible stream of life known as *kalma, saut, sarosha*, word, *naad, shabad, unhad shabad, bange-asmani*, celestial music, Big Bang etc. The outer expression of these visiting enlighten souls is the Attention which is like a spark out of which the divine attributes flow in multi-directions. The paper covers how the soul acquired the mind as laws of nature from the quantum field to be understood as the Universal Mind. One of the laws of the nature is “Every action has got an equal and opposite reaction”. As you sow so shall you reap is a common factor as the qualities of the mind in all the faiths. In Addition, the mind deals with the information of time only based on events and experiences gained with the given material body regarding lust, anger, ego, attachments, deceit, intoxication, jealous etc also hunger, cloth, housing and vanities of the world during the visit.

The paper deals how to avoid Attention (The Driving Capable Force) becoming biased by the illegitimate needs of the body & mind and to disturb the peaceful co-existence, harmony and brotherhood. Finally the paper suggests how one can learn to live with sustainable attributes of the Divine by avoiding unsustainable attributes of mind and body based on the illegitimate and legitimate needs.

21

Ayurvedic Scripture for Nature of Sleep and Today's Sleep Disorders

Dr. Chanda Kumari

Guest Lecturer, Sanskrit, Satyawati college, University of Delhi, Delhi

Email: chandascss@gmail.com

This is a question I hear a lot “What is Ayurveda?” The easy answer is that it is the traditional science of Ayurveda medicine is designed to bring the body back into balance so it can heal itself, which in itself is amazing, but underneath all of that, Ayurveda medicine is so much more. Ayurveda is a Vedic science which, like yoga, has only one purpose: to expose the illusion and neediness of the mind and become free. So Ayurveda is the science that seeks to free you of all that, and let the real, delicate, vulnerable and powerful “truth of you” out so you can be fully content with just being you. There are many problems human faced in this

time because there mind is not set one of them is sleeping. The present paper will discuss about this.

Sleep is one of the pillars of Ayurveda, and is considered to be as important as diet in maintaining health and balance in the body. Sleep is the time when the body is able to repair and heal itself. The mind and emotions also become balanced through sleep. This is the innate needs of all living organisms. It is a biological process often regulated by environmental circumstances. In sleep breathing and the heart beats slow down as a result reduces the blood pressure and the metabolic activity of the body to some extent and the body is in a state of complete relaxation. Ayurveda preceptors seem to have taken great pain to analyses the nature of sleep and dreams, its function and impact on human body, mind and consciousness. Usually the night serves as one of the main causative factors of sleep. Thus the preceptors of Ayurveda define the sleep as the nature of night.

In the modern age two kind of sleep—1 NREM 2 REM sleep. This is the modern scientific explanation of sleep. But his nature of sleep and its impact on human behavior and health are mainly found extensively discussed in the ancient Indian classical Ayurvedic scriptures like Carakasamhita, and Susrutasamhita etc. So in this present paper I will explain nature of sleep stated by the ancient Ayurvedic scripture, and how it is useful for today. It will be the purpose of my paper.

22

That...By Knowing Which, All Else Becomes Known

Para Vidya to Aparā Vidya

Mr. Chander Khanna

Member, Executive Committee, Toronto Area Interfaith Council, Canada

Email: ckhanna1@msn.com

Upanishads say...*nayamatma pravachanena labhyo, na medhaya na bahuna shrutena.....*Self is realised only through *Para Vidya*, all knowledge, including that acquired via Scriptures, being limited. Also, Truth reveals itself to only those who know they cannot know it....except by grace. A handful of Realised Souls—absorbed in *Para Vidya*, their minds merged in cosmic Mind—became knowers of all. The import of their revelations is being rekindled as scientists and philosophers worldwide are acknowledging the potential of these revelations shaping human evolution.

This paper explores SIX of many ancient revelations which, despite insufficiency of human language, not only corroborate the emerging understandings of the world around us but also provide elegant answers to the unexplained gaps encountered along the way. Mind, the Next Frontier, was firmly established by the sages exploring its healthy as well as unhealthy

states concluding that *Buddhi*—the finest, subtlest evolute of *Prakriti*—receives its power from reflected Consciousness. *Spanda Karika* fills missing gaps in the Superstring and successor theories with vibrations of Prana....*akunchana-prasarna* of consciousness the primacy of which also explains the phenomena of Action at a Distance-entanglement. Increasingly thinkers/scientists around the World are accepting Pure Consciousness—Prajna—a reflection of which animates all creation as the ultimate reality.

Behind every eerie disorder there is an eerie type of Order *Rta* in *Anrta*. According to the *Rishis*, until transcendence takes place to *Para Vidya*, there will always be elements of uncertainty, unexplained mystery in what we observe/encounter. The *Rishis* emphasised that we are not just silent witnesses but are active participants affecting Reality in which *Drashta*, *Drshyu*, *Drsti* merge into one, which also elegantly explains the Anthropic principal.

The understandings reached by *Vedic Rishis* corroborate relativism, quantum unified field, superstring, anthropic principles. Cellular memory modifiable via *spanda karika*, *yoga nidra*; where that which exists does not convert to nothing nor does it come from nothing—total void being *poornam* (fullness), manifesting *avyakta* to *vyakta*.

Essence to existence to Essence, where creation moves in a never ending *Rta* of *akanchuna-prasarna*, where as a precursor to the anthropic principle *drshta*, *drshtu*, *drshya* merge as one, where Ultimate Realty is known to only those who know they *cannot* know it, where matter/energy is a product of the Shakti (power) of Pure Consciousness.

23

The Emerging Cosmology and Some Vedic and Post-Vedic Indic Insights into the Nature of the Universe

Mr. Come Carpentier de Gourdon

*Writer, Analyst, Convener of International Editorial Board, World Affairs,
The Journal of International Issues, New Delhi, India and Paris, France*

Email: comecarpentier@gmail.com

Can contemporary cosmology draw inspiration and knowledge from ancient Indian astronomy and cosmogony? Why our concepts of the universe and of life are changing in the light of some recent (and not so recent) discoveries.

The rise of exobiology and exopolitics, *lokas*, *dhatu*s, the multiverse etc. will be discussed in the reference of these questions.

24

Philosophical Intersections in Patanjali's Yogasutra

Dr. Daniel Raveh

Department of Philosophy Tel Aviv University, Israel

Currently fellow of the JNIAS, JNU, Delhi

Email: daniraveh@gmail.com

Everyone today is interested in yoga. The word “yoga” in its contemporary denotation refers to a practice that is primarily physical, or which works with body and breathing as its initial tools. The popularity of yoga both in the West and in India results in a vast “yoga literature” produced for the sake of the constantly growing community yoga-practitioners, or “yoga-buyers”.

The word “philosophy” is often used here not with reference to rigorous reflection and investigation rooted in a questioning approach, but rather to “theory” intended to complement the practice of yoga, consisting of authoritative answers, doctrinal prescriptions, or even worse, New-age slogans, clichés and maxims repeated in book after book.

My endeavor in this short talk is of course different. I hope to illustrate that this classical treatise of meditation consists of hardcore philosophical strands, and contributes, along with its commentarial body, to the perennial philosophical exploration of time and temporality, the limits of language, freedom as concept and ideal, the ever-pending question of self and identity, and the role and place of body and memory in identity-formation.

In this talk, we will “travel” together in Patanjali's text, and discuss several of its philosophical intersections. In my reading I correspond with the philosophical work of Krishnachandra Bhattacharyya and Daya Krishna, two of the most creative Indian thinkers in the 20th century.

25

Primary Elements and Brahmanas

Dr. Divya Tripathi

HoD, Sanskrit, DAV Centenary College, NIT Faridabad (Haryana)

Email: divya16tripathi@yahoo.co.in

Vedas are undoubtedly the powerhouse of wisdom. The Brahmanas are the books which vividly explain the Adhidaivika (subjects related to the nature and devas which signify the physical forces or powers) and Adhibhautika (the primary elements) contents as mentioned in the Vedas.

What modern science is able to disclose about the secrets of the physical world in recent years, has already been presented in a simple and fascinating manner in Brahmanas. Their grasp of the details of the creation of the universe is vast and comprehensive.

These books help us to understand the form of the universe prior to its creation and about the stages in its formation. But being the literature of remote past, many of the terms used there, lost their real meaning. Efforts should be made to identify them and to relate them to the scientific terms of modern science so that more and more cosmic secrets, already well established in Brahmanas, can be well understood. Vedic hymns are not merely praise of the nature (God) but these definitely refer to the various physical forces working under the eternal laws of the One Great Being and also unfold the primary elements of creation—the apah, agni, prithvi etc. in a scientific manner.

26

Govardhan Eco Village—A Nexus of Spirituality and Ecology

Mr. Gauranga Das

President, Govardhan Eco Village, Mumbai

Email: acd.gev@gmail.com

Despite our improved lifestyles, deeper concerns in regards to ecology and our relationship with environment continue to plague us increasingly. The principles taught in GaudiyaVaishnavism can provide solutions to these concerns. The Gaudiya Vaishnava theology and culture requires a lifestyle that does not damage, pollute, and exploit Earth. In order to respond to the current existential ecological crisis, there is a clear and distinct movement amongst the contemporary community of Gaudiya Vaishnavas to represent the Earth-honoring values of the tradition and to create communal examples forged and formed in the foundation of these values.

This paper will focus on one such example of a Gaudiya Vaishnava anticipatory community, the Govardhan Eco-Village (GEV) located in the foothills of the Sahyadri Mountains, approximately 100 km north of Mumbai, Maharashtra, India. A brief theological and pragmatic case-study of the Eco-Village will be presented in this paper.

This case-study will demonstrate how GaudiyaVaishnavism contains within itself a profound and relevant eco-theology for our moment of civilizational crisis and crossroads. Preceding the case-study, a brief exposition on the existential and eco-theological foundations of the theory and practice of the anticipatory community will be presented.

27

Exploring the power of Mind for Health, Wellness and Longevity

[Paper By Gururaj Mutalik, Bhushan Patwardhan and Girish Tillu]

Send by

Mr. Gururaj Mutalik

Executive Director, Jijnyasa Foundation, Orlando Florida

Email: www.ancientindianwisdom.com

Last three decades have witnessed spectacular progress in Science. With drastic reduction in Infant and maternal mortality, new formidable challenges like non-communicable, degenerative diseases, and newer infectious diseases have emerged. We have managed to add years to life but not succeeded fully to add life to years. Ancient wisdom of Eastern traditions rooted in Upanishads and Geeta, Yoga and Ayurveda, have addressed these concepts for practical application to life situations. ‘*Jeevaam Sharadah Shatam*’–‘May we live a 100 years of healthy and fulfilling life’ was the aspiration of everyday Vedic prayers. Yoga and Ayurveda way of life contain pathways towards this objective. Chinese and Tibetan traditions have similar concepts.

Modern science at its cutting edge of research is beginning to explore the impact of mind on health and diseases. There is a growing body of research, which is exploring internal mechanisms of harnessing mind power towards healing process. In essence, empowering the mind involves transformation—a process of ‘*Rising Up*’ to initiate and sustain cure of damaged systems and rejuvenation *from within*. There is an imperative need to bridge ancient wisdom with modern scientific developments. This presentation surveys briefly important landmarks in this area.

28

Ram Lila and the Remaking of a New Caribbean Civilization : Nobel Prize Winner Derek Walcott

Dr. Indrani Rampersad

Independent Researcher, Trustee, Ayodhya Research Institute, Ayodhya (Uttar Pradesh)

Email: i_rampersad@yahoo.com

Trinidad is a tiny, almost invisible island, on the globe, and the larger of the twin island state of Trinidad and Tobago. It was Nobel Prize Winner Derek Walcott of St Lucia who, in 1992, brought the open-air Ram Lila in this tiny island to international fame when he crafted his acceptance speech (Nobel Lecture, December 7, 1992. See <http://www.nobelprize.org/>

nobel_prizes/literature/ laureates/1992/walcott-lecture.html) around the motif of the open-air Ram Lila. He recognized that it was not ordinary drama. People of Indian Origin in Trinidad and other parts of the Caribbean are largely descendants of indentured labourers whose ancestors came in the mid-19th to early 20th century to work on contract on colonial plantations, expecting to return at the end of their contract to what they called not Bharat desh or India (which was not yet born when they left), but which they lovingly referred to as ‘muluk’ or ‘muluk desh.’ Theirs is a story of largely deceptive labour schemes with contracts that kept them bonded to their plantation owners; of broken promises and broken hearts; and of creativity and new beginnings. Their literary and sacred texts like Bhagavad Purana, Mahabharata, Shiv Puran, Garuda Purana, Ramcharitmanas, Sukh Sagar, and Prem Sagar and a rich oral and performance tradition gave them the fertile ground on which to grow a new Caribbean identity from the seeds of the ancestral land.

This paper looks at how Nobel Prize Winners Derek Walcott saw Ram Lila as not reflecting a people in search of a “lost India” but being “celebrations of a real presence.” He saw the remaking of a people and their culture as analogous to the putting together of the fragments of a broken jar with a love that is stronger than that “which took its symmetry for granted when it was whole.” In other words, the Indians were investing much more in moulding and shaping their new realities on the foundations of the past, than they were about preserving that past.

29

Protecting the Environmental with Agnihotra– A Scientific Analysis

Mr. Ish Narang

Former Assistant Commissioner, Government of India

Email: iknarang@yahoo.co.in

Modern science has found ways to prevent the pollution, but it has failed to find any means to purify the air once it has been polluted. Our ancient ritual Agnihotra on the other hand, prevents pollution as well as purifies the air once it has been polluted. It is the oldest science of prevention of pollution. It is not a ritual alone but has a great science hidden in it. However several misconceptions are associated with this ritual.

1. Various types of pollutants : Chemical, Biological, and Atomic
2. Modern science has no means to purify polluted air.
3. Ancient ritual Agnihotra : prevents pollution, purifies polluted air The oldest science of preventing pollution and post pollution purification of environment.

Misconceptions on Agnihotra : Oblations burnt/ wasted., Burning increases carbon dioxide, increases pollution.

Facts validated by modern science: Oblations of medicinal substances in Agnihotra—not destroyed, change to gaseous form, spread far & wide.; Cathartic power of the medicinal substances enhanced several times.; Benefit several persons who inhale these gases.

Results of some researches and experiments ::

- a. Study conducted by NBRI, Lucknow and AAHF: 94% destruction of bacteria in air in 60 minutes of Agnihotra.
- b. An Ashwamedha Yajna at Gorakhpur : 70% reduction in sulfur dioxide, 11 % in nitrogen oxide and 66% in bacteria.
- c. Dr. Arvind D. Mondkar (M.Sc., PhD—Microbiology) : 91.4% destruction in bacteria.
- d. Dr. Hafkin : burning of Ghee and sugar kills germs of several diseases.
- e. Professor Tilward : Smoke from burning of Ghee and sugar kills microbes of TB, measles, smallpox.
- f. Dr. Shirowich, a Russian Scientist : Burning of Cow Ghee reduces the impact of Atomic radiation.
- g. Dr. L. Matela Anatoninowska of Poland : ash of Agnihotra helps in reduction of impact of Atomic pollution

Our Rishis were great Scientists

- a. They knew principles of modern science.: Matter can neither be created nor destroyed. & Oblations turn to gases.
- b. Need to protect environment was understood and realized.
- c. Had deep knowledge of medicinal properties of substances offered as oblations.
- d. Agnihotra is the only method of purifying polluted air.

We may thus conclude that Agnihotra is of prime importance in today's world. There is no other method to purify the air once that has been polluted by us. This requirement is of enormous proportion for the in-door air because that is what we breathe most of the time. Our life style of remaining in-doors is doing more and more harm to the environment. In the given circumstances, *Agnihotra* has become an absolute necessity

30

Unity of Existence in Philosophy of Sankara and Mulla Sadra

Mr. Jan Mohammad Lone and Mr. Hossein Kohandel

Research Scholars, Philosophy, Aligarh Muslim University, Aligarh (Uttar Pradesh)

Email: montahajaan@gmail.com

Unity of existence has been interpreted in Islamic philosophy and school of Vedanta in Indian philosophy. The transcendental philosophy of Mulla Sadra is based on multiplicity in

unity and unity in multiplicity that is explained by two theories: (I) Gradational unity of existence, and (II) Individual unity of existence. Sankara as mystic philosopher of Vedanta built his philosophy on unity of existence that is called non-dualism which means that Atman is identical to Brahman. Sankara demolishes the realm of multiplicity with the help of cosmic illusion that is known as doctrine of Maya. This paper focuses on the idea of Mulla Sadra and Sankara in unity of existence. Although both mystic thinker's ideas are common on unity of existence and one reality is hidden by veil and these two thinkers accepted the spirituality of classical ascription in own realms consist of Quran and Vedas so they developed system of thought which is built upon premises and assertions that permit some degree of examination but some discrepancy also can be seen in their ideas and our main endeavour in this paper is to discuss the similarities and polarities among Mulla Sadra's and Sankara's philosophy.

31

A Comparative Study of Indian and Western hilosophy : with Special Reference to Yoga– Vedanta with Western Psychological Concepts

Mr. Jayanta Baruah

Ex-student of Gauhati University, Gwahati (Assam)

Email: jayantabaruah325@gmail.com

Study of mind and consciousness through established scientific methods is often difficult due to the observed –observer dichotomy. Cartesian approach of dualism considering the mind and matter as two diverse and unconnected entities has been questioned by oriental schools of Yoga and Vedanta as well as recent quantum theories of modern physics. Freudian and Neo-Freudian schools based on the Cartesian model have been criticized by the humanistic schools which come much closer to the Vedantic approach of Unitarians. A comparative analysis of the two approaches is discussed.

32

Use Once and Then Throw Away

Dr. Jeffrey Armstrong (Kavindra Rishi)

[A Western Master of Eastern wisdom motivational speaker and spiritual teacher]

Founder of VASA-the Vedic Academy of Sciences and Arts, Vancouver, Canada

Email: kavindra@jeffreymstrong.com

“How destructive science and technology, the greed only ethos of planned obsolescence and a one life only world view can be replaced by a renewal of sustainable Vedic Sciences.”

It is no small irony that the three Abrahamic religions, beginning with Judaism, start counting their brief view of history, at about 5000 years ago, the same historic moment when the Vedic culture of Bharat was observing with considerable trepidation, the beginning of the Kali Yuga and received the Bhagavad-Gita as a possible antidote. Of course, any Vedic practitioner would, with generosity of spirit, applaud those three religions for at least honoring the Supreme Being and proposing to live a morally healthy life. But the thesis of this presentation is that in those three short-sighted religions and the mostly atheistic scientific worldview that arose from them, left out of their teaching a most crucial ingredient to healthy and sustainable life.

What was left out and lost to modern thinking, turns out to be the foundational viewpoint that stands behind all life and action in the Vedic worldview. That deceptively simple scientific perception is that all life is intelligent and this realm of matter was designed by a purposeful Cosmic Intelligence and that ALL forms of life, in every place they live, from protozoa to human, are immortal beings who are undying and sacred atoms or sparks of Divine Consciousness who are visiting the dark realms of matter from their original and permanent home in the luminous abode from which they originally emanated, called Brahman. This material world of ours and all the rest of the universe and universes, are in fact campuses for learning through experience within matter. In that sense a universe is in fact a University and every being on campus deserves respect as a fellow learner and student of life. This is the deeper meaning of the Sanskrit expression “Namaste”, or “Not (na) me (ma) but you (te) “. Or “I bow to you as an immortal and divine fellow student on this great campus of material learning.”

In this presentation, I will propose that the intrinsic purpose in the design of life and the value and purpose of all beings, is not a subject of religious preference, it is instead the foundation of all science and thought. ALL healthy beings want to continue to live and all things. From DNA to planetary systems, are contrivances made of matter by an intelligent and purposeful designer. To deny this is to deny the universal intelligence that is the basis of existence. These views do not require faith, only intelligence and no joining any religion of any particular kind does not become mandatory by embracing these two premises.

But without these two principles, the worst and most degraded behaviours in humans come to the foreground. producing a “Use-once and Throw-away” world-view of the sort that is currently threatening the future of our planet. My proposal is that the very nature and design of the Cosmos screams continuity and thus the need for universal co-operation between all humans and the purposeful laws that govern Nature. Our next use of scientific powers and technological innovation MUST become governed by the universal Vedic principle of “Loka Samgraha” or “Acting to hold the world together for a sustainable future”—the ancient Vedic world view.

To achieve this as a co-operative rather than aggressive state of global living is a new challenge that has awakened with our modern unleashing of previously unknown technological powers. Therefore developing and implementing new methods of problem-solving and long term solutions are the newsocial challenges that face our world. We need a universal ethos of continued existence that is not only greed driven. The cultural past of the Vedic civilization was based upon the ability to disagree on many things while holding a universal and respectful view of one another. Our current model is a “Robber Baron”, political and corporate view that

needs to be replaced with stabilizing technologies that consistently promote, well-being, universal education and a stable approach to the use of world resources. Ancient Vedic sciences of agriculture, medicine etc. were developed around these universal ideas. Therefore, it is the right historical moment for Bharat to emerge as both a thought leader and personal example of a more universal way to solve the human needs in a sustainable way. The alternative is not acceptable. Our current path of one life only driving by a “Use-once and Then Throw-away world-view, must change for the good of all. A revival of and the universal development of sustainable Vedic sciences is one important next step in fulfilling this need.

33

Reconstructing the Whole from Contemporary and Vedic Science

Prof. John J. Kineman

University of Colorado, Boulder, USA

This paper is based on a paper authored by Dr. John Kineman and Dr. Deepak Anand of the Sri Sathya Sai Institute of Higher Learning at Puttaparthi, AP, India, which was presented at the Indian Society for Indic Studies 1st International Conference—“Ancient Indian Wisdom and Modern World”, 29th-31st March 2013 in New Delhi.

Whereas the last Century of science and philosophy might be characterized as struggling to comprehend uncertainty, the current Century will likely be characterized by a similar struggle to comprehend complexity as a “whole system” principle. Vedic pre-history that is now being uncovered through new evidence and revised interpretation, provide us with an important precedent for holistic meta-science lived sustainably for thousands of years in the Indus/Saraswati river basin or present-day Pakistan and India. Just as Vedic concepts guided scientists in the scientific revolution from modern to post-modern science, the Vedic worldview may now help us understand more deeply the causal relations that explain complexity and wholeness in natural systems. This pending theoretical advance requires a synthesis between Eastern and Western meta-science to understand and formalize “cyclical causation” in systems. The revised history of Vedic origins that is now emerging, demonstrate natural causal principles that were embodied in the smooth running of Harappan and Vedic civilizations before their demise from exogenous factors. The philosophy of non-duality as lived in pre-historic civilization and handed down in oral tradition and eventually literature, provides a clear presentation of cyclical causality which is reinforced by recent developments in relational biology and Category theory to describe “holons”. While human history rarely is used to prove scientific principle, in this case it must be; because the science that is needed today is about the sustainability of complex, living and cognitive systems; something that Western science cannot address through mechanistic approaches because they are based exclusively on mathematical fractioning of systems. The approach here, in contrast, explores the cultural and mathematical nature of cyclical causation as a foundation for a new science of whole systems.

34

The Fifth Veda and Hindu Dharma

Dr. Joydeep Bagchee & Dr. Vishwa Adluri,

Editor on the standing editorial board of Oxford Bibliographies Online: Hinduism. &

Author of several books on Hinduism, Mahabharata, Science etc, USA

Email: jbagchee@gmail.com

The Mahabharata is known as India's Fifth Veda. It is considered a repository of all knowledge and sciences (shastras). It is the foundational text for classical Hinduism, mediating between the Vedic-Upanisadic wisdom and bhakti and temple worship. The text creates the Hindu pantheon and the Hindu universe of dharma. Yet Western Indologists approached it as a "monstrous" text (Oldenberg).

They claimed that the "original" Mahabharata was a heroic Aryan epic, while the present text was the result of Brahmanic "corruption." Many of these prejudices have become untenable in light of the Mahabharata Critical Edition, completed by the Bhandarkar Institute scholars under V. S. Sukthankar's leadership. In this presentation, we will refute these prejudices and show how we can now appreciate the unity, continuity, and grandeur of Vedic civilization through the Mahabharata down to the present.

35

'Devotion' in the Gita: A Scientific Approach to Happiness

Ms. Jutika Devi

Research Scholar, Philosophy, Gauhati University, Guwahati (Assam)

Email: jutikasarma89@gmail.com

An analysis of concept of devotion as a path for realization of supreme being in the *Gita* reveals on one hand, that devotion is not only worshipping of the supreme reality but it also means love, surrender and detached service. Devotion is understood as so because it is seen in the *Gita* as how Arjuna became happy by loving, surrendering and by doing detached service. So these interlinkedness of these three attributes of devotion can be analysed as the way to happiness. In other words devotion in the *Gita* has a pragmatic value. On the other hand, that a true devotee can be identified through certain distinct characteristics such as contented, selfless, balanced, which actually he exhibits. The *Gita* tells that these attributes found in a true devotee are to be attained by practicing them.

My paper tries to show: How devotion as love, surrender, and detached service is helping an individual to become happy and also spreading happiness. Second, that the attributes prescribed for the devotee has pragmatic value as they help one to be happier and contribute to the

betterment of a person. If a person become happy from inside through devotion then only he will be able to spread happiness to others. Ultimately we all are striving towards liberation. Not going in the broader sense, here liberation means getting relief from pain, sufferings, sorrows, complexities etc. These are the things by which our minds are getting corrupted. So first of all, the task is to make the mind free from all of these. When all the material things are getting failed to give peace to man, then people start for seeking some spiritual happiness. The method or the procedure to get such kind of spiritual happiness, the *Gita* suggest the way of devotion.

Devotion along with the adaptation of these qualities to become a true devotee serves two purpose altogether. It not only makes an individual a true devotee, but also helps an individual to reform himself from inside and makes him happy.

36

The Method of Investigation in Indian Tradition

Prof. K. Srinivas

Department of Philosophy, School of Humanities, Pondicherry University,

Kalapet, Puduicherry (Tamil Nadu)

Email: ragsri55@yahoo.com

It is the view of many, if not everyone's, that Indian philosophy is bereft of reason, and it is a form of occultism. Many westerns still hold old-fashioned views about Indian philosophy without getting into its structural depths.. The chief objective of this paper is to show that the very art of investigation into the fundamental doctrines of Indian philosophy vindicates that Indian philosophy is not dogmatic, unrealistic, and illusionistic. The intellectual content of Indian philosophy is very profound and is arrived at argumentatively.

37

Hindu Philosophy and Healing Science— Confluence of Psychology, Physics, Philosophy and Healing Science

Ms. Kamlesh Kapur

Historian and Teacher of Hindu Dharma Studies, USA

Email: kamleshk@cox.net

This paper will discuss Ayurveda as a subset of Vedas, emerging from overall elements of Hindu philosophy, which analyzes the reality of the cosmos, the material nature (*Prakriti*)

and of the *self* and how their unique inter-connectivity is revealed in each person. The paper highlights the cultural ethos, and the vast structure of Ayurveda emanating from and inspired by the wisdom of the ancient Rishis and their attitude towards the healing capacity of the plants.

The extensive link between philosophy, physics, psychology and healing science are reflected in the following premises:

- As is the diet, so is the mind
- As is the microcosm, so is the macrocosm
- Nondual consciousness
- Origin of consciousness is not in the bicameral brain; awareness is in all the body parts and energy can be directed to any ailing part through breath and focus.

The paper will discuss some of the contentious modern issues that face humanity such as absence of harmony within and its outward manifestation in aggression, militancy and violence. Some other contentious issues such as stem cell research and abortion are choked with notions of morality or the lack thereof; these have been a part of Ayurveda for almost 2800 years.

38

The Chinese Rationale behind Indian Kundalini Yoga

Dr. Koenraad Elst

*Ph.D. Asian Studies, MA Sinology, MA Indology, MA Philosophy
Leuven (Belgium)*

Email: koenraadelst@hotmail.com

The transmission of energy practices from China to India is so far a marginal hypothesis posited by only a handful of specialists and not worked out in detail. This paper seeks to give more body to the emerging paradigm of a transmission of energy practices from Chinese *Neidan/Qigong* to India, where Hatha Yoga and Kundalini Yoga are medieval innovations (within an already existing yogic tradition of meditation and some breathing exercises) largely based on a psycho-physiology unknown in the ancient Yoga classics.

Their focus on vitality fits the older Chinese philosophy of *Yangsheng*, “nurturing life”, and their energy-steering along the spine is indebted to the Chinese practice of *Xiaozhoutian*, “microcosmic orbit”. We discuss in detail how crucial elements in Yogic energy practices find their rationale only in the Chinese tradition, e.g. stimulating body points which had no special meaning in pre-medieval Indian physiology but are all-important in the ancient Chinese meridian system.

39

Vedic Ways to the Secrets of the Neutrino

Dr. Kumar S. Sharma

*Founder: SAVYTRI (Sri Aurobindo Veda & Yoga Teaching and Research Institute) and
Para Vidya Publishers 295 Woodcliff Road, Newton, MA 02461, USA
Email: kumar@ageofananda.net*

This paper reveals the *neutrino as the very first evolute or quantum of consciousness* in the manifest domain, and its unique role and special agency for that reason as the *cosmic information transmitter*. Facts about neutrino release from black holes, their ubiquitous presence and incredible numbers, and the role of the conscious observer in quantum mechanics are integrated to portray the critical part played by the elusive neutrino in the formation and evolution of the universe. The primacy of consciousness to a comprehensive Grand Unified Theory of Everything is also pointed out.

The discoveries reported here started with knowledge of the neutrino from physics and cosmology, followed by the revelation of its subtle secrets during meditation on the glorious Gayatri mantra and by other spiritual practices. The paper begins with the scientist's view of the neutrino, then has a Vedic interlude in which its supra-physical role is revealed, confirmed by Vedic sources and a most intriguing Puranic reference to three kinds of entities that travel on the pathways of the Sun's rays to influence human affairs. It concludes with the important discovery of the *primacy of the neutrino* in the sequence of matter-energy manifestation and its identification with the *pavitrak*, or most subtle or pure particle as defined in the *Sanskrutakosh*, controlled by Lord Ganapati and associated with his worship.

40

Origin of Life: Clues obtained from Objective Science and Indian Philosophy

Dr. M.V. Jagannadham

*Senior Principal Scientist, CSIR-Centre for Cellular and Molecular Biology,
Uppal Road, Hyderabad-500007, Telangana, India.
Email: jagan@ccmb.res.in*

The quest for knowledge began right from the beginning of the human civilization. While harnessing science to solve the problems of his everyday life, man started observing the nature with curiosity and also sought to understand the relation between nature and living beings. Human curiosity to find out the origin of living beings led to the queries on the first appearance of life on this planet. However, starting from the Vedic period to the present age, the question

remains unsolved despite astonishing progress in the state of knowledge in various branches of science witnessed during the past few decades. In this presentation, attempt has been made to summarize the various postulations made on the origin of life starting from Vedic period to the modern science. It reveals that the idea of an entity called “Supreme Cognizant Being (Bhagavan) “ always being present in the universe dealt with in the Vedanta is still relevant. This idea provides a rational explanation to the first appearance of a living entity on earth.

41

New Directions of Research in Different Disciplines of Science with Special Reference to Vedic Texts

Prof. M.M. Bajaj

Former Professor, Physics, University of Delhi

Email: ykwadhwa01@gmail.com

For the past several years, our Group consisting of scientists from University of Delhi and ICAU made a vigorous and extensive study of various developments in Science (Physical, Astro-physical, Cosmology, Immunology, Bis-Sciences, Seismology and Terrestrial Sciences). Simultaneously, we also undertook study of Vedic Science. Our study has shown the likelihood of emergence of many new dimensions for future galactic journeys.

Recent successes in Mars, Jupiter and Pluto have convinced us that Vedic literature is far ahead of modern cosmology. Vedic thoughts inspire us to take new researches in every walk of human knowledge. Our Group has also succeeded in developing several experimental methods to control and mitigate earthquakes, tornadoes, cyclones, sea storms, hurricanes, etc. on the basis of Vedic knowledge. Vedic science also provides a huge potential for controlling genetic disorders.

42

Education—A Spiritual Vision

Dr. M.S. Sheeba

Assistant Professor, Sanskrit, Maharaja's College, Ernakulam (Kerala)

Email: k.sheebaji@gmail.com

India is a land of values and has its own heritage. If one truly wants to understand India, its culture and ethos, an essential knowledge on Sanskrit and self knowledge are needed. That language is perfect worthy and finished. This language has come to be identified as very

closely with Indian spirituality, religion and philosophy. From the ancient time onwards India was known by its different names like *Arshabharatam*, *Aryavarttam*, and *Bharatakhanda* etc. Vedas really contain the quintessence of the spiritual thoughts of great seers. A singular feature of the ancient civilization is that it has been moulded and shaped in the course of its history, more by religious than by any other influences. Religion dominated every sphere of the life of the people, called Hindus. Education, especially spiritual education was an unavoidable part of religious life in that time. Each individual was the chief concern of the Vedic system of education.

India has always admired the individual who had the strength to renounce worldly life and pleasure and followed the path of the ascetic and keynote of Indian Philosophy. In India from the ancient time onwards more importance has been given to education. India never gets into a total annihilation or destruction even today because of its spiritual based treasure of culture. Swami Vivekananda also said that India's pulse beat is its spirituality itself.

Education is a process where the matured personality teacher acts upon the immature personality students thereby bringing forth desirable changes in the students. Gandhi also said that Education is the drawing out the best in child and man body mind and spirit and he had introduced the value oriented education. Through this process of education one can achieve the completeness. The system of Vedic education was really based on that. It will make the younger as a suitable being for the society where he dwells. The Vedic system of education was divided the human life into four *ashramas* like *Brahmacharya*, *Garhapatya*, *Vanaprasta* and *Sanyasa*. These *Ashramas* correspond to the four stages through which an individual was required to pass, in order to develop a balanced and complete personality. In which the *Sanyasa* meant a life of complete renunciation from worldly ties for the attainment of salvation or self realization, the ultimate aim of life

Know thyself 'is the key note of Indian Philosophy. Without knowing oneself man's life is incomplete and fruitless. Nowadays education is seemed as a meaningless insincere fruitless activity in all sense. And also we can see that the product of education is also a valueless effect. Becoming an individual with a burden of only physical knowledge will make the individual selfish, arrogant, ignorant and unworthy. Because of this physical knowledge and outer visions, man can achieve only extrinsic developments. Along with these extrinsic developments intrinsic developments also must be needed. Then only education will be completed with a true vision of life and truth. Neither the study of Vedas nor the performance of Vedic rites nor the sacrifices nor austerities can ever produce self realization in a man whose heart is contaminated with sensuality.

The peculiarities of education in Vedic times were that the conduct or curriculum was varied in accordance with the intrinsic needs of different persons. And the classical method of learning was in a most intellectual and fruitful way by *Sravana*—hearing of the sound, *Manana*—reflection of the hearing sound in mind and *Nididhyasana*—the profound and repeated meditation or the constant musings of the reflected.

43

India's Caste System and American Pluralism—Some Similarities

Prof. Madan Lal Goel

*Professor Emeritus of Political Science & Director of International Studies,
University of West Florida, Orlando, USA
Email: lgoel@uwf.edu*

India should not unduly apologize for caste. While any caste-based and birth-based discrimination should be fought, yet a caste-based society is a tolerant society. It celebrates cultural, ethnic, language and religious diversity. This is a good thing. Science and technology were supposed to eradicate primordial ties. This did not happen. Instead, finding one's "roots" has become important. America now is a multi-ethnic, multi-religious and multi-racial society. More and more it resembles a caste-like society in India, not in the sense of hierarchy but in the sense that it values cultural and ethnic diversity. Paper will be discussed on keywords such as Jati and Varna, Endogamy, Brahmin poverty, British policy on caste, Caste among Muslims and Christians, Status of minorities in India, Myth of American "melting pot", American pluralism and caste, Jews and Parsees of India.

44

Vedic Spiritual Teachings—A Way to Enhance Resilience and Mental/Physical Well-Being in Young Adults

Ms. Madhu Sharma

*Duke University, Durham, NC, USA
Email: Madhu.sharma@duke.edu*

Mental and physical well-being is one of the major issues in the world, not only for the Indians across the globe, but everyone else as well. This paper discusses this issue and presents Vedic teachings which indicates that spirituality is essential in facing life challenges and spirituality enhances resiliency in dealing with these challenges. Instilling spirituality in young adults is key to having that firm faith and solid ground for facing life challenges in adulthood. Vedic teachings during Brahmacharya ashram are foundational, and instilling these spiritual teachings at an early age into young adulthood is key to strengthening and enhancing resiliency during adulthood. Discussion in paper will be on keywords Resilience, spiritual, well-being, Vedas, young adults.

45

The Power of the Upanishads—An Oral Tradition

Mr. Michael Sternfeld

Producer, Fairfield, IA 52556, USA

Email: michaelksterfeld@gmail.com

The Upanishads—as poetic expressions of the Absolute level of life—seem far from the objective field of science. Yet, upon deeper examination, we find that the ancient wisdom expressed by the Vedic sages finds a rich field of objectivity emerging from their inner subjective experience. The Upanishads were cognized by these seers as detailed expressions of truth emerging from the silent depths of their own consciousness. These impulses of the Veda were later recorded by them and then passed down generation after generation, first orally and later in written form. The essence of the Upanishads revealed in these stories is the primacy of knowing our true nature, or Self. The Upanishads look at the Self from many angles, drawing us into the reality where our self becomes awakened to our Self. Ever experienced as set “deep in the cave of our hearts”, the Self is our inner essence, lying at the core and also transcendent to our ever-changing thoughts, feelings and perceptions. Now bringing this around full-circle for our desire for Vedic knowledge to be grounded in a scientific, objective basis, we can look to the commentary of Vedic sage Maharishi Mahesh Yogi. One of Maharishi’s key contributions was to underscore that the Upanishads are a living reality that can be experienced in one’s own consciousness through the systematic process of transcending on a regular basis. This is the systematic experience of *turiya chetana* or the fourth state of consciousness. The Mandukya Upanishad speaks of this state of pure consciousness as “peaceful, benign, undivided—that which is known as the fourth. That is the Self. That is to be realized”. This fourth state of consciousness is measurable and repeatable, because the practice of meditation (Transcendental Meditation) has been found to be amenable to the systematic procedures of verification found in science. For example, there are specific alpha wave brain signatures of people exhibited during the regular practice of meditation. The practice of meditation then becomes a bridge to unite our innermost subjective experience with the applied wisdom of Upanishadic truths and allow these impulses to be integrated as a living reality in our daily life.

46

The Individual Consciousness and the Cosmic

Ms. Mitali Bhagabati

Research scholar, Philosophy, University of Delhi, Delhi

Email: mitbhagabati@gmail.com

The enquiry into the nature of Atman, Brahman; and their relation to each other is one of the core concepts found in the Vedas and Upanishads. The word Brahman etymologically

means the Great, the Supreme. In understanding the concept of Brahman we find difference among the Vedic concept of Brahman and the Upanishadic concept of Brahman. In the Vedas, Brahman is not understood from metaphysical point of view; while in the Upanishads Brahman is conceived as an Ultimate explanation of the world. But the Upanishadic view of Brahman cannot be said to be entirely a metaphysical concept as the unity of Brahman and Atman is not a mystical experience, they means two different states of the same reality. The individual consciousness or Atman is therefore said to be limited Brahman. The aim of this paper is to understand the relation between the individual consciousness or self and the whole cosmos as the one Ultimate reality in different forms and names. In this regard, I have also attempted to give a small introduction of “Brahmavidya” or the knowledge of Brahman in order to interpret how the individual self can have the knowledge of its real nature (that is ‘Sohum’—I am already divine) by understanding Brahmavidya.

47

Writing an Introductory Textbook on Sanatana Dharma for a Global Audience

Prof. Narayanan M. Komerathand & Padmavathy P. Komerath

*Professor, Daniel Guggenheim School of Aerospace Engineering,
Georgia Institute of Technology, Atlanta, Georgia 30332, USA
Email: Komerath@gatech.edu*

The appropriate presentation of Sanatana Dharma at an introductory level for a broad contemporary audience is considered. The chosen framework is based on the Vedic concept of Upanishads, going from an easily accessible introduction to an exploration of the classics and the research. Each chapter is concluded with a summary explanation modeled after ‘Vedanta’. The core values and the organization of the literature base are considered. A logical progression to Bhakti is explained, followed by a discussion of the attempts at reunification and revival. Some difficult issues are considered. Comparisons with other religions are avoided. Issues and experience in publication are considered for the benefit of those who might follow our path. Some of the contributions of the paper are summarized below. We have listed a set of inclusive Core Beliefs that avoids certain pitfall. This is a desperately needed resource for modern school children and their parents. We have contributed an extensive literature search with over 320 references cited on diverse aspects, collected without being judgmental. A simple flow connects the deepest Vedic concepts to visible, vibrant modern practice, as well as scriptures, literature and art. The clear intent of the Vedas is seen to be consistent with contemporary laws in free democracies, with no discord.

Finally, we present a discussion on science and human advancement, showing how Sanatana Dharma is only strengthened in relevance as technology and knowledge advance.

48

Astronomy Poison Pills Chronology markers for the Mahabharata and the Ramayana

Mr. Nilesh Nilkanth Oak

Atlanta, USA

Email: nileshoak@gmail.com

Mahabharata and Ramayana texts are rich in astronomy evidence that can be in turn employed in determining the exact or approximate timing of numerous incidents within these epics. Not surprisingly numerous researchers have attempted to establish chronology of these epics over last 100 years. There are more than 130 claims for the chronology of Mahabharata war and more than dozen claims for the chronology of Ramayana.

Unfortunately, majority of these researchers have, knowingly or unknowingly, resorted to use of selective evidence in arriving at their claims while ignoring rest of the evidence. This paper/presentation would show that the critical evidence ignored by these researchers in fact not only falsifies their claims but also establishes crisp and clean time limits on the upper and lower bounds for the events of these epics. These are the 'Astronomy poison pills (APP). APP are based on long term phenomenon of 'the precession of equinoxes' and beyond falsifying haphazard claims, act as 'poison pills' against dogmatic, skeptical of superficial claims for the chronology of these epics. APP is a fact, objectively testable, that creates crisp, clean, rational and scientific shield of extreme mathematical certainty against dogmatic, skeptical or superficial claims for the chronology of India's ancient narratives, and in turn for the chronology of ancient Indian history.

49

Internal Levels of Earth as Depicted in the Vedas

Dr. Nirupama Tripathi

*Assistant Professor, Sanskrit, Kanpur Vidya Mandir PG College, Kanpur
(Uttar Pradesh)*

Email: irupamatripathi@gmail.com

A close study of Vedic literature reveals the fact that science was developed even in ancient India. The intricacies of the structure of the Earth have been extensively discussed in the Vedas. The Rigveda propounds 07 layers of the Earth which are analogous to the 03 main layers discussed by Earth scientists today: Crust, Mantle and Core. They have subdivisions as the Upper and Lower Crust, Upper and Lower Mantle and Outer and Inner Core. A portion of

Mantle is known as Transition Zone due to its different physical characteristics; thus completing the 7 layers. The centre of the Earth has very high temperature approximately 7000°C which confirms presence of *Agni* at centre of the Earth as stated in the *Vedas*. Convection currents, due to temperature differences, are also present inside the Earth and leads to transportation of heat energy.

The present work seeks to compare the concept of 7 layers as discussed in the Vedic literature and modern scientific studies. Paper will be discussed on these keywords—Earth, Internal structure, Temperature, Convection currents, Vedic literature.

50

Science of Understanding Ancient Indian Social Institutions

Dr. Pankaja Ghai Kaushik

*Assistant Professor, Sanskrit, Lady Shri Ram College for Women,
University of Delhi, Delhi
Email: pankaja22200@gmail.com*

Scientific spirit refers to the desire to unfold the secrets of nature. It also implies that nothing should be accepted as truth unless it has been thoroughly tested and verified. Only that is reliable knowledge which correctly explains things as they actually happen in nature and there by enables us to bring about the desirable end or prevent the undesirable ones. This research paper has been written with the object of explaining the scientific methods and encouraging their application to the social aspects of ancient Indian life. Although, there are no scientific methods or rules to study social issues announced by ancient Indian thinkers but the institutions of ancient Indian society seem to be well designed with the provision of different dimensions to interpret them.

The sources of the understanding of ancient Indian social institutions are many and various. These include the Vedic literature, two epics, Puranas, Sutra and Smriti literature, Arthashastra, the classical Sanskrit literature and folk-tales etc. It has been generally assumed and often asserted that ancient Indian thinkers presented social institutes also on the basis of metaphysical ideology and their interpretations were also philosophical and ethical and that is why they do not carry practical implementation. That is the, perhaps, reason there is no systemized methodology has been mentioned for understanding ancient social issues.

Many older and contemporary scholars of oriental studies have made attempts towards constructing a picture of the ancient Indian social organization and institutions from various point of views such as philosophical, ethical, economical and psychological meaning. These researches and studies have proved that apart from purely metaphysical one, Indian thinkers did carry systemized speculations in the realm of social organizations.

In nineteenth century one of the founding father of modern sociology Emile Durkhiem wrote “Rules of Sociological methods to develop a systematic sociology, the framework to analyze and explain social issues. He presented his disagreement with the ‘philosophical’ approach to social studies on the bases of ethical values. He vigorously advocated the ‘scientific’ approach of studying social issues. His study is in the sharp contrast with ancient Indian social attitude.

This paper aims to see how Indian thinkers were presenting social issues based on high moral values with scientific methods which have been established by Emile Durkhiem. For this paper original Sanskrit texts containing social issues, “Rules of Sociological methods to develop a systematic sociology” authored by Emile Durkheim have been and other secondary sources have been consulted.

51

Time and Space

Mr. Parameswaran Murthiyedath

Engineer, Srikrishnapuram

Email: geomet9@gmail.com

The concept of time and space were sufficiently made clear by the various statements of the Vedas. According to the Vedas, the birth of time and space was an instantaneous and simultaneous occurrence at the very beginning of the birth of the universe. According to the Vedas the universe came born and got instantly expanded from an epicenter located at an unaccountable great distance and height from our Earth. A clear concept of geometry was central to the descriptions of the Rigveda. The expansion of the universe was from a height, slanting down to the Earth and moving far away from the Heaven. The Rgveda did not think in terms of either a flat universe or a heliocentric one, but one most similar to what the modern science had to propose. Various accounts of how this universe had manifested and the very willingness to accept diverse theories indicated a total lack of discord and conflict in the process of formulation of the Vedic theories. There are several descriptions in the Rigveda and the Atharvaveda that proposed a geometry of the rashicakra, using different terms and using different approaches of construction. However, all of them were based on a basic definition of time, in terms of division of a circle. The nature of inquiry of the Vedas was with the additional purpose of correlating the time and space and integrating those into one singular holistic approach, in which geometry played an important role. Such geometry was getting based on the ecliptic movements, made into a universal model for conceiving the theories applicable in many levels.

The Atharvaveda brings out the significance of time in relation to events in the process of creations. This is an account of some of the details of such Vedic theories about simultaneous birth of space and time.

**Vedic-Upanishadic Foundation of
Science and Spirituality
(Whatever is *of* the as well
as *in* the Spirit)**

Professor R.P. Singh

*Centre for Philosophy, School of Social Sciences,
JNU, New Delhi*

*Email: rpsinghjnu@yahoo.com,
rpsingh@jnu.ac.in*

Spirituality and Science are regarded by many thinkers as two separate realms. What we normally call Science is that in which we have hypothesis, we can observe and experiment and we are able to analyze, measure, prove and predict. From that perspective, Spirit or spirituality may be the last thing to be found in any microscope. Spirituality may not be so easily measured from the parameters used in normal science. I propose the insight into this proposal from *Rita* in *Rig Veda* and *Upanishadic* distinction between *para vidya* and *apara vidya*, between the higher and the lower knowledge. In Greek philosophy, Plato did same between *doxa* and *episteme*, between opinion and truth.

Spirituality is often mistakenly thought to be abstract and unworldly, as if it has little or nothing to do with our world of sense and science. The distinction between abstract and concrete, common sense and science, and science and spirituality, is a matter of degree and not of kind. The world of experience may be studied in details and also under the aspect of some principles or laws. While spiritual philosophers, generally speaking, use the terms like *concepts* and *categories*, scientists prefer such expressions as *laws* and *theories*. The categories of spirituality like simplicity, substantiality and integrity, etc. and the laws of science are instantiable and concretizable.

In order to organize my presentation, I propose to divide the paper into two parts. In Part-I, I'll discuss the philosophical implications of the *Rita* as cosmic order and the distinction between *Para vidya* (Spirituality) and *Apara vidya* (Science).

I'll develop conceptions of matter, material entities/ elements, etc. to show the foundation of science in Upanishads. In Part-II, I'll present the notion of Spirituality in the Upanishads in the context of some of eastern and western thinkers.

53

All-Pervading Cosmic Consciousness Field of Vedic Science and the Quantum Field Theory of Modern Physics

Prof. Radhey Shyam Kaushal

*Formerly UGC Research Professor, Department of Physics & Astrophysics,
University of Delhi, Delhi
Email: kaushal.rs@gmail.com*

The concepts of Vedic science, comprehended through the atomic model of human Being, have already been exploited by the author to propound a theory of fundamental processes in human behavior and experiences. In this paper, an attempt is made to look for a possible explanation of the origin, existence and survival of both animate and inanimate matter in the same, finest subtle cosmic consciousness field ('*Sristi*' of Vedic science and denoted by Φ_{cc}). For this purpose, analogies from physics, such as that of the concepts of fields, particles, holes, quanta of interactions, second quantization, etc. are freely used. The roles of other epifields like the fields of cosmic desire, cosmic intelligence, cosmic mind along with the field of five cosmic elements (*panca mahabhutas*), present already in their primordial forms, are also considered. It is recognized that a generalization of *panchi karan* rule of Vedic science for the *panca mahabhutas* clearly reveals the concepts of many Universes and higher dimensions prevailing in modern grand unified field theories of physics.

54

God Revealed Vedas Most Precious Gift for Human Being

Dr. Rajni Sarin

*Delhi
Email: drrajnisarin@gmail.com*

Who am I? I am not a body—I have a body Vedic concept of Self-Realization Soul (Atman) is the real guide in life of a person. It is the inner self of man and knows the truth and the untruth. Because of one's selfishness, stubbornness and ignorance, man rejects the truth and inclines toward Untruth. However, Vedas categorically say "Atma" cannot be cognized by any of the senses and sense organs." However, if you do not separate ecology, science of good governance, science of Axiology with three kind of values (trivarga) and enlightenment and also do not resist the flow of life with our inner wakening, one can communicate with the

soul being Vachispatiah. The right and virtuous path is only known to the manifested soul (jivatma), which is nearest on self-realization and farthest when phenomenal and the material worlds become the closest. Yajur Veda refers to human beings as tri-ani pada i.e. having three bodies in one divine (causal body where soul resides near the heart), spiritual (subtle body energized by spirit residing in shuniya (cosmic void) and gross body where senses and sense organs reside).

It is the material knowledge, which separates us from the God and makes us feel that we are independent of God and live in a material world, which is controlled by Nature. As and when the material knowledge becomes intense, individuals start feeling that they can even control the Nature and create their own laws and tend to overlook. In the initial stage of practice meditation is a progress. Though there can't be any specific definition for meditation in my limited understanding. M–Mind; E–Engaging; D–Deeply; I–In; T–Total; A–Awareness; T–Transcending; I–It's; O–Own; N–Nature. Masters diving deep in to their mind have declared that it is possible to stop the momentum and discover mindless state of freedom.

55

Vedic Science of Rain Forecasting and Global Water Challenges

Prof. (Dr.) Ram Gopal

*President, WAVES, Jodhpur Chapter & Chairman, RAB, IRIIM, Howrah & Chairman, BAC, ICMR, GOI, Jodhpur & President, NSI Chapter, Jodhpur & Formerly: Director, DRDO, MOD, GOI, New Delhi & UGC Professor, JNV University, Jodhpur (Rajasthan)
Email: drramgopalresearch@gmail.com*

Water, one of the five basic elements (*Panchmahabhutah*) is the first *sine qua non* for the very existence of life. Rgveda narrates 'Aapo va idah sarvam viswabhootanyapah'. The *Bhoomi Sukta* of Atharveda proclaims, 'Mata bhoomi puthroaham prithivyah' and 'Parjanya pita yasva'. *Parjanya* is the *aqua pura*, the father of all cration. In Sanskrit we find 99 synonyms of water. All religions of world lay great emphasis on minimum need based use and cleanliness of water. *Nasadiya Sukta* of the *Rgveda* narrates ten different theories regarding creation of cosmos. *Ambovada* is one of the ten cosmogonist doctrines in the Vedic times conceptualized by the *Sadhya* gods. *Ambovada* was an important Vedic doctrine in which the waters were conceived as the primeval source of all creation. The eternal cycle in the universe is governed by flow of *Apah* in the three forms described by the scientists. All creation proceeds from the infinite ocean of *Varuna*, who is the presiding deity of water. The sun also originates from *Apah* Ocean and sets in it. Only thus *Apah* is visible below and above sun. The *Apah* is thus omnipresent, the universe is *Apomaya*. Continuous evaporation of water by solar energy to maintain balance is discovered by modern science as thermal desalination processes. In a similar way Vedic Rishi describes the hydrological cycle as 'Samudradarnavadadhi

samvatsaro ajayatah'. The imbalance in its quantity and quality within body and external environment is cause of unrest, disaster and diseases. In the universe divinity of water directly governs quality and eternity of life.

Global studies show a challenging future and a chaotic view, when considering total use and water availability in third millennium. Projections of per capita all purpose water availability will drop from 1000-5000 m³ per year to-day to less than 1000 m³ of water per year by 2030 in many developing countries. Globally, fresh water is consumed at a rate that is doubling every 20 years. According to UN estimates by 2025, the demand for fresh water will rise by nearly 60 percent more than is currently available.

Currently more than 1.1 billion people lack access to clean drinking water and 2.6 billion people lack adequate sanitation. UN report (2008) states to-days's urban population of 3.2 billion will rise to nearly 5 billion by 2030, when 3 out of 5 people will live in cities. The UN considers this rising trend to be the most significant influence on the welfare and economic security of nation's environmental sustainability and the achievement of human rights around the world. The welfare of next generation therefore lies in meeting water challenges and bringing water safety by decoding Vedic resources and following traditional water management practices.

The scientific communication process hence should be involved more aggressively in various components of water literacy including newer technologies and traditional technologies spelled out in '*Vedic Sciences*' like water conservation and eco-technology, water reuse and recycling, waste water treatment, drinking water purification, watershed and wet land development, water audit etc. The solution lies in systematic research and development with Vedic and modern tools.

Kadambini is a Vedic science of rain forecasting. Kadambini, a line of clouds (*Meghmala*) is a *Nimitta* (cause) for inferring the rainfall. Vedic literature states proficiency in the five auxiliary sciences—*Jyautisa*, *Lok*, *Alekhya*, *Miti* and *Bhuvankosa* as the basis of weather prediction. The person well versed in the *Nimittasastra* having the eye of *Nimittajnana* becomes three-eyed master like Siva and he is venerated as an expert of rain forecasting and water divining.

Kadambini written by Vidyavachaspati Pt. Madhusudan Ojha is a scripture of *Nimittas*, which showers the *Nimittas* pertaining to rainfall. '*Vrashtibodhak Nomittashastra*' describes science of rain forecasting, which is divided in 4 parts– (i) *Bhautiknimitta*, giving knowledge of rains based on place, men, animals, birds, insects etc. (ii) *Antarikshanimitta*, giving knowledge of rains based on wind, clouds, lightening, thunder, stars, storm, rainbow, constellations etc. (iii) *Divyanimitta*, giving knowledge of rains based on solar and lunar eclipse, comet, planets, *saptanadichakra* etc. (iv) *Misranimitta*, giving knowledge of rains based on astronomy and astrology of 12 months, special days like askshayatratiya, ashadpurnima, holika etc.

The ancient meteorological science of India has been preserved from generation to generation in regional languages besides in Vedic literature. The Vedic science dealt with in this treatise is of great utility not only for meteorologists but also for people in general and agriculturists in particular.

Modern meteorology conceived by western scientists not having cent percent confidence level is not complete in itself. The ancient weather science abandoned by most of the traditional astrologers and astronomers needs to be revived. A golden triangle consisting *jyotisa*, *meteorology* and *modern science* can encompass rain gods Indra and Varuna to bestow their blessings as *Jala-Jeevnam* to humanity. Water problems although have posed many global challenges at the start of 21st century but it is solvable by bridging gap between ancient Indian science and modern technologies.

In this paper ancient water purification and conservation technologies *vis-a-vis* modern water quality testing and purification technologies developed by DRDO and various S&T agencies in India have also been addressed to preserve the elixir of life (water) for global welfare of the next generation.

56

Structural Concept of Reality, Thought and Language in View of Vedant And Nyaya

Prof. Ram Sevak Dubey

*University of Allahabad, Allahabad
(Uttar Pradesh)*

Email: dr.rsdebeyau@gmail.com

&

Dr. Sarvesh Kumar Mishra

*Shri Lal Bhadur Sanskrit Rashtriya Sanskrit Vidyapeeth,
New Delhi*

Our whole cosmos is bounded with the three chains which are known by the nomenclature of Reality, Thought and Language. Except these three there is nothing in the world. As the leg of an elephant pervades all kinds of legs in the same way only these three terms pervade whole of the cosmos whether our physical world or spiritual one. First of all Reality comes before us after that we get the Knowledge (Thought) of that reality and at last Language comes only on that situation when we need to convey the knowledge of that particular Reality about whom we have come to know.

As far example when we talk about Reality then in first prima facie this universe comes before us in a form of big Reality and from ancient past to modern era philosophers are doing research to know the secrecy of this universe. In this research paper we have defined these three basic concept of the cosmos—in view of Vedant and Nyaya philosophy which are Reality, Thought and Language and what is interconnection and interdependency among these there has been also described by us.

Humayun Tomb : Islamization of Hindu Architecture Temple or Dormitory of Dead Mughals?

Mr. Ramen Nandi

Independent Researcher, New Jersey, USA hist.res15@gmail.com

&

Mr. Pankaj Bahot

Research Scholar, JNU, Delhi Pankaj.bahot@gmail.com

&

Ms. Hemlata Gautam

Research Scholar, JNU, Delhi hlgautamjnu@gmail.com

Delhi, the capital of independent India, and its neighborhoods are famous for ruined forts, tombs and mosques. It is told by the Historians that the monuments were built by the Islamic invaders and the conquerors of the country in the mediaeval period, roughly, between fourteenth and seventeenth centuries. Humayun Tomb complex is one among such monuments which is accepted by UNESCO as one of the World Heritage Sites in India. Beside Emperor Humayun and his close relatives, bodies of more than 150 unknown Mughals were interred in the main tomb. There are countless graves in other tombs and mosques of various shapes and sizes, including many on the ground just outside the main compound.

There were even residences built for 300 artisans, supposedly, brought by Bega (Hajji) Begaum from Mecca for construction of the Humayun Tomb.

Concocting stories and citing the Islamic concept of Paradise, observance of the rules for prayers, similarities with Persian art and architecture, etc. the Historians concluded that those monuments have to be Mughal architectures. They never evaluated the possibility that those could be Hindu temples constructed close to Yamuna, the river sacred to the Hindus, possibly built centuries before Islamic invasions.

Moreover, no attempt has been made by the Historians to verify from the engineering perspective if the constructions were done during mid sixteenth century and not the earlier constructions.

One of the authors visited the tomb complex a few times in last few years and observed that the site is undergoing extensive rehabilitations/renovations. It appears that some alterations are made which may change the character of this historic site.

58

Traditional Knowledge Systems in India— Implications for the Present

Dr. Ravi P Bhatia

*Educationist and Peace Researcher & Former Controller of Examinations,
University of Delhi, Delhi
Email: ravipbhatia@gmail.com*

Among the great civilizations of the world, the Indian civilization can be ranked high in terms of its antiquity, vibrancy and continuity even to the present age. The Indian civilization consisted not only of the present day India but also neighboring countries like Tibet, Pakistan, Afghanistan, Burma and especially Sri Lanka. Apart from linguistic and religious factors there were regular geographical, economic, trade, cultural interactions between India and its neighbours. The Indian civilization sharing a common storehouse of knowledge in various fields of life faced many challenges especially during the colonial period from early 18th century. However today there is a strong need for reviving our traditional storehouse of knowledge for a better and meaningful life for our peoples. This would also improve the environmental situation which is facing pollution and degradation of air, water and soil. The other critical issue is global warming and climate change that is posing severe problems on all aspects of our lives especially health, agriculture and biodiversity.

This article discusses the pinnacles of achievement reached by India in ancient and even mediaeval times in diverse areas such as agriculture, astronomy, architecture, Ayurveda, education, sustainability of the environment and water management. It also tries to understand how the indigenous knowledge systems were not only sufficient and relevant but also helped in maintaining a balanced, healthy, social interaction and how they need to be studied and adapted to meet the present day challenges. Today our countries are facing many similar problems of poverty, conflict, poor educational facilities, degradation of the environment, several lifestyle diseases. The article analyses these issues and suggests that we need to understand our traditional and indigenous systems of knowledge and suitably adapt them for addressing the common challenges we are facing.

59

Science in Vedas

Dr. Reena Kannojiya

*Senior Assistant Professor, Philosophy, Miranda House, Delhi University, Delhi
Email: reena_kannojiya@yahoo.com*

Vedas are primary source of knowledge in ancient Hindu tradition. The four Vedas viz., Rig Veda, Sama Veda, Yajur Veda, and Atharva Veda are considered epitome of knowledge. Veda

in its original meaning is “knowledge”. So, if Vedas are rich source of all kind of knowledge then it is always enquired about them whether they are scientific in nature or not. However, knowledge itself represents science. As science always draw its premise from nature and its experience in form of ideas. Ideas are the fundamental scientific enquiry to be developing or advance in theory and facts. This paper is an effort to enquire about scientific ideas immersed as knowledge in Vedas.

The purpose of paper can be achieved by analyzing and evaluate the instances, narrations, and facts from Vedas to establish the point that they are scientific in attitude and description. So that the rejection and objection rises against Hindu scriptures can be contested firmly in the denial of being scientific in nature. The philosophical ideas in Hindu scriptures are the fundamental key to discover truth, which is intuitive, spiritual and divine in their enquiry rather materialistic only. Moreover, Hindu scriptures are not only deals with matter and mind but also pave the path of holistic development of human life by discussing various fields of modern science.

60

The Science behind Tree-Worship

Dr. Richa Sikri

*Assistant Professor, History, M.L.N.College, Radaur
(Haryana)*

Email: Richa.sikri@yahoo.com

Today we are facing environmental hazards and the basic component for survival ‘air’ the prana of every human being is not pure. The increasing presences of suspended particles in air are causing many health problems. The reasons behind it are many but the major one is cutting of trees. For the development purposes trees are fallen down in numbers. But at the same time in our culture there is tradition of worshipping trees since the time of the Indus Valley Civilization. There are hymns in the Vedas where particular trees are hailed and cautions are made not to cut trees. Afterwards also evidences show the prevalence of tree-worship. Many trees like Peepal, Banyan, Banana, Bel, Ashoka, Neem, Coconut, Mango, Tulsi etc. are considered sacred and worshipped as these are associated with different deities.

The reasons behind worshipping trees are scientific. Trees give us oxygen which is important for our survival and absorbs carbon-dioxide and other green house gases. Further they trap dust, pollen and other pollutants and make air clean and clear. Trees hold the soil in place and reduce the chances of floods and helps in cleaning of water.

Moreover trees have medicinal values and have the positive aura which is capable of reducing stress and make a calmer impact on body and mind.

61

MIND OVER AGING

An Integration of Modern Medical and Ancient Vedic Perspectives on Overcoming Aging

Dr. Robert H. Schneider

*Director, Institute for Natural Medicine and Prevention & Dean, Maharishi College of Perfect Health, Maharishi University of Management, Maharishi Vedic City, Iowa
Email: rschneider@mum.edu*

Everyone ages—in every country, culture and time epoch. Usually beyond 40, aging is associated with a decline in mental and physical abilities. To live longer, healthier and happier lives, people often turn to a plethora of products that promise to slow the biological clock only to find that none of these widely marketed approaches brings complete or long-lasting fulfillment.

Fortunately, modern medical science has discovered the secrets of an ancient system of natural medicine that has been shown to prevent and slow the aging process. This holistic approach to aging enhances the mind and body from deep within, using the wisdom of the body's inner intelligence. It's the world's most ancient, complete and sophisticated system of natural medicine revised in a modern scientific context with the development of consciousness at its foundation. This is *Maharishi AyurVeda*, including the Transcendental Meditation technique. In this presentation, we review the ancient Ayurvedic understanding of the aging process and prescriptions for *Rasayana* therapy, including behavioral *Rasayanas* may be understood and validated with modern scientific insights and experiments. These modern concepts encompass epigenetics, the microbiome, mind-body medicine and successful aging. This combination of modern and ancient Vedic views leads to an integrated vision of possibilities for enhancing the aging process in contemporary society. Store-House Consciousness (*Alaya-Vijnana*) : An Important Concept of The Yogacara Buddhism

62

Store-House Consciousness (Alaya-Vijnana) : An Important Concept of the Yogacara Buddhism

Ms. Rumi Baishya

*P.G. Teacher, Logic & Philosophy, Amranga Barihat H.S. School, Assam
Email: rumibaishya89@gmail.com*

Yogacara, an influential school of philosophy, accepts no other reality than consciousness and holds that the appearance of objects is the transcendental illusion. Consciousness is of

three kinds, viz, *Alaya-vijnana*, *Manovijnana* and *Pravrtti-vijnanas*. Yogacara admits of eight layers of consciousness. They enumerate the five senses, supplemented by the mind, defilement of the mind and finally *Alaya-vijnana*, which is the basis of the other seven. It is the first phase in the process of differentiation of pure *vijnana*. It is the place which contains the seeds of previous experiences and form the seeds of future karmic actios. *Alaya* is ‘*sarva-bijaka*’ and also ‘*vipaka*’. Thus, *Alaya* serves two functions in the cosmic process. The accumulation of seeds of consciousness in *Alaya* is called *hetu parinama* and their actualization *phala parinama*. *Alaya* contains the seed of self-disruption in the form of subject-object duality. This bare objectivity is the first precipitation of the transcendental illusion. It is because of the presence of *vasanas* that the illusion of a world is created. The *Alaya* is a stream of discrete moments that flow like the current of a river with a perpetual succession of *vasanas* of different karmas and the further effects of them. It is conditioned, momentary and inherently unstable. In the final state, all the impediments obstructing the purity of consciousness are completely annihilated from the *Alaya* and it itself comes to a stop. This paper is basically to find out as to what the nature of *Alaya* is and how it functions in the entire evolutionary process till the idea of objectivity is eradicated.

63

Vedantic View of Consciousness and Cosmic Process

Prof. S.R. Bhatt

*Chairman, Indian Council of Philosophical Research (ICPR), New Delhi &
Former Professor, Philosophy, University of Delhi, Delhi
Email: srbhatt39@gmail.com*

Right from the dawn of human cognitive enterprise the reflective mind has been concerned about the nature of Reality, proximate and ultimate, empirical and trans-empirical. This has been caused by curiosity as well as practical necessity. There have been varied conceptions and theories in this regard but the demand for some kind of universally acceptable conception is one which thoughtful mind cannot help making. Unfortunately no two human minds have ever *fully* agreed with each other in their pronouncements. In the west right from the Greek times the dominant trend has been to distinguish between, and separate, mind (Consciousness) and matter. This position was sharpened by Descartes but this led to severe and serious objections and problems. Darwin tried to reduce mind to matter and put forth materialistic theory of evolution which had a great following in natural and social sciences which were made bhaviouristic and reductionist. But in the present quantum era this position has been challenged and the idea of consciousness transcending matter has been mooted. However there is no finality about the verdict of science. In the field of science there cannot be finality of judgment because of the very nature of its methodology and empiricist bias.

Holistic System-the Gift of Vedic Civilization

Dr. S. Rammohan

*Editor, The Mountain Path & Director, Sarasvati Research Centre & Board Member,
Centre for the Study of Religion and Society,
Chennai (Tamil Nadu)
Email: srammohan8@gmail.com*

Ayurveda, ‘the science of life’, is the ancient heritage-system of diagnosis and healing in India is a system of holistic treatment of the patient and disease. *Sushruta*, the doctor of ancient times declares “a person who studies one branch of learning only cannot arrive at proper conclusions. Therefore, a physician should strive to learn as many related sciences as possible. Ayurvedic diagnosis and treatment follows, with an integral view, the channel system (*srotas*), enveloping all the functions of the body. It is based upon the deep communication with the spirit of life itself and a profound understanding of our psycho-physical system. It deals with the diagnosis and healing of diseases relating to the thirteen channel systems called ‘*srotas*’.

(1) Reparatory (*Pranavaha Srotas*), (2) Water metabolism (*Udakavaha Srotas*), (3) Digestive (*Annavaha Srotas*), (4) Circulatory—Lymphatic (*Rasavaha Srotas*), (5) Circulatory—Blood (*Raktavaha Srotas*), (6) Muscular (*Mamsavaha Srotas*), (7) Adipose (*Medovaha Srotas*), (8) Reproductive System (*Shuklavaha Srotas*), (9) Urinary (*Mutravaha Srotas*), (10) Excretory (*Purishavaha Srotas*), (11) Sweta (*Swedavaha Srotas*), (12) Menstrual (*Artavavaha Srotas*), (13) Lactation (*Stanyavaha Srotas*).

Ayurveda deals with the diagnosis and healing of the problems associated with the systems holistically. According to Ayurveda, the health of the body depends upon the equilibrium of the humours (*Vata*, *Pitta* and *Kapa*) tissues and waste materials. Ayurveda acts in conjunction with *Hatha* yoga; both advocate the use of herbs, food and technique for health of body and mind. They prescribe the removal of ‘*doshas*’ (connate impurities), and as an aid prescribe *pranayama* (breath control) and postures (*asanas*). Ayurveda has its spiritual and psychological therapy (*satvavajaya*), drawn from yoga text. It also leads to healing, purification and rejuvenation. The Ayurveda recognizes food, sleep and control over sexual energy as the important pillars of life. It describes the qualities of various foods their impact on body and the need for regulating intake, the ill-effect of contradictory food usages, the effect and need of sleep and the importance of the sexual control (*ojas*). It delineates a regime for healthy presentation of the body and mind through proper control of all the three elements.

The ancient Ayurvedic texts, like *Charaka Samhita* and *Sushruta Samhita* give a detailed description of common pathogenesis of diseases and their treatment. The integrated approach ancient Indian healing system, that combines herbology, body-control through *asanas*, breath control through *pranayama* and mind control through *dhyana* offers holistic solution to the patient.

65

Ecological Concepts in Taittiriya—Samhita

Mr. Sambhu Nath Mondal

Research Scholar, R.S. Vidyapeetha, Tirupati, Andhra Pradesh

Email: sambhunath.mondal8@gmail.com

The way of life based on Vedic culture is intrinsically environment friendly, as the Vedic goal of life, namely, dharma implies proper ecological balance between man and his rounding. As long as man does not abuse and the violate the nature around him, that is flora, fauna and the elements of nature, he is assured of a happy life. The following saying of Mahabharata (vanaprava) and T.A. (10.63)—“*Dharmo rakshiti rakshitah*”, “*Dharmo vishvaya jagatah pratishtha*”.

Vedic sages loved the flora to such an extent that visualised the God in the trees, plants, and creepers. The Vedic usage ‘Vanaspati’ is itself quite suggestive. There is a Vedic rite called ‘*Akuraropanam*’ which is performed on almost every auspicious occasion. The essence of the rite consists of planting some seeds and watering then with Oshadhi sukta, a set of mantras praising the glory of flora. The concept of harmonious co-existence between man and the flora is in calcites in this rite. The following mantras of T.S. (4.2.6) speak volumes about the reverence given to the flora in the Vedic way of life—“*ya jata osadhayo debebhyastriyugam pura. Mandami babhrunamahagam satam dhamani sapta ca.*” This mantras says that ‘There plants and trees are created by God. My heart rejoices at the mere sight of there innumerable varieties of flora’ and another mantra (T.E.k., 1.14) “*aratte aganirastvaratparasastu te nivatte tvabhivarsatu. Svasti testu vanaspate svasti mestu vanaspate.*” Actullyn this mantra—‘Oh beloved tree! May the forest fire never come near you. May the axe never come near you. May the typhoon never touch you. May you get enough water by rain. You grow happily and i will live happily.’ The message of Vedas to the mankind is that man is a part of the Nature and he should learn to live in harmony with it.

66

Executing Health the Supreme Determinant of *Purushaartha* through *Ayurveda*

Ms. Sandhya Gupta

Ph.D. Scholar, Centre of Philosophy, School of Social Sciences,

Jawaharlal Nehru University, New Delhi

Email: drsandhyagupta2013@gmail.com

Health is the supreme determinant of *dharma* (moral virtue), *artha* (wealth), *kama* (sensual desire/pleasure) and *moksha* (self-realization/liberation). According to traditional

texts of *Āyurveda*, *purushartha* is the reason behind the birth of *purusha* (human being) on this earth. But in the absence of health and longevity, it becomes impossible for him to accomplish the very reason of his existence. Health and disease are observed as the blissful and sorrowful phases of life. *Ayurveda*, the science of life, helps to achieve holistic health. *Āyurveda* is eternal. It was evolved and documented in ancient India by our sages to help human beings remain healthy and enjoy long life in order to attain *purushartha*. This paper is an effort to explain the significance of *Ayurveda* in executing health, the prerequisite for achieving *purushartha* in contemporary time as it was in the ancient India. *Ayurveda* is deeply rooted in Vedas and is very much influenced by Indian philosophy. In order to comprehend the philosophical basis of *Ayurveda* and to substantiate my discussion, I will take into account *Brihatrayi* i.e. *Charaka Samhita* (4th-2nd century B.C.), *Susruta Samhita* (4th-2nd century B.C.), *Ashtanga Hridaya Samhita* (4th century A.D.) and some linked concepts of Indian philosophy.

67

Mahabharata Retold with Scientific Evidences

Dr. Saroj Bala

*IRS (1972 Batch), Retd. Member, CBDT
Director, Institute of scientific Research on Vedas
E-mail: sarojbala044@gmail.com*

Entire ancient history, revealed through Vedas and Epics, is capable of being re-constructed scientifically with accuracy by making use of modern scientific tools and technologies, which include planetarium software. The astronomical references of Rigveda could be observed in the sky between 7000 BCE and 5000 BCE, whereas those of Ramayan could be observed sequentially around 5100 BCE. The astronomical references of Mahabharat pertain to the sky views observed sequentially between 3153 BCE and 3102 BCE. For arriving at these dates, following approach and methodology were adopted–

More than one lakh slokas contained in nine volumes of Mahabharat (Parimal Publications) were scrutinized and astronomical references were extracted sequentially. Only those which were found in Critical Edition as well were identified for sequential dating. All translations were redone with the help of Sanskrit scholars and referring to dictionaries as some of the traditional translations were found to be not fully correct.

Astronomical references from Sabha parva, Vana Parva, Udyog Parva, Bhishma Parva, Shalya Parva, Shanti Parva, and Mausala Parva have been dated sequentially by making use of Planetarium software (Fogware). The internal consistency of astronomical dates with the text of Mahabharata was ensured. Astronomical dates calculated by almost all the scholars during last 130 years were analysed with respect and genuine efforts were made to provide the missing links and to make the dating more comprehensive.

Vana Parva of Mahabharat reveals that in Mahabharat days asterisms were being counted from Rohini as equinox was on that. Astronomically there is precession of equinox by one degree in 72 years. Today Spring equinox is in 3rd quarter of Purva Bhadrapad Asterism; thus equinox has moved by more than 5.25 nakshatras (Krttika, Bharani, Asvini, Revati, and Uttara Bhadrapada) since this reference in Mahabharata. This means that more than 5040 years (960 X 5.25) have passed. This took our research period for dating of Mahabharata references to 4000 BC – 3000 BC).

A more accurate translation of all the relevant *slokas* of chapters 2 and 3 of Bhishma Parva, had enabled such accurate depiction of sequential sky views, which should be able to set at rest all controversies regarding the dating of Mahabharat war. Sky view of 19th December, 3139 BC, depicting *Magh Shukla Saptami*, a day before Bhishma's demise and of September 14, 3139 BC, depicting all astronomical references of Bhishma Parva observed six hours before solar eclipse of Kartik month are most exclusive, which do not get repeated on any other date; not even around 3067 BC, 1792 BC or 1472 BC.

Eleven sequential sky views covering a period of 52 years from 3153 BC to 3101 BC have been generated, using planetarium software (Fogware), which exactly match the descriptions in Mahabharat, are internally consistent and sequentially accurate. Evidences from archaeology, archaeobotany, palynology, oceanography, remote sensing and genetic studies have corroborated this date sequence of events recorded in Mahabharat. The kingdoms which supported Pandavas and Kauravas during Mahabharat war, have been plotted on the Map, which reveals that entire Greater India was involved in this war. This map also certifies the existence of *Bharatvarsha* as a Nation with defined boundaries for more than 5000 Years.

68

The Critical-Philology-Paradigm and Our Adhyatmika Tradition

Dr. Sati Shankar

Global Synergetic Foundation, New Delhi

Email: satigsf@gmail.com

During recent decades a lot of writings, diametrically opposed to our traditional view, have come from the West declaring Sanskrit writings devoid of any spirituality, full of internal contradictions, divisive, and above all created for power-culture manipulations, and hence oppressive, immoral and socially toxic. Our Tradition's viewpoint, however, has always been the "bliss", *ananda; vijnanam anandam brahma; SB.14.6.9.34; BrhU.3.9.34*), of the "Cosmic Whole" through *purushartha*, that is why it invokes, *sarve bhavantu sukhinah, sarve santu niramayah | sarve bhadrani pashyantu, ma kashchid_duhkha-bhag-bhavet||*. If one finds an "exploitative-power-culture-manipulation" in such a viewpoint, which assimilates *sarve*,

i.e., “all”, into its bliss invocation, there must be something wrong in one’s reasoning. Many of the mistakes are committed when we continue using mindlessly some Paradigm or methodology without really knowing if it is applicable to the subject under consideration. Every method depends on certain assumptions and success or failure of the method depends on whether foundational assumptions are satisfied or not. In this paper, we explore the foundations of the Western literary analytics, the “Critical Theory—Philology Project—Paradigm”, applied by Western practitioners to our Sanskrit Knowledge System and Scriptures, and examine their applicability to our Sanskrit Knowledge System, especially that part dealing with the *adhyatmika* dimension. Causes limiting the Paradigm responsible for previously mentioned insinuating interpretations have been found and modifications are proposed to widen and generalize the foundational assumptions to enhance the applicability of the Paradigm, and so to assimilate the part, which has been assumed away so far.

This dismissal of a vital aspect of our traditional paradigm may be due to conceptual handicap, technical limitation or lack of tractability or to dominance of the leftist ideology or a combination of all these. Examination of these may be undertaken, as challenging research projects, both, by Indian and/or the Western scholars since what is proposed here would lead to methodological innovation.

69

Justification of Death: Analyzing through Mokshadharmā

Dr. Shakuntala

*Associate Professor, Philosophy, University of Gauhati, Guwahati
(Assam)*

Email: shakuntalabora@yahoo.com

The birth story of Death in *Mahabharata* actually tells us of the necessity of destruction. The story begins with Brahma being angry for not being able to find a solution to Earth’s suffering that arises due to burden imposed on her by over population of creatures. Brahma’s anger starts destroying living creatures. Seeing destruction of living creatures Shahnū appears who requests Brahma to end the annihilation. Brahma suppresses his anger and from this suppressed anger Death is born. Brahma tells Death to destroy living creatures which she refuses to do for fear of incurring curse of creatures. To this Brahma tells her that in her dharma will reside as she will act equally towards every creature while bringing death to them. My paper is an attempt to understand justification of destruction and also to enquire what it is that gives something the status of dharma.

Scientific Aspects of Vedic Sun God

Prof. Shashi Tiwari

Former Prof. of Sanskrit, Maitreyi College, University of Delhi

&

General Secretary, WAVES-India

Email: shashit_98@yahoo.com

According to the Vedas, the structure of the world is purely Nature-oriented. It is said, 'Soma-suryatmakam jagat' i.e. 'the world is an outcome of Soma (water or moon) and the Surya (sun)'. The *Nirukta* talks about Surya as the source of all heat and energy; especially fire is the outcome of solar energy. The study of Sun-god shows his intimacy with five basic elements: earth (*prithivi*), water (*jala*), air (*vayu*), fire (*agni*), and ether (*akasha*). In the *Rigveda Samhita*, the sun and its various forms and attributes are invoked and worshiped under various names denoting his functions, qualities or features, such as Surya, Savitrò, Pushan, Bhaga, Mitra, Vishnu, Aryaman, Vivasvat, Amsa, and Aditya. These names can be etymologically explained as the epithets of Sun-god. These names denote his functions, attributes or qualities. In the *Rigveda*, we chiefly recognize five solar deities because they, having solar features, are praised independently in the hymns or verses.

The number of solar deities is extended definitely after Rigvedic period. Surya is the most prominent among all the solar deities of *Rigveda* as he represents the visible luminous orb. Other solar deities reflect a number of characteristics and features of solar energy and its sustaining power. The family, horses, chariot and other items related to Vedic Sun-god can be elucidated through scientific symbolism. Vedic insight has proved Surya as the main source of life and liveliness. Most of the mythological conceptions in reference to Surya are designed by the Vedic Seers on the basis of scientific knowledge. Ancient seers also knew about co-ordination between all natural powers for universal peace and harmony.

Surya as the greatest god of Vedic traditions, reaches the highest peak of Supreme divinity, but due to his bright visible (*pratyaksha*) form and motivating character, he kept fascinating our ancient seers to express him constantly in a natural way. Surya's physical form is prominent in Vedic prayers but his divine character has overpowered the minds of devotees because of his energetic influence.

Due to the realization of his numerous natural powers, Sun-god, is invoked with a group of solar deities for prosperity, health and happiness in the Vedic hymns, and is also realized as a Supreme god who can bring about all wellbeing and can grant absolute immortality to the devotee.

71

A Scientific Critique of Abiogenesis and Exploring Alternative from Vedic View

Dr. Shilpi Saxena

Center for Advanced Studies, University of Delhi, Delhi

Email: drshilpisaxena.du@gmail.com

Abiogenesis is the theory that life can arise spontaneously from nonlife molecules under proper conditions. Evidence for a large number of transitional forms to bridge the stages of this process is critical to prove the abiogenesis theory, especially during the early stages of the process. The view of how life originally developed from nonlife to an organism capable of independent life and reproduction presented by the mass media is very similar to the following widely publicized account:

Four and a half billion years ago the young planet Earth was almost completely engulfed by the shallow primordial seas. Powerful winds gathered random molecules from the atmosphere. Some were deposited in the seas. Tides and currents swept the molecules together. And somewhere in this ancient ocean the miracle of life began, the first organized form of primitive life was a tiny protozoan [a one celled animal]. Millions of protozoa populated the ancient seas. These early organisms were completely self-sufficient in their seawater world. They moved about their aquatic environment feeding on bacteria and other organisms. From these one celled organisms evolved all life on earth. (Miracle of Life quoted in Hanegraaff, 1998, p. 70). The “warm soup” theory, still the most widely held theory of a biogenesis among evolutionists, was developed most extensively by Russian scientist A.I. Oparin in the 1920s. The theory held that life evolved when organic molecules rained into the primitive oceans from an atmospheric soup of chemicals interacting with solar energy. Later Haldane (1928), Bernal (1947) and Urey (1952) published their research to try to support this model, all with little success. Then came what some felt was a breakthrough by Harold Urey and his graduate student Stanley Miller in the early 1950s.

72

Scientific Thoughts and Components in Vedic Literature: An Investigation for its Genesis

Dr. Soma Basu

Associate Professor, School of Vedic Studies, Rabindra Bharati University, Kolkata

Email: somabasu01@gmail.com

By examining the earliest textual evidence i.e., the Vedas (specifically, the Rigveda) and with the aid of further researching into the different phases of scientific history and development

it is possible to shed considerable light on the causes and motivations behind the ancient Indian scientific traditions. Vedic seers used to observe all natural phenomena as the manifestation of divinity. They attained a transcendental stage no doubt, first they observed natural phenomena very keenly and later on, they conceptualized divinity among particular deity keeping in view particular natural attributes. There are few prominent deities in the Rigveda whose divine and natural attributes are clearly perceived in the hymns, thus they are transparent; and there are many whose natural attributes are not very prominently pronounced; they cannot be identified from physical phenomena, they are opaque. Among them, Agni (or, the deity of fire) is one of the principal deities of the Rigveda who has been the most prominent of all the natural phenomena. It is produced by rubbing vigorously and forcefully two wooden sticks with both hands. The Maruts (or, the deity of wind) are described as the symbol of power. They have tremendous capacity and great strength for achieving activity. They are transparent deities. Natural attributes of Agni and Maruts as observed by the seers are in clear conformity with modern science.

A close study of the hymns of the Rigveda reveals that the seers did exhibit the knowledge of mathematics since they had to calculate the position of stars and planets to fix the proper time for sacrifices, daily performance of which deemed to be the most important and highest work. As early as in Vedic era man's experience of using ten fingers might have given rise to the concept of large numbers as multiples of 'ten', as a number of references in the Rigveda show that man used ten fingers while producing fire. It is quite likely that they knew additions and multiplication which again can be shown from the Rigvedic stanzas.

In this paper there has been an humble attempt to examine the physical features of fire and wind as found in the Rigveda and also to affirm our claim that it is India to which goes the credit of enumerating some of the scientific ideas and discoveries especially in Physics, Mathematics, Astronomy and Chemistry, the chief elements of ancient science to which Europe arrived at much later. We have taken up only physical features of Agni and Maruts, and a bit of mathematics for our discussion.

73

Science of financial management in Ancient India

Mr. Subramanian Chidambaran

M.A. Sanskrit (2nd year), University of Mumbai, Mumbai (Maharashtra)

Email: bcsbbu@gmail.com

It is a lesser known fact to many people that India was the highest contributor to world GDP until the first millennium. A strong GDP indicates a strong economy which in turn suggests a strong and robust financial system. But unfortunately Indians have not been great at record keeping and hence even to know what finance systems existed during the time of our ancestors, we need to rely on the huge corpus of literature sources. Most of the current research as well as understanding of the ancient Indian finance systems is from the study of

the great work 'Arthashastra' of Kautilya. This paper is an attempt to look at sources beyond the *Arthashastra*, in fact scanning right from the Vedic literature onwards.

74

Etymology of Bhakti in *Bhagvadgita*: Hermeneutic Study

Dr Sumanta Rudra

*Pursuing research on Bhakti in Chaitanya School, Kanchipuram University,
Kanchipuram (Tamil Nadu) Email: sumantarudra@gmail.com*

&

Prof. Shakuntala M. Gawde

*Assistant Professor, Department of Sanskrit, University of Mumbai,
Mumbai (Maharashtra)*

Email: shakuntala_gawde@rediffmail.com

The paper introduces the significant position of Gita in the overall Hindu Philosophy. We take an overview of notable and popular commentators of the Gita belonging to various philosophical schools. However, due to the composite nature of the Gita the commentaries lead to varying interpretations of the text. For the purpose of this paper we have taken the study of Bhakti yoga in the Bhagvad Gita. We interpret the etymology of Bhakti and its Philosophy which aims to trace the meanings and role of bhakti as it historically emerged in the oldest text, Rig veda, and some of the well-known thought systems of India. With this background we understand various stages of Bhakti in Gita combined with various stages of divinity of the Bhagwat, that shows how the human entity Krishna is the form of universal being and the reason for supreme devotion. Paper tries to investigate the implicit meaning of bhakti and its usage in the *Bhagvadgita* by hermeneutic understanding of selected verses which showcases *para bhakti* from the translation of the book “ *Bhagvadgita As it is*”.

75

Healing For Living Beings through Music

Dr. T. Seetha Rama Lakshmi

Professor of Music; Member, WAVES, Bangalore

Email: tsrlakshmi@yahoo.com

Basically healing is the response for treatment. It is for living beings on earth. All the beings on the earth are directly or indirectly exposed for the ailment Nature itself is rich

produce the remedial measures to a major extent. Natural breeze from the various plants and herbs, medicinal plants and other nature's enormous panoramic beauty contribute to put the health back. Further pleasant feeling, work and more add to the process of healing efforts. In earlier times Music therapy was much in vogue. It is Valid even in the contemporary times.

Now also to a maximum extent, knowingly or unknowingly music is a part and parcel of the living beings. In the aspect of overcoming the hurdles and health hazards in the living beings Music sounds help. Apart from that many advanced techniques have also taken a place in the field of research and subject as such. Music is a healing device for some of the physical and mostly mental illness of the living beings.

76

A Study of Gynaecology in Atharvaveda

Mr. Tahasin Mondal

Research Scholar, Sanskrit, Aligarh Muslim University, Aligarh (Uttar Pradesh)

Email: tahasin89@gmail.com

Today mankind's scientific comprehension has transcended to a whole new level. Nothing is impossible, with science by our side. As an example, the test tube baby is such an achievement that even a few decades ago this was supposed to be an impossible feat. The west is quite a few steps ahead of us when science is concerned. The advent of science has ensured that each and every system and major organ of the body has different scientific field and an area of study. To understand this situation we have to go back a few thousand years back in time, when the rest of the world was in darkness. India however, was scientifically ahead of all other nations, thanks to the Vedic sages and their scientific thinking. The knowledge that they imparted had a very wide spectrum but here in this research paper we will be discussing about the gynaecological aspects.

Atharva Veda is very articulate, precise and vivid when talking with respect to this. Everything from the changes the mother's body goes through while pregnant, the psychological changes to the process labour is described and elaborated upon. It has theories on the reason why some females cannot conceive. There have been evidences of surgical procedures being performed on women who cannot conceive. After child birth the mother's body becomes weak and prone to diseases. To prevent this a medicine named 'Baja pinga' (ot fiax) was used in those times. The labour room should be rid of all things that may be a cause of infection or a disease. During labour the bio-waste (blood, umbilical cord, and placenta) should be disposed properly. This wastes could lead to infection and are dangerous for both the mother and the child. Reference in AtharvaVeda (8.19) –

“ye anno jatan marayanti sutika anusherate |

Stribhagan pingo gandharvan vato abhramivajatu ||”

The Vedic scholars stressed upon the importance of sunlight entering the room. It is common knowledge that sunlight drives away germs. Unfortunately, no importance is paid to

this important fact. The Vedic scholars were so ahead of other contemporary scholars that their theories can be put to use even today. Their knowledge about gynaecology illuminated minds and helped save to lives of countless mothers and sons. What we need, is a proper scientific experiment conducted by an impartial body, to test these theories and put them to use.

The miracles performed in today's medical world are said to be a gift from the west; but contrary to the popular belief, this science has been in practice in India since times immemorial. The Vedic scholars were the pioneers in the medical branch that is now called gynaecology. And the awe inspiring fact is that all this had been done a couple thousands of years ago. All in all, the Vedic scholars demand respect and acknowledgement of the fact they were the first among men to have thought about this delicate science which gives rise to new lives. The purpose of this Research Paper is to raise awareness about the knowledge that the Vedic Seers possessed a few thousands of years ago. The advanced gynaecological science that is see today is present because of the precedents set by the Atharvaveda. The Atharva Veda was the first book to shed light upon this science.

77

Rig-Vedic Science

Dr. Trivedi, Chandra P.

*Former Principal, MJS, College, Bind &
Vedic Research Institute, Ratlam, Madhya Pradesh
Email: atcptrivedi@gmail.com*

&

Dr. S.P.S. Chauhan

*Former Prof. of Zoology, Delhi University, Delhi
Email: spschauhan40@gmail.com*

The seals have been prepared for demonstration and teaching. The Seers in the beginning of Vedic hymns have traced origin and evolution of the creation in a symbolic way from the fundamental energy Primeval Man. It is an essential part of the teaching to start the subject from its original source and gradually enter into the depth of the subject. Accordingly, the way of expression and knowledge is the same but with different metaphors, which lead to the depth of subject concern with praise prayers in the background, where words indicate the phenomenon at micro level.

All seer have used the same terminology of the deities with different metaphoric expressions, indicating the origin of solar system and sun as the main source of energy. The metaphors will look like 'headless and footless', without the concern knowledge with reference to the context. They have expressed the origin of the creation and nature from the fundamental energy with its dualistic force of photon phonon interaction.

The generation of charged particles is the first step. Accordingly the solar system, from nebula came into the existence with photon-phonon interaction. The earth became the centre for the origin of life. The formation of the atmospheric layers, generation of ions in the ionosphere and formation of ozone layer in the atmosphere are the essential factor for the origin of life.

The white visible-light with its complimentary resonant seven rays lead the formation of atom have constituted the base of creation. The generation of the magnetic energy in the atom and electromagnetic bond energy is the main cause of creation. The major elements of the creation are Carbon, Hydrogen and Oxygen. They have been termed, as Matrishva, Pavman, and Indu respectively. The nature feed the creation just like mother, under the nature and the natural forces.

The white visible light with Red wavelength has got the entry into the earth's atmosphere through ozone layer. With time carbon dioxide and water with the help of Bhrigu, Bhag (chlorophyll) converted the Red wavelength of light into the chemical-energy. The Ashvins—nucleotide pairs of DNA stimulated the process of evolution. The DNA with four bases is a universal genetic material. It is the base of living-beings with generation of life energy in the primitive prokaryotic cell.

They have summarizes the thoughts, with focus on the single unified force as the creator with its dualistic force. The atom is the building block of the creation, the DNA with four base is the building block of the living-beings, the life energy, the chemical energy of photosynthesis, the electromagnetic bond energy, with impact of VÈc—thought energy are playing, their role under the cosmic principles with photon-phonon interaction.

These thoughts have been woven in the metaphors, so as to teach the students to acquaint them with phenomena and reactions in the nature at micro level. Just like a teacher teach to his students and examine them with asking answers of the riddles. It is the theme of the hymns, which move forward gradually into the depth of the subject concern.

As reflected in the book four Seer Scientist Vamdeo son of Gotam belongs to school of Biology, where he has traced the origin and evolution of the creation with reference to the origin of life and consciousness, and gone into the depth of biology, exploring the Ribhu as celestial race.

Similarly the Seer Dirghtamas belongs to the school of cosmic science. He has traced the origin and evolution of the creation with reference to the solar system and seasonal variation in the system, and how the system is working. He has described it in the book one from hymns 150 to 175.

The scientific facts, which have been revealed in the Vedic hymns, are in tune with the modern science at present. The higher Vedic knowledge, just like, the consciousness, the role of thought energy in life, the words and pictures are thought stimulator, they stimulate the language of DNA. These facts are waiting for the establishment in the modern science. Hence to interpret Vedic hymns one must have interdisciplinary approach with knowledge of the creation system.

78

Embryology Depicted in the Bhagavata Purana

Dr. V.K. Hampiholi

Emeritus Fellow, Dr. A.V. Baliga College of Arts and Science, Kumta (Karnatak)

Email: vishwanathhampiholi@yahoo.co.in

The study of embryo is known as embryology. It deals with the process of conception, development of embryo and growth of fetus. The systematic study of this science started in the western countries after the 17th century. But, it appears that in India the study of embryology has started a long back. We come across some references regarding this science in the Vedic literature. The *Bhagavata purana* is one of the important puranas and it describes the development and the growth of *garbha*.

The soul enters the womb of a woman through the semen. The union of sperm (*Shukra*) and egg (*Shonita*) is called *Kalala* (zygote) and it takes the shape of a bubble (*Budbuda*) and it becomes an egg. Within a month the head appears and during second month other parts of the body show their existence. Various limbs appear at the end of the third month. In the second trimester the *Sapta Dhatus* come in to being. It feels hunger and thirst. An amnion encloses it and it begins to move in the womb. The mind and the intelligence emerge during this period. The fetus grows and it gains memory by the grace of the God. It suffers a lot like a bird in the cage. It remains lying with its head turned towards the belly and with its back and neck arched. Thus the paper presents the embryology depicted in the *Bhagavata Purana*. Some illustrations are given to prove that the fetus is capable of learning and to express its feelings. And at last it is showed that the findings of modern science are nearer to the description of ancient texts.

79

The Construction, Structure and Means of Human Cognition and Communication: A *Brahmajnana* and *Shaddarshana* Insight

Dr. Varanasi Ramabrahmam

Former Associate Professor, Physics, Andhra Pradesh

Email: rbvaranasi@gmail.com

The comprehensive nature of information and understanding, available in the *Upanishads* as *Brahmajnana* and *Advaita Philosophy*, in relation to the scheme of human cognition and communication is presented. All this is highlighted with vivid classification by differentiating cognition as a combination of cognitive agent, cognizing element, cognized element; formation,

form and structure of cognition, instruments and means of cognition, validity of cognition and the nature of energy/matter which facilitates the cognition-cognizing process. The human communication process which is the reverse of cognizing process is also presented with necessary description. The sameness of cognitive and communicative process during language acquisition and communication processes is also given. The axioms of human cognition together with the means and validity of cognition are presented and discussed.

80

Vedic Values Resonate in the Modern Human Rights Revolution

Prof. Ved P. Nanda

*John Evans Distinguished University Professor &
Thompson G. Marsh Professor of Law at the University of Denver, USA
Email: nandas@earthlink.net*

In the Vedic period the concept of Dharma, conceived as human responsibilities, integrated the state and all actions of individuals. The importance of human rights resonated in the rich legacy of *Vasudhaiva Kutumbhakum*, with its clear message of equality of all human beings and protection of inherent human dignity. These are basic values cherished in the Vedas, which indeed form the foundation of the modern human rights revolution.

81

Science and Spirituality in the Upanishads

Dr. Vedwati Vaidik

*Former Associate Professor, Sri Aurobindo College (eve), University of Delhi, Delhi
Email: dr.vaidik@gmail.com*

The Upanishads are the fountain head of Indian philosophy. The treasury of the highest knowledge. Samvada dialogue i.e. the method of questions and answers, could be seen employed at every stage of the development of Indian philosophy. The Upanishads are to be regarded as the record and outcome of such Samvadas and academic disputations of the path finders and the system builders of the Saksatkrt dharma rsis, of the devarsi and of the king philosophers. The various samvadas or dialogues on the philosophical problems embodied in the Upanishads were held at the celebrations of the great sacrifices or at samiti or Parishads organized by the Great king Philosophers of that time, besides this, the Ashrams ie the forest hermitages of the upanishadic period were the philosophical laboratories of learned sages to discover the spiritual and highest truth of life in their contemplation and to impart it to their inquisitive disciples.

In the conversation of the great sage Yajñvalkyā and Maitreyī on the absolute self, he tells her, as a lump of salt thrown in water becomes dissolved in water but wherever one may take it is salty. So, this great being infinite, limitless is in all beings but is not visible like the lump of salt once dissolved in water.

The Brahmin sage Uddalaka Aruni teaching his son Svetaketu the oneness of the self illustrates him through the example of the Nyagrodha tree. He asked his son to bring the fruit of the Nyagrodha tree. The son brought it. He asked him to break it. He broke. The father asked what do you see? He replied, I see extremely fine seeds. Father asked him to break one. He broke. He asked him again, what do you see? He replied, 'Nothing at all'. Then the father said, 'The subtle essence (Anima Sakti) exists in this great Nyagrodha tree. So do the cosmic process (of the creation) with its name and forms arise from the subtle essence of pure being (Sat) that is the self. 'That art thou'.

Raikva the man with the cart told to King Janasruti that there are two absorbents in the world Prana and Vayu. When the fire, the sun, the moon and water goes out, it goes into the air. Air absorbs them all. With reference to the self Prana (breath) is the absorbent. Speech, mind, sight hearing goes in to breath as breath absorbs all this.

The great sages knew that one can combine together gold with (borax), salt, silver with gold, tin with silver, lead with tin, Iron with lead and wood with leather. There are hundred other instances in these dialogues of the Upanisads which are rich in elevating expressions and unfolds, the secret of science and spirituality imbibed in them Upanisads.

82

Scientific Aspects of Vedic Knowledge

Dr. Vimallesh Kumar Thakur

Delhi

Email: thakurvimallesh@yahoo.co.in

We have a reservoir of knowledge in the Vedas. As time passes, it comes into light. It requires stringent labour and research. Vedic people were versed in scientific expeditions and hence they were very progressive in their approach and outcome. Agriculture was the basis for development of any civilization. Vedic people overcame the difficulties thwarted by nature and its geography through their knowledge of tools, appliances, plantation (soils, seeds, sowing methods, transplantation, pesticide, manuring, irrigation). 'Aksha sukta' describes about agriculture. The Krishna-Parasara mentions deeply about 'madika', 'hala-prasarana', 'yathakalam', 'vyadhikha-ndanamantra', 'vata', 'bhambha', 'krimi', 'kita', 'kasyapiyakrishisukti', etc. Varahmihira too gives ample examples. The Rigvedic references also highlight the techniques used in Vedic times.

There is an account of the devices for lifting water from a well and for using it for irrigating the fields (Kasyapiyakrishisukti verses 167-69). There are references to channels too (RiV.10.19.4). The process of the formation of clouds and of rainfall was described in

terms of an embryo and delivery. It occurred from the first day of the bright half of Margasirsha (Brihatsamhita 21.5.6) The period of delivery of the rainfall was determined accordingly (ibid.9-12). Varahamihira records auspicious marks for the nourishment of the rain foetus, symptoms in different months favouring their health, and also indications of miscarriage (ibid.13-28).

The application of astronomical knowledge to agricultural work was noticed by Megasthenes (Fragment I, p.41; Majumdar p.237) who says that the philosophers of India, when gathered at the beginning of the year, forewarn the assembled multitudes about droughts and wet weather and also about propitious winds. *Rituvijnana* or climatology developed along with astronomy. The Brihatsamhita of the Varahmihira has many chapters dealing with several aspects of the subject.

83

Relationship Between Veda, Human Physiology and the Universe—Answers through Maharishi Mahesh Yogi Ji's Revelation to the World

Mr. Vivek Vaidyanathan

PhD student of Maharishi Vedic Science from Maharishi University of Management

Certified Teacher of Transcendental Meditation

Email: Vivek.vaidyanathan@tm.org

From time eternal, Veda is known as the basis of natural law (वेदोऽखिलो धर्ममूलम्). Veda is also asked to be imbibed eternally (वेदो नित्यम् अधियताम्). How could one imbibe books eternally or books be the basis of all natural law? Maharishi has structured all the Vedic literature preserved across time in a structured starting from pure unmanifest field of creative intelligence and revealed a sequential unfoldment of knowledge to become the basis of the whole phenomenal creation which is nothing but the sequential expression of Veda. In this paper, we will discuss the structure of Veda and the Vedic Literature and the sequential unfoldment of knowledge. We will also understand the value of the unmanifest and its connection to the most recent discoveries of Modern Science including Unified Field and Default Mode Network of the brain and how it connects to the experience of the Pure awareness through the practice of Transcendental Meditation technique as revealed by His Holiness Maharishi Mahesh Yogi Ji.

We will also see the variety of technological innovations based on the experience and understanding of the Transcendental Veda which is universally applied across all cultures, traditions, religions around the world.

Edifice of Vedic Science and Scientific Temper

Mr. Y.K. Wadhwa

Adviser, JBM Group, Gurgaon

Email: ykwadhwa01@gmail.com

The edifice of ‘Vedic Science’ is not built on distortions. The Vedas are not only the source of spiritual sciences but also material sciences. Dharma as per Vaishishik Darshan ensures both *Abhyudaya* (material well being) and *Nishreyasa* (spiritual well being). Vedic way of life did not neglect material progress as is evident from various Ved mantras which talk about Steamers, (Rig Veda 1-46-78), Spacious buildings with thousand pillars and appropriate measurements (Atharvaveda 9.3.21/ (Rig Veda 5.62.6), Canals (Atharvaveda 3.13.7), Designing of high speed vehicles (Rig Veda 1.120.10), Use of Wind, Solar, Electrical energy (Rig Veda 1.46.8). Vedic people were familiar with extraction of metals, dyeing of textiles, large number of numerals was in common use, and geometrical principles were used in construction of altars and buildings during Vedic times.

In view of above, I would like to ask those who question existence of any sciences in the Vedic texts, whether it is possible for any society to reach at such a level of material advancement without having a scientific base? Is it justified on the part of certain sections to dub such a society with mechanized devices and gold decorated buildings (RV 5-62-6) as primitive and scientifically backward? There is no denying the fact that this scientific base originated in India—the land of Vedas and which later travelled to the west where it got further developed in the last few centuries. However, it cannot lower the position of Vedas as the mother-of-science and India the birth place of knowledge and a Jagadguru. India has been a knowledge seeker as well as provider since ancient times. It was not the wild imagination of Maharishi Dayanand Saraswati (1824-1883) who spoke about sciences in the Vedas. Sri Aurobindo also asserted the same.

Vedas-as-the-mother-of-science is not a “magnificent dead end” as it provides lot of potential for asking new questions or providing new answers. Rationality, sense of inquiry and reasoning constitute the very basis of Vedic lore. Vedic thought has a scientific base, a scientific temper and it is not a closed water tight compartment. As per Nirukta of Acharya Yaska, Logic has been described as one of the rishies—*Tarkoo vai rishi*. Manu Smriti (12-106) says *Yasterkenanusandhatey sa dharma ved netra*, i.e., one who investigates the truth with logic and reason he alone can comprehend the truth. Vedic knowledge has to be understood with reasoning and objectivity or else it will look absurd says Vaishishka Darshan (6.1.1) *Budhipurva vaky akritir vedey*.

The Scientific temper of the Vedic rishies has evolved down the ages and influenced mankind. However, the biased minds or the persons with a sick mindset still continue to decry and deny the contribution of Vedic knowledge to the field of Science.

III

HINDI ABSTRACTS

85

जलविषयक वैदिक अवधारणा की वैज्ञानिकता

डा० अजय कुमार झा

सत्यवती महाविद्यालय, अशोक विहार, दिल्ली

Email: dr.ajaydu@gmail.com

जल प्राणी जगत् की एक महत्वपूर्ण आवश्यकता है। हम सभी जानते हैं कि कोई भी चेतन एवं अर्धचेतन प्राणी जल के बिना अधिक समय तक जीवित नहीं रह सकता है। मनुष्य की आवश्यक सभी आवश्यकताओं की पूर्ति के लिए जल की बड़ी अहंभूमि की होती है। जल के बिना अन्नोत्पादन असम्भव है तथा अन्न के बिना पृथ्वी पर जीवन अकल्पनीय है। वर्तमान समय में जल का असमान वितरण एवं इसका प्रदूषित होना दो गम्भीर समस्याएँ हैं। विश्व के विभिन्न देशों की सरकारें इस समस्या का समाधान करने का भरसक प्रयास कर रही हैं, परन्तु सफलता नहीं मिल रही है। विभिन्न संगोष्ठियों एवं सम्मेलनों का आयोजन कर इस समस्या का समाधान निकालने का प्रयास हो रहा है।

जलविषयक समस्या के समाधान के लिए वैदिक जलविषयक अवधारणा को समझने की आवश्यकता है। अथर्ववेद के एक मंत्र में जल को औषधि कहा गया है। वहाँ कहा गया है कि जल से अभिसिंचन करो, जल से उपसिंचन करो। जल बड़ी औषधि है—

जलाषेणाभिषिंचत। जलाषेणोपसिंचतजलाषमुग्रभेषजं तेन नो मृडजीवसे।

ऋग्वेद में मेघ को पिता कहा गया है। जल का वृष्टि करने वाला मेघ हमार पिता है—

आपो निषिंचन्नसुरपितानः।

वर्षा का जल अमृत के समान है और प्रजाओं के लिए प्राणरूप है—

स नो वर्षं क्नुतांजातवेदाः प्राणं प्रजाभ्यो अमृतं दिवस्परि।

इसी प्रकार वैदिकसाहित्य में जल विषयक अनेक मंत्र मिलते हैं जिनके विश्लेषण से वर्तमानकालीन जलसम्बन्धित समस्याओं का समाधान किया जा सकता है।

86

पर्यावरण शुद्धि का अप्रतिम साधनः यज्ञ

डा० अनिता खुराना

व्याख्याता—संस्कृत स०पृ०चौ० राजकीय महाविद्यालय, अजमेर

Email: khurana.anita5@gmail.com

आज सम्पूर्ण मानव सभ्यता के समक्ष पर्यावरण प्रदूषण की समस्या विकराल रूप में खड़ी है। आस—पास का समस्त वातावरण, जल, श्वास लेने के लिये सुवासित वायु, अन्न उपजाने वाली शस्य

श्यामला धरा, अन्तरिक्ष का सम्पूर्ण विस्तार, सुरम्य वनस्पति पूर्णतः प्रदूषित है। पर्यावरण प्रदूषण और असन्तुलन की समस्या के समाधान के लिये आज विश्वभर के वैज्ञानिक चिन्तित हैं।

वेदशास्त्रों ने पर्यावरणीय घटकों की शुद्धता के लिये हमें एक ऐसा अमोघ उपाय प्रदान किया है जो सभी तत्त्वों पर अपरिहार्य रूप से अपना प्रभाव छोड़ता है। वह उपाय है—यज्ञ। मन्त्रपूरित यज्ञ की सूक्ष्म ऊर्जा तरंगों प्रकृति के समस्त घटकों के भीतर तक पहुँच कर वहाँ विद्यमान प्रदूषण व विषाक्तता मिटा कर उसमें उपयोगी तत्त्वों का प्राण संचार करने में समर्थ हैं—

हविष्मतीरिमा आपो हविष्यां आ विवासति।

हविष्मान् देवोष्ध्वरो हविष्मां अस्तु सूर्यः। यजु. ६.२३

(यज्ञीय हवियों द्वारा हम जलों को, आकाश को, सूर्य आदि को हविष्मान् करें जिससे उनमें शुद्धि होकर प्रदूषक अथवा हानिकारक तत्त्व नष्ट हो जायें)

यज्ञ में समिधा, घृत एवं स्थालीपाक का प्रयोग होता है। यज्ञ में समिधा के लिये जिन वृक्षों की लकड़ियों के चयन का विधान है वे विविध औषधीय गुणों से युक्त एवं पर्यावरण शोधन एवं सन्तुलन में विशेष योगदान प्रदान करती हैं। यज्ञ में “घृत” का प्रयोग बहुतायत किया जाता है और घृत में पर्यावरण शोधक शक्ति अतुल मात्रा में है। यज्ञ में डाली जाने वाली हव्य वस्तुएँ सुगन्धित, पुष्टिकारक, रोगनाशक होती हैं। ये वस्तुएँ अग्नि में जलकर वायु को सुगन्धित शुद्ध, पुष्ट व रोगनाशक बनाती हैं। अतः स्थान—स्थान पर तथा प्रत्येक उद्योग, प्रतिष्ठान, फैक्ट्री, मिल, कारखानों आदि स्थानों में अनिवार्य रूप से प्रतिदिन प्रातः, सायं एक—एक घण्टा सूर्योदय और सूर्यास्त के समय पर्यावरण शोधक यज्ञ अवश्य करना चाहिए।

87

वेदज्ञान का भाषावैज्ञानिक पक्ष

डा० अंजू सेठ

एसोसिएट प्रोफेसर, सत्यवती महाविद्यालय, दिल्ली विश्वविद्यालय, दिल्ली

Email: dr.anjuseth@gmail.com; yseth7@gmail.com

भाषा मनुष्य के विचारों को व्यक्त करने का सशक्त माध्यम है जिसके अभाव में सम्पूर्ण संसार अज्ञानान्धकार में तिरोहित हो जाएगा। भाषा द्वारा भौतिक जगत् को जानने एवं लोगों से सम्पर्क स्थापित करने में विशिष्ट सहायता मिलती है। भाषा के आदि ग्रन्थ वेद ज्ञान के अथाह रत्नाकर हैं जिनसे ज्ञान की विविध सरिताएँ उद्भूत होती हैं तथा ज्ञानयज्ञ रूपी महासागर में विलीन हो जाती हैं। तभी कहा गया है— “वेदोऽखिलो धर्ममूलम्” तथा “सर्वज्ञानमयो हि सः” कहकर मनु ने इसी तथ्य का सार्वभौम उद्घोष किया था। वर्तमान संगोष्ठी का प्रेरणास्रोत भी वेदज्ञान ही है— यह सर्वसिद्ध एवं सर्वमान्य है।

वैदिक साहित्य में ज्ञान की अन्य विधाओं की भाँति भाषाशास्त्र एवं भाषाविज्ञान के उत्स भी उपलब्ध होते हैं। सर विलियम जोन्स, मैक्समूलर एवं प्रो० सईस जैसे पाश्चात्य विद्वान इसे मुक्तकण्ठ से स्वीकार करते हैं। चूँकि इस संगोष्ठी का उद्देश्य प्राचीन ज्ञान का संयोजन, परिवर्धन एवं पुष्टीकरण है अतएव

वेद के त्रिकालातीत, सटीक एवं अकाट्य भाषावैज्ञानिक तथ्यों को विद्वत्जनों तक पहुँचाना ही इस लेख का चरम उद्देश्य है। भाषाविज्ञान का सम्बन्ध प्रत्यक्षतया जनमानस की भाषा एवं गतिविधियों से होता है एवं उसी भाषाविज्ञान के तत्त्वों की वैदिक साहित्य में उपलब्धि इस बात की परिचायिका है कि मन्त्रद्रष्टारः ऋषियों की दूरदर्शितापूर्ण दृष्टियों ने वर्तमान युग की संभावनाओं एवं समस्याओं को व्यक्त कर उनके निवारणार्थ उपाय भी प्रेषित किए हैं जो वर्तमान युग में अति अनिवार्य हैं क्योंकि भाषा ही मानव के मनोमस्तिष्क का दर्पण है। यदि भाषा समृद्ध है एवं भाषावैज्ञानिक तथ्यों एवं परिवर्तनों से सम्पन्न है तो जनमानस भी समृद्ध होगा। यदि भाषा में विपुल शब्दभण्डार है, अर्थपरिवर्तन, अर्थसंकोच एवं वाक्यविन्यास की कुशलता दृष्टिगत होती है तो जनसामान्य का सुखवैभव भी विपुल होगा। विभिन्न वैदिक उद्धरणों के माध्यम से भाषा के सतत विकास, समृद्धि एवं भाषाविज्ञान की प्रायः सभी शाखाओं यथा शब्दविज्ञान, अर्थविज्ञान, ध्वनिविज्ञान, वाक्यविज्ञान, वर्णविज्ञान, शब्दार्थसम्बन्ध एवं स्फोट तत्व की उद्भावना वैदिक युग में अत्यन्त सूक्ष्मता परन्तु सहजता के साथ वर्णित की गई है। प्रस्तुत लेख में सभी सम्बद्ध भाषावैज्ञानिक तथ्यों को वैदिक वाङ्मय में उपलब्ध मूल उद्धरणों के माध्यम से विवेचित करते हुए उनका परवर्ती व्याकरणदर्शन के प्रसिद्ध वैयाकरणों एवं पाश्चात्य भाषाविज्ञान पर प्रभाव को भी वर्णित करने का प्रयास किया गया है।

प्रस्तुत लेख विवेचन, विश्लेषण एवं तुलनात्मक दृष्टि से वैदिक वाङ्मय के भाषावैज्ञानिक पक्ष को उभारने का विनम्र प्रयास है। वेद में उपलब्ध भाषाविज्ञान की ये विविध सरिताएँ ही भविष्य में अनेक सिद्धान्तों के निर्माण का प्रेरणास्रोत बनीं एवं पल्लवित, पुष्पित और संवर्धित होकर विश्ववन्दनीय बनीं।

88

वैदिक ज्ञान के वैज्ञानिक पक्ष: अर्थ—विज्ञान

डा० अर्चना रानी दुबे

पोस्ट डॉक्टरल फेलो, विशिष्ट संस्कृताध्ययन केन्द्र, जवाहरलाल नेहरू विश्वविद्यालय,
नई दिल्ली-110067

Email: archanadubey@yahoo.com

अर्थविज्ञान—जैसा कि नाम से ही स्पष्ट है, यह अर्थ का विज्ञान है। इसमें भाषा के अर्थ—पक्ष का वैज्ञानिक अध्ययन—विश्लेषण किया जाता है। शब्द भाषा का शरीर है तथा 'अर्थ' उसकी आत्मा है। भाषा का सम्पूर्ण व्यवहार अर्थबोध के उद्देश्य होता है तथा भाषा के द्वारा बोध्य अर्थ के वैज्ञानिक अध्ययन की ज्ञान शाखा ही 'अर्थविज्ञान' है। अंग्रेजी में इसे 'सिमैन्टिक्स' (Semantics) कहते हैं।

भारत में अर्थ—चिन्तन की परम्परा प्राचीन काल से ही चली आ रही है। भारतीय वाङ्मय के प्राचीनतम ग्रन्थ 'ऋग्वेद' में सर्वप्रथम हमें वैदिक ऋषियों के अर्थचिन्तन का दिग्दर्शन होता है। ऋग्वेद के 'दशम मण्डल' का 125वाँ सूक्त 'वागम्भृणी' सूक्त है। इन मन्त्रों में वैदिक ऋषि का वाक् तत्त्व के विषय में जो वक्तव्य है, वह बहुत ही गम्भीर व विचारपूर्ण है (अर्थविज्ञान और व्याकरण दर्शन पृष्ठ 25)। इस सूक्त के मन्त्र अर्थ—विचार की दृष्टि से महत्त्वपूर्ण हैं। ऋग्वेद के आठवें मण्डल के 100वें सूक्त में भी वाणी का वर्णन मिलता है। ऋग्वेद के प्रथम मंडल का मंत्र है—

चत्वारि वाक्परिमिता पदानि तानि विदुर्ब्राह्मणा ये मनीषिणः।

गुहा त्रीणि निहता नेंगयन्ति तुरीयं वाचो मनुष्या वदन्ति॥ (ऋग्वेद 1/164, 45)

ऋग्वेद के अन्य मन्त्रों से स्पष्ट है कि ऋग्वैदिक काल में भी अर्थचिन्तन पर्याप्त विकसित था। ब्राह्मण ग्रन्थों में हमें भाषा और उसके अर्थविश्लेषण का प्रारम्भ दृष्टिगत होता है। 'शतपथ ब्राह्मण' में 'इन्द्र' शब्द की व्युत्पत्त्यात्मक व्याख्या की गई है। (शतपथ-ब्राह्मण 14/6/11/2) 'तैत्तिरीय आरण्यक' में पुरुष की व्याख्या 'पूर्वमेवाहं ईहासम् इति' इस प्रकार की गई है, जो कि विशुद्ध व्युत्पत्त्यात्मक है। (तैत्तिरीय आरण्यक 23/1/2) ब्राह्मण एवं आरण्यक ग्रन्थों में विकसित वैदिक अर्थचिन्तन की प्रणाली उपनिषदों में भी दृष्टिगत होती है। (द्रष्टव्य छान्दोग्योपनिषद् 6/8/1) उच्चतम विशुद्ध भाषा का विवरण उपनिषदों में प्राप्त होता है। 'माण्डूक्योपनिषद्' में 'ऊँ' को ब्रह्म का प्रतीक माना गया है। 'अ, उ, म' चेतना के तीन स्थितियों (जाग्रत, स्वप्न तथा सुषुप्ति) के प्रतीक है। सम्पूर्ण 'ऊँ' चेतना के एकत्व का बोध कराता है। (माण्डूक्योपनिषद् 1) इससे स्पष्ट है कि हमारी भाषा आत्मतत्त्व को प्रकाशित करने की एक आभासात्मक साधन मात्र है। इस प्रकार वैदिक साहित्य में भाषा विषयक ऐतिहासिक तत्त्व प्राप्त होते हैं।

मन्त्रों के अर्थों को शुद्ध समझने के प्रयास ने वेदांग के रूप में 'शिक्षा' को जन्म दिया। वैदिक शब्द कोश 'निघण्टु' की व्याख्या के रूप में 'यास्क' का 'निरुक्त' ग्रन्थ भी (छठीं शताब्दी ईसा पूर्व) इसी काल में प्राप्त होता है। 'यास्क' ने अपने ग्रन्थ 'निरुक्त' अर्थात् 'निरुक्ति' का आधार ही अर्थ को माना है।

अर्थ-ज्ञान के बिना निर्वचन असम्भव हैं- अर्थनित्यः परीक्षेत। (निरुक्त 2-1) 'यास्क' 'अर्थविज्ञान' को 'भाषाविज्ञान' का सर्वस्व मानते हुए वाणी रूपी वृक्ष का पुष्प और फल अर्थ को स्वीकार करते हैं- 'अर्थ वाचः पुष्पफलमाह।' (निरुक्त 1-20) वैदिक भाषाचिन्तन में 'अर्थ' को केन्द्र मानकर ही वाणी का विवेचन किया गया है। वैदिक भाषाचिन्तन की परम्परा का ही विकास आगे चलकर 'व्याकरण' ग्रन्थों में प्राप्त होता है। पाणिनि, पतंजलि के पश्चात् 'भर्तृहरि' का 'वाक्यपदीय' इस परम्परा का अङ्गीकारी ग्रन्थ माना जा सकता है।

89

वैदिक मनोविज्ञान— शिवसंकल्प सूक्त के परिप्रेक्ष्य में

डा० अर्जुन प्रसाद चौधरी

टी.जी.टी. (संस्कृत), रा.उ.मा.बा.विद्यालय, डिफेन्स कालोनी, नई दिल्ली

Email: Arjun.choudhary41@gmail.com

वेद मानव मात्र के लिए प्रकाश स्तम्भ हैं तथा ज्ञान की अक्षय निधि माने जाते हैं। कहा भी गया है- सर्वज्ञानमयो हि सः (मनु.२/७) वेदों का प्रकाश संसार भर में फैलकर मानव जीवन में व्याप्त, निराशा, अज्ञान, दुर्विचार, आधि-व्याधि को दूरकर मानव जीवन में, ज्ञान, आचार, संयम एवं सहभाव का प्रकाश आलोकित कर रहा है। वर्तमान समय में मनोविज्ञान एक अत्यन्त महत्वपूर्ण विज्ञान है। महाकवि

कालिदास ने कहा है— “शरीरमाद्यं खलु धर्म साधनम्”। मानव जीवन न केवल प्राण धारण, भोजन व शयन है अपितु अपनी इन्द्रियों के स्वास्थ्य रक्षण तथा उनके द्वारा श्रेष्ठ कार्यो इसका अर्थ है मन का विज्ञान अथवा मन की विभिन्न स्थितियों का विज्ञान ।

शुक्ल यजुर्वेद का शिवसंकल्प सूक्त मनोविज्ञान के इसी गूढ तत्त्व को उजागर करता है। इसके प्रत्येक मन्त्र में मन के शिव संकल्प अर्थात् शुभ विचार वाला होने की कामना की गयी है। यदि मानव मन शुभ संकल्प वाला हो जाए तो संसार “सत्यं शिवं सुन्दरम्” से ओत-प्रोत हो जाए।

90

वेद में प्राणतत्त्व-विज्ञान

डा० अरुणा शुक्ला

संस्कृत विभागाध्यक्षा, बी. एल. एम. गर्ल्स कॉलेज, शहीद भगतसिंह नगर, (नवांशहर) पंजाब

Email: arunashukla71@yahoo.co.in

ज्ञान और विज्ञान दोनों ही अपना वैशिष्ट्य रखते हैं। ब्रह्म को जानना ज्ञान है और ब्रह्म से उत्पन्न सृष्टि के विभिन्न तत्त्वों का विश्लेषणात्मक ज्ञान विज्ञान है। सृष्टि के विभिन्न तत्त्वों की जानकारी ज्ञान कहलाती है और यह कई प्रकार की होती है। जब कोई वस्तु हमारे समक्ष आती है और हमारी इन्द्रियों के साथ उसका सन्निकर्ष होता है, तब उससे जो ज्ञान होता है वह प्रत्यक्ष ज्ञान कहलाता है। प्रमा, प्रमेय और प्रमाण ये ही ज्ञान के अवयव हैं। विज्ञान में प्रमा, प्रमेय तथा प्रमाण होते हैं, किन्तु प्रधानता वस्तुगत या पदार्थगत तत्त्वों के विश्लेषण की होती है। प्रमेय वस्तु किस प्रकार के कार्य करती है, किन तत्त्वों के साथ उसका सम्बन्ध है अपने से भिन्न तत्त्व के साथ मिलने पर उसमें क्या क्रिया-प्रतिक्रिया होती है, अन्य तत्त्वों के साथ उसकी सापेक्षता तथा निरपेक्षता क्या है, यह विज्ञान कहलाता है।

वेद विश्व का प्राचीनतम वाङ्मय है। यह उन ऋषियों के द्वारा दृष्ट है जिन्होंने धर्म का साक्षात्कार किया था, अर्थात् जिन्हें सभी प्रमेय वस्तुओं का यथार्थ ज्ञान था। विभिन्न तत्त्वों का निर्माण कैसे होता है? उनमें किस प्रकार, किस स्थिति में, कैसी क्रियाएं एवं प्रतिक्रियाएं होती हैं उन सबका भी उन्हें ज्ञान था। इस प्रकार वेद में न केवल ज्ञान का बल्कि विज्ञान का भी प्रतिपादन पूर्णरूप से हुआ था। इसके लिए ऋषियों की भाषाशैली के सम्यक् ज्ञान के अभाव में हम वेद में निहित विज्ञान के तत्त्वों को जान नहीं पाते। वेद-विज्ञान को जानने के लिए उस शैली को भी जानना परमावश्यक है। ऋषि जब किसी वैज्ञानिक तत्त्व का विवेचन करता है तो उसके लिए जो शब्दावली प्रयुक्त करता है वह श्लेषात्मक है उसके तीन अर्थ एक साथ निकलते हैं— आधिभौतिक, आधिदैविक तथा आध्यात्मिक।

वेद-विज्ञान में प्राणतत्त्व का विशेष महत्त्व है क्योंकि वही जीवन का आधार है। वैदिक ऋषियों का चिन्तन प्राणिविज्ञान की अपेक्षा प्राणविज्ञान पर अधिक है। विश्व के प्राचीनतम वाङ्मय ऋग्वेद में प्राण को ‘आयुः’ कहा गया है— ‘आयुर्न प्राणः’ (ऋ. १.६६.१)। इस प्रकार संहिताओं में प्राणतत्त्व का अनेकविध विवेचन किया गया है, जहां प्राणों की संख्या अनेक है। इसके अतिरिक्त संहितोत्तरवर्ती ब्राह्मणग्रन्थों, आरण्यकों तथा उपनिषदों में संहितागत प्राणविषयक अवधारणा का ही कई दृष्टियों से

उपबृंहण किया गया है। ब्राह्मणों में अर्थवाद के द्वारा तथा उपनिषदों में आख्यान के द्वारा प्राणतत्त्व का विवेचन किया गया है और उसकी महत्ता का प्रतिपादन किया गया है।

91

“आत्मतत्त्व” के औपनिषदिक तथा वैज्ञानिक पक्ष

सुश्री भाग्यश्री वि. पाठक

शोध छात्रा, संस्कृत विभाग, कला संकाय, का०हि०वि०वि०, वाराणसी

Email: b.v.pathak12@gmail.com

वेद न मात्र भारतीय संस्कृति के महत्त्वपूर्ण ग्रन्थ हैं अपितु यह सम्पूर्ण मानव समाज के लिए आकर के समान है, जिसमें मनुष्य को अपने सभी प्रश्नों के उत्तर तथा जिज्ञासाओं की सम्पूर्ति प्राप्त होती है। ‘विद् ज्ञाने’ धातु से भाव अर्थ में घञ् प्रत्यय लगने से ‘ज्ञानार्थक’ वेद शब्द की निष्पत्ति होती है। इस प्रकार वेद का शाब्दिक अर्थ ‘ज्ञानराशि’ है। ‘सर्वज्ञानमयो हि सः’ (मनु० २/७) मनु का यह कथन वेदों के विषय में इसी सारगर्भित अर्थ को प्रतिपादित करता है जिसका अर्थ है— वेदों में सभी विद्याओं के सूत्र विद्यमान हैं।

कुछ जिज्ञासाएँ विज्ञान एवं मनुष्य के समक्ष उपस्थित हैं जिनके विषय में वर्तमान में भी शंकाएँ विद्यमान हैं तथा वैज्ञानिक भी इन शंकाओं के समाधान के लिए औपनिषदिक तथ्यों की सहायता पर अवलम्बित हैं। इन्हीं विषयों में से एक है— “आत्मा”।

विज्ञान अनेक वर्षों से भिन्न भिन्न प्रयोगों के माध्यम से आत्मा के विषय में जानने का प्रयास कर रहा है। ज्ञान एवं विचार भिन्नता के कारण अनेक वैज्ञानिक दृष्टि से ‘आत्मा’ की परिभाषाएँ भी पृथक पृथक बनीं। इसी आत्मा के विषय में उपनिषदों से प्रामाणिक तथ्य प्राप्त होते हैं जो कि समस्त जिज्ञासाओं की विश्रान्ति तथा समुचित ज्ञान के लिए अन्यतम स्रोत के समान हैं। प्रस्तुत शोध पत्र में ‘आत्मतत्त्व’ विषयक वैज्ञानिक पक्ष के आधार में औपनिषदिक तथ्यों का वर्णन किया जाएगा।

92

सृष्टि विवेचन में ऋत

सुश्री गीता रानी

तदर्थ असिस्टेन्ट प्रोफेसर, इन्द्रप्रस्थ महिला महाविद्यालय, दिल्ली विश्वविद्यालय

Email: geetaranijee@gmail.com

ऋग्वेद के अध्ययन से ज्ञात होता है कि ब्रह्माण्ड—सृष्टि—विवेचन में वैदिक काल में दो मुख्य धारणाएँ विद्यमान थीं। प्रथम यह कि सम्पूर्ण सृष्टि का नियम किसी एक सत्ता के द्वारा है। जिसके अधीन पूरा ब्रह्माण्ड है; सूर्य, चन्द्रमा, नक्षत्र, ग्रह, पंचमहाभूत सब उसके शासन के अधीन हैं। द्वितीय यह कि सम्पूर्ण सृष्टि में सकारात्मक एवं नकारात्मक शक्तियों में परस्पर विद्रोह की स्थिति रहती है।

कारणवश स्वच्छ आकाश में अंधकारयुक्त बादलों का साम्राज्य व्याप्त हो जाता है और बाद में बादलों के छट जाने पर स्वच्छ आकाश के दर्शन होने लगते हैं। इसी भांति सूर्य की किरणों का हनन नकारात्मक शक्तियाँ कर लेती हैं। ऐसी स्थिति में उनसे युद्ध करने के पश्चात् सूर्य पुनः प्रकाशित होने लगता है। इस शक्ति को जिसके परवश अखिल जगत् है वह 'ऋत्' की मुख्य अवधारणा के रूप में प्रकट होता है। वैदिक धर्म के इतिहास के पोषक तत्त्व के रूप में यह मुख्य सिद्धान्त है। वैदिक युग में यह सार्वभौमिक आदेश के रूप में परिलक्षित होता है। पाश्चात्य विद्वानों ने भी इस तत्त्व को 'कॉस्मिक आदेश' एवं 'सार्वभौमिक कानून' के रूप में माना है और इसे 'ऋत्' की संज्ञा से द्योतित किया है। ऋत् से सम्बद्ध तथ्यों का अवलोकन करने से ज्ञात होता है कि ब्रह्माण्ड के नियम का संरक्षण किसी एक दिव्य शक्ति पर केन्द्रित है, और वह समस्त शक्तियों का अधिष्ठाता एक देवता है जो इस जगत् की समस्त वस्तुओं को नियन्त्रित करता है। ऋग्वेद में उस देवता के रूप में वरुण को स्वीकार किया है जो इस 'ऋत् का रक्षक' है।

यदि इस चिन्तन को वैज्ञानिक पक्ष से देखा जाए तो स्पष्ट होता है कि जिस 'तत्त्व' की यहाँ बात की गई है वह वास्तव में नाभिकीय ऊर्जा की द्योतक है। जिस अभीद्ध-तपस् के रूप में भी जाना जाता है। जब इसमें विस्फोट होता है तो तत्त्वद्वय की प्राप्ति होती है जिन्हें 'ऋत् एवं सत्य' के रूप में जाना जाता है। यह आग्नेय तत्त्व एवं सोमीय तत्त्व के प्रतीक है। ऋत् अर्थात् अग्नि की धनात्मक शक्ति प्रोटोन के रूप में एवं शाश्वत नियम के रूप में जान सकते हैं ये ऊर्जा का मूल कारण है।

इसमें गतिशीलता होती है एवं उत्पादन क्षमता भी होती है। सत्य अर्थात् सोमीय तत्त्व ऋणात्मक शक्ति, इलेक्ट्रान के रूप में जान सकते हैं। इन तत्त्वद्वय का जब संयोग होता है तब सृष्टि का प्रारम्भ होता है और वैदिक भाषा में इन्हें 'ऋत् एवं सत्य' नाम से अभिहित किया गया है। उपर्युक्त दृष्टि से ऋत् के स्वरूप पर सूक्ष्म प्रकाश डाला जाएगा।

93

वैदिक दार्शनिक चिन्तन के परिप्रेक्ष्य में पर्यावरण विज्ञान

श्री. जगनारायण मिश्र

शोधच्छात्र (पी.एच.डी.), संस्कृत विभाग, दिल्ली विश्वविद्यालय, दिल्ली

Email: jaggymisra009@gmail.com

प्रकृति का तात्पर्य इसके व्यापक अर्थों में है यथा पर्यावरण, पारिस्थितिकी तंत्र, इत्यादि, सृष्टि के उत्पत्तिकाल से ही मानव की प्रवृत्ति प्रकृति के साथ तादात्म्य सम्बन्ध स्थापित करने की रही है, इसके लिए वह प्रकृति का दोहन प्रकृति का आत्मसातीकरण, परिपोषण, परितुष्टीकरण व प्रकृति का संरक्षण करता चला आ रहा है, समस्या तब उत्पन्न होती है जन मानव अपने स्वार्थ की तृष्णा में प्रकृति के दोहन पर आमादा हो जाता है तब प्रकृति भी मानव को उसके कृत्यों की सजा उसके संपीडन, क्षय व विनाश के फलस्वरूप प्रदान करने लगती है।

तब समय-समय पर मानवीय चेतना जागृत होने लगती है और वहाँ से दार्शनिक चिन्तन या यूँ कहे कि यथार्थ ज्ञान की सम्बोधि प्राप्त होती है। मनुष्य अपने कृत्यों पर प्रायश्चित की अग्नि में जलने लगता है, तब समय-समय पर प्रकृति संरक्षण-जन संरक्षण का पाठ हमारे उच्च मेधावी-मनीषियों द्वारा पढ़ाया जाता रहा है। यह परम्परा निरन्तर चली आ रही है।

प्रस्तुत शोध-पत्र के माध्यम से उसी नित चलायमान परम्परा के उत्तरदायित्व का निर्वहन शोधार्थी की अल्पप्रज्ञा के माध्यम से व सुधीजनों के उत्कृष्ट मेधा के करण से पीढ़ियों के उत्तरदायित्व का निर्वाह व आद्य मानवीय मनीषियों के ऋणों से उऋण होने का प्रयास किया जाएगा।

94

‘वेदों में वनस्पति विज्ञान’-औषधि पौधों के विशेष सन्दर्भ में

सुश्री कल्पना कुमारी

वनस्पति विज्ञान विभाग, कालिंदी कालेज, दिल्ली विश्वविद्यालय

Email: kalpana082008@gmail.com

वेद शब्द से वह ज्ञान अभिप्रेत है, जिसको सर्वप्रथम ऋषि महर्षियों ने खोजा अथवा साक्षात्कृत किया वेद संपूर्ण वाग्मय का बोधक शब्द है। वेद अपौरुषेय और अनादि हैं, इसलिए वे स्वयंभू, स्वयं प्रकाश और स्वतः प्रमाण हैं। भारतीय संस्कृति के इतिहास में वेदों का स्थान अत्यंत गौरवपूर्ण है।

वनस्पतियाँ हमारे जीवन का अभिन्न अंग हैं। प्रकृति और व्यक्ति के जीवन में संतुलन के लिए पौधों का होना आवश्यक है। वनस्पतियों में हरे रंग का क्लोरोफिल होता है जिससे यह सूर्य की रौशनी, जल और कार्बन डाइऑक्साइड की सहायता से अपना भोजन बना सकता है। यही भोजन जीव जगत की ऊर्जा का आधार है।

वनस्पतियों से हमें लकड़ी, ऊर्जा भोजन, औषधि इत्यादि प्राप्त होते हैं। हमारा पर्यावरण और हम वनस्पतियों के बिना इस पृथ्वी पर जीवित नहीं रह सकते हैं। संस्कृत साहित्य में वृक्षों को देवता की उपाधि दी गयी है। शायद इससे अच्छा विशेषण और है भी नहीं। वृक्षों ने अपने लिए कदाचित कुछ नहीं चाहा तथा जो भी उनके पास होता है उसे वे मनुष्यों तथा पर्यावरण के हित में लगा देते हैं।

छायामन्यस्य कुर्वती स्वयं तिष्ठन्ति चातपे।

फलन्ति हि परार्थे च सत्येते महाद्रुमाः॥

वेदों से भी हमें यही ज्ञान मिलता है की हम वनस्पतियों का उतना ही उपयोग करें। जितने की हमें जरूरत है। ताकि हमारे बाद की पीढ़ी के उपयोग के लिए भी रह सके। वनस्पतियों की औषधि रूप में उपयोग वैदिक कल से चली आ रही है। हमारे वैदिक ऋषि वनस्पतियों के उपयोग के साथ उसके संरक्षण की बात भी करते हैं।

वैदिकवाङ्मये वृष्टिविज्ञानम्

Prof. Kamla Bhardwaj

Head of the Department of Vyakaran,

Shri L.B. Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi-110016

Email: kamlabhardwaj55@gmail.com

पृथिव्यप्तेजोवाय्वाकाशाख्यानि पञ्चमहाभूतान्यपि भूतत्वेन प्रख्यातानि सन्ति। प्रतिमहाभूतं देवत्वं प्रतितिष्ठति। भारतीयसंस्कृतिप्रवर्तकैः ऋषिभिः अन्तर्दृष्ट्या चराचरविश्वोत्पत्तिरहस्यं प्रतिपन्नमभूत्। एभिः पञ्चमहाभूतैः जगदेतत् अस्य च सर्वाणि बाह्य रूपपदानि निर्मितानि। एभिः विना भारतीयविज्ञानं सर्वाः विद्याश्चापूर्णा एव विद्यते। तेष्वपि जलं विशिष्टम्। जलशब्दस्य ज-जन्म, ल-लयः इति व्युत्पत्त्या जन्मप्रभृतिः लयपर्यन्तं मानवजीवनं स्यादथवा सृष्टिः स्यात् सर्वं जलमेवाधारितम्। अतः वैदिकवाङ्मये सूक्ष्मवैज्ञानिकदृष्ट्या वृष्टिविज्ञानविषये सविशदं निरूपितम्। सूर्यरश्मयः पृथिवी स्थिता आपः शोषयन्ति। ताः आपः अन्तरिक्षे मेघरूपाः भवन्ति। अनन्तरं वायूनां साहचर्याद् भुवि वृष्टिर्जायते।

वेदेषु सूर्यः- वायुः- मेघा वृष्टेः प्रमुखकारणानि प्रतिपादितानि। पृथ्वीस्थतापमानात् ऊर्ध्वस्थानीय तापमानं न्यूनतमं विद्यते। पृथिवीतः यज्जलं वाष्परूपेणोर्ध्वं गच्छति शीततापमानस्थित्या वाष्पं तद् मेघरूपेण परिवर्तितं भूत्वा वृष्टिरूपेण पृथिव्यां वर्षन्ति। वर्षणप्रक्रियाविषये वेदेषु निरूपितं यद् वर्षणाय वायोरनुकूलतानिवार्याः। अत एव यजुर्वेदे “शत्रो वातः पवतां” इत्यादिमन्त्रे प्रार्थितं यत् वर्षणानुकूलसुखकारी वायुरस्मभ्यं प्रभवति। वायोरनुकूलतायै सूर्यतापः वर्तते। तदनु च गर्जन्तु उत्तमगुणयुक्ताः पर्जन्यरूपिणः मेघाः सर्वत्र वर्षन्तु वायोः दिशागतिविशेषेण चतुर्दिक्षु सुवृष्टिर्भवति। कीदृशेन वायुना मेघोत्पत्तिः, मेघविनाशः, मेघैर्वर्षणञ्च भविष्यतीत्यपि सम्यग्तया वेदेषु निरूपितम्।

यज्ञेष्वग्नौ द्रव्याहुतिप्रदानेनाथवा सूर्यतापेन तापितवायुः धूम्रयुक्तत्वात् अभ्रस्थितिं प्राप्नोति इयमेव स्थितिः वातज्ञानार्थम् आवश्यकी। केन वायुना मेघवर्षणं निष्पाद्यते, कीदृशः वायुः वृष्टिमेघानां विनाशकः, कः वायुः केवलं प्रवहति, न च वर्षणकारी। कीदृशेन वायुना मेघानां स्निग्धता नश्यतीत्यपि वेदेषु वर्णितम्। कीदृश्यां स्थित्यां प्रबलवृष्टिः, कदा चाल्पवर्षणम्, अवर्षणञ्च जायते।

अनावृष्टिस्थित्यामपि यज्ञे आहूतिभिरन्तरिक्षद्युलोकञ्च तृप्यन्ते वर्षणञ्च सम्पाद्यते। वेदेषु सूक्ष्मतयैतद् निष्पादितम्। तत्र अग्निजाद्रिजदिव्येति त्रिविधप्रकारकाणां मेघानां स्थानमन्तरिक्षं मन्यते। यज्ञेन उत्पन्नमेघाः पर्जन्यरूपेण वर्णिताः यज्ञेनान्तरिक्षेजलखननप्रक्रियावशपि वेदेषु सुष्ठुरूपेण निरूपिता। वैदिकवृष्टिविज्ञानेन नैकदिवसमासपूर्वमपितु वर्षपूर्वकमपि वर्षणस्थित्याकल्प्यते।

96

समसामयिकपरिदृश्ये शास्त्रेषु वर्णिता स्त्रीशूद्रयोः प्रासंगिकता

डा० कौशल्या (कौशल पंवार)

असिस्टेंट प्रोफेसर, संस्कृत विभाग, मोतीलाल नेहरू महाविद्यालय,

दिल्ली विश्वविद्यालय, नई दिल्ली

Email: panwar.kaushal@gmail.com

आधुनिक परिदृश्ये सकलसामाजिकपरिवर्तनस्य आन्दोलनैः मनुष्यस्य मनुष्यरूपेण परिचयं दत्तम्। तस्य अस्मिता स्थापिता, तस्य भूमिकायाः निर्णयः कृतः। समाजस्य परिदृश्यं परिवर्तितं, मूल्यमान्यताः परिवर्तिताः। मनुष्यद्वारा समाजे स्वभूमिका निर्धारिता तथा समाजेन मनुष्यं नूतनं रूपं दत्तम्। (अद्य) सम्प्रति सर्वं परिवर्तितं तर्हि वयं धर्मशास्त्रेषु निरूपितया मनुष्यधारणया तत्कालीनसमाजस्य मूल्येन, मान्यतया, चेतनया विचारैश्चाधारेण वर्तमान-मनुष्यं परिभाषयितुं न शक्नुमः। न तं संचालयितुं शक्नुमः। तथैव विभिन्नाः सामाजिका अस्मिताः अपि धर्मशास्त्राधारेण न संचालयितुं शक्नुमः। तत्कालीन समये समुदायानां किमपि परिचयं नासीत्। एते तत्र मात्रपराधीनतायाः भूमिकायामासन्। एतेषां कृते कर्तव्यपालनमेवासीत् परन्तु अधिकारनाम्नि उत्पीडनस्य कर्मफलवादी सिद्धान्तः एव। उत्पीडितप्राणिषु समाजस्य शूद्राः स्त्रियश्च मुख्यरूपेण आस्ताम्। स्त्रीसमुदायः गृहे दासी भवति स्म शूद्राः च बहिः।

आधुनिकया विचारधारया मनुष्यस्य परिवर्तनं कृतम्। सोऽपि समाजपरिवर्तने स्वभूमिकां ज्ञातवान्। पुरातनकाले मनुष्यस्य भूमिकायाः निर्वहणं प्राचीन धर्मदर्शनानि कुर्वन्ति स्म, एतद् दैवकर्मफलस्य सिद्धान्ते आधारितमासीत्। यदि समाजस्य विश्लेषणं करणीयं चेत् तर्हि तस्य समाजस्य विकासस्य किमपि वैज्ञानिकं ऐतिहासिकं चक्रं न आसीत्, अपितु अध्यात्मधर्मयोश्चाधारे व्याख्यायितं सतयुगत्रेताद्वापर कलियुगस्य च कालचक्रमिव अवधारणा आसीत्। अत्र समाजनियन्ता स्वयमेव ईश्वरः भवति। मनुष्यः ईश्वरं विहाय स्वयमेव सामाजिक नियन्ता। महती क्रान्तिकारी भूमिकेयम्। अत्र तस्य भूमिका कर्तव्यं एवम् अधिकारश्च धर्मेण अथवा अध्यात्मेन पूर्वं परिभाषितं नास्ति। अत्र धर्म द्वारा परिभाषित समाजस्य परिभाषिकी अवधारणा न नास्ति। अपितु मानवसभ्यतायाः विकासस्य ऐतिहासिक-सामाजिकीया अवधारणा अस्ति। एवम् अस्मिन् शोधपत्रेष्वहं परिवर्तित-दृश्येषु शूद्ररूपाः एवं शास्त्राणां भूमिकायाः, तस्याः प्रासंगिकतायाः नूतनया विचारधारया ज्ञानस्य प्रयासं करिष्यामि।

97

वेदों में वृष्टि विज्ञान

सुश्री खुशबू भारती

शोध-छात्रा, अलीगढ़ मुस्लिम विश्वविद्यालय, अलीगढ़

Email: khushbooamualigarh@gmail.com

जीवन जीने के लिए जल आवश्यक तत्व है। यह जल पृथ्वी पर अनेक रूपों में विद्यमान है। इसी पृथ्वी पर समुद्र हैं, नदियाँ हैं और वर्षादि के रूप में व्यापक जल है। जिसके कारण खेती

होती है और उससे ये सब प्राणी तथा चलने वाले गतिशील जीव प्रसन्न होते हैं। इस प्रसन्नता व सुख का मूल आधार जल है। पृथ्वी पर प्राप्त अनेक प्रकार के जलों में से वर्षा का जल भी अपनी उपयोगिता के कारण पृथ्वी व अन्य प्राणियों को जीवनदाता के रूप में जीवन प्रदान करता है। वेदों में इसी वर्षा के जल का उल्लेख हुआ है। वर्षा कैसे होती है?, मेघ कैसे बनते हैं?, वर्षा का क्या महत्व होता है? वेदों में इस वैज्ञानिक प्रक्रिया का उल्लेख विस्तृत रूप से प्राप्त होता है। अथर्ववेद में स्पष्ट रूप से वर्णित है कि सूर्य की रश्मियों के द्वारा सागर से पानी वाष्प में परिवर्तित करके आकृष्ट किया जाता है और फिर मेघ बनकर अन्य प्राकृतिक क्रियाओं के फलस्वरूप वह पुनः जल बनकर स्थान-स्थान पर बरसता है—

कृष्णं नियान हरयः सुपर्णा अपो वसाना दिवमुत पतन्ति ।
त आववृत्रन्त्सदनाददतस्यादिद् घृतेन पृथिवी व्यदुः॥

इस वृष्टि से ही हितकारक औषधियां बनती हैं और उत्तम रसवाली भी बनती हैं। ये औषधियां रोगियों के शरीरों में रहने वाले दोषों को धोती हैं और उनको निरोग बनाती हैं। इन औषधियों और विविध रसपूर्ण अन्न को खाने से मनुष्य बल और उत्तम बुद्धि को प्राप्त करते हैं। यदि वृष्टि न होती तो इन पदार्थों की उत्पत्ति भी नहीं होती और अकाल होता। परिणामतः मनुष्य निर्बल और मतिहीन बनते। अतः मानव का जीवन वृष्टि पर ही निर्भर है और वृष्टि से ही पृथ्वी हरी-भरी रह सकती है। इस प्रकार प्रस्तुत शोध पत्र 'वेदों में वृष्टि विज्ञान' पर विस्तृत रूप से आलोकपात् किया जायेगा।

98

वाल्मीकि रामायण में वर्णित युद्ध-व्यवस्था

डा० ललिता कुमारी जुनेजा

एसोसिएट प्रोफेसर, संस्कृत-विभाग, राजकीय महाविद्यालय, फरीदाबाद (हरियाणा)

Email: consultdrkewal@yahoo.co.in

रामायण और महाभारत भारतीय संस्कृति के महान् स्तम्भ हैं, जिन पर भारतीय संस्कृति टिकी है। सम्पूर्ण वैदिक वाङ्मय में, स्मृतिग्रन्थों में, महाभारत में, नीतिग्रन्थों आदि में वर्णित धर्मयुद्ध नियमों का अत्यन्त सूक्ष्म वर्णन उपलब्ध है। वाल्मीकि रामायण में श्रीराम की आदर्श युद्धव्यवस्था का विस्तृत एवं कुशल निरूपण हुआ है। रामायण ही नहीं, सम्पूर्ण वैदिक वाङ्मय में राष्ट्ररक्षा तथा आत्मरक्षा के लिए शस्त्रास्त्रों का महत्त्व, वैदिक ऋषियों की युद्धदृष्टि तथा समर्थराष्ट्रविषयक उनका चिन्तन अद्वितीय है। सत्य, धर्म और न्याय की रक्षा के लिए युद्ध की आवश्यकता सदा ही अनुभव की जाती रही है। युद्ध के अनेक प्रकार के अङ्गों तथा उपकरणों का विस्तृत वर्णन सर्वत्र दृष्टिगोचर होता है। शङ्ख, भेरी, बांसुरी, काहल आदि युद्ध के वाद्ययंत्रों का भी उल्लेख प्रचुर मात्रा में किया गया है। रामायणकाल में वर्णित शस्त्रास्त्र अत्यन्त विकसित थे जैसे अस्त्रादि अमरीका, चीन, फ्रान्स, जापान आदि देशों में अब भी नहीं हैं।

वैदिक-काल से आरम्भ करके आज तक ऋग्वेद, यजुर्वेद, अथर्ववेद, रामायण, महाभारत आदि ग्रन्थों में युद्धकारण, युद्धाभिमुखी सेना, युद्धाचारसंहिता, युद्धविज्ञान, व्यूहविधान, युद्धाभिरुचि, युद्धस्वरूपम्, युद्धमहोत्सव, युद्ध में कूटनीति आदि विशयों का विस्तृत विवेचन प्रस्तुत किया गया है। प्राचीन काल में चार प्रकार की सेना का उल्लेख मिलता है—हाथी, घोड़े, रथ तथा पैदल। आदिकवि वाल्मीकि की रामायण के अनुशीलन से तत्कालीन भारत में राजदूत व्यवस्था का निदर्शन प्राप्त होता है। राजदूतों के माध्यम से उस समय राजा शान्ति, युद्ध, राजधर्म का निष्पादन आदि कार्य करते थे। युद्ध के कुछ निश्चित नियम थे कि सूर्यास्त के बाद युद्ध की समाप्ति की घोषणा हो जाती थी। निःशस्त्र शत्रु पर प्रहार नहीं किया जाता था। तात्पर्य यह है कि रामायण-काल में युद्ध धर्म की रक्षा तथा अधर्म के नाश के लिए स्वस्थ भावना से किया जाता था। रावण की मृत्यु पर श्री राम विभीषण को कहते हैं—

मरणान्तानि वैराणि, निवृतं नः प्रयोजनम्।
क्रियतामस्य संस्कारो, ममाप्येष यथा तव ॥

99

वेद ही ईश्वर है

प्रो० लक्ष्मीश्वर झा

पूर्व अध्यक्ष, वेद विभाग, श्री लाल बहादुर राष्ट्रीय संस्कृत विद्यापीठ, नई दिल्ली

ईश्वर उसे कहते हैं, जो इस विश्व को उत्पन्न, पालन और संहार करता है। ये तीनों कार्य स्वयं वेद भगवान् करते हैं, अतः व्यास, महर्षि यास्क और मनु ने वेद को स्वयम्भु शब्द से संबोधन किया है। कालान्तर के आचार्यों ने ईश्वर नामक तत्त्व को वेद से भिन्न माना है, जो मूल वैदिक भावना से सर्वथा विरुद्ध है। तथापि आचार्य सायण ने अपने भाष्यों में ईश्वर के निःश्वास के रूप में वेदों को स्वीकार किया है। किसी भी प्राणी की संज्ञा प्राणी तभी होती है जब उसमें प्राण विद्यमान हों। जब वेद ईश्वर के प्राणरूप निःश्वास हैं तो यह कहा जा सकता है कि वेदों से ही ईश्वर का ईश्वरत्व है। वस्तुतः संज्ञा की दृष्टि से प्राण को भले ही अलग माना जाय किन्तु संज्ञा शरीरस्थ प्राण की ही प्राणी के रूप में होती है। प्राण ही संज्ञी है। इस तरह से वेद और ईश्वर इन दोनों में कोई भेद नहीं है। वेद भगवान् स्वतः ही स्वयं को विभिन्न रूपों में प्रकट करके विश्व का निर्माण करते हैं।

100

यजुर्वेद में उपलब्ध भौतिक-विज्ञान के सिद्धान्त

डा० मधुकर मिश्र

इलाहाबाद विश्वविद्यालय, इलाहाबाद

E-mail : madhukarmishratc@gmail.com

भौतिक-विज्ञान के अन्तर्गत ऊर्जा, प्रकाश, विद्युत, सामर्थ्य इत्यादि विषयों का गहन अध्ययन किया जाता है। भौतिक विज्ञान वेद के उन्हीं प्राचीन वैज्ञानिक सिद्धान्तों के आधार पर ही आविष्कार और

अनुसंधान करने वाला विज्ञान है। भौतिक विज्ञान के अनुसार वस्तु की सम्पूर्ण ऊर्जा नियत रहती है। ऊर्जा का क्षय कभी नहीं होता; ऊर्जा मात्र एक रूप से दूसरे रूप में परिवर्तित होती रहती है। 'ऊर्जा-संरक्षण' सम्बन्धी भौतिक विज्ञान का यह सिद्धान्त यजुर्वेद में प्राप्त होता है। यजुर्वेद में स्पष्टतः च्वजमदजपंस म्दमतहल पद के लिए ही 'वयस्' पद प्रयुक्त है। वर्तमान समय में बिजली उपलब्धता में सर्वाधिक प्रतिशत योगदान वाले जल-विद्युत का मूल हमें यजुर्वेद (11/32) में प्राप्त होता है। इसका उल्लेख तैत्तिरीय संहिता (3/5/11/3) तथा सामवेद में भी मिलता है। यजुर्वेद के अनुसार अथर्वा ऋषि ने सरोवर के जल-मन्थन से जलीय-विद्युत का अविष्कार किया था। सम्प्रति इसी सिद्धान्त को परिमार्जित करके टरबाइनों के द्वारा जल से विद्युत उत्पन्न की जा रही है। यजुर्वेद के अनुसार-अग्नि जलीय ऊष्मा है- "अग्ने पित्तम् अपामसि"।

भूगर्भीय ज्वलनशील पदार्थों जैसे-पेट्रोल, गैस, कैंरोसीन तेल आदि का भी यजुर्वेद में विस्तृत वर्णन प्राप्त होता है। भौतिक विज्ञान के अनुसार ताप या ऊष्मा एक ऐसी ऊर्जा है, जो किसी द्रव्य में उसके अणुओं के गति के कारण उत्पन्न होती है, यह एक वस्तु से निकलकर दूसरी वस्तु में प्रवेश करती है और अणुओं में गति उत्पन्न करती है। यजुर्वेद में ऊष्मा की इस सम्प्रेषण शक्ति के लिए 'द्रुतवत्' का प्रयोग किया गया है। भौतिक विज्ञान के अनुसार विद्युत के द्वारा ध्वनि तरंगों का सम्प्रेषण भी होता है, जिससे दूरस्थ व्यक्ति परस्पर वार्तालाप कर सकते हैं तथा दूर देशान्तरों में सन्देश प्रेषित कर सकते हैं, संवाद को सुन सकते हैं। यजुर्वेद में 'श्रवो वयः' शब्द के द्वारा विद्युत की इसी सम्प्रेषण क्षमता को बताया गया है। यथा- 'अग्ने तव श्रवोवयो' यजु0 12/106।

यजुर्वेद में वर्णित विद्युत की इसी सम्प्रेषणीयता के सिद्धान्त के आधार पर ही ग्राहमवेल ने टेलीफोन का तथा मारकोनी ने वायरलेस का निर्माण किया था। भौतिक विज्ञान के अनुसार अग्नि में तापीय प्रसार के कारण पदार्थ का फैलाव होता है, जिसके कारण कोई भी वस्तु आसानी से टूट जाती है। यजुर्वेद (29/13) के अनुसार सौर ऊर्जा के सफल अविष्कार का श्रेय त्रित् अर्थात् इन्द्र, गन्धर्व और वसु को है। इन्द्र ने ऊर्जा का सर्वप्रथम ज्ञान प्राप्त किया, गन्धर्वों ने इसका परीक्षण किया और वसुओं ने इसको मूर्तरूप प्रदान किया। वसु को भौतिक विज्ञानवेत्ता के रूप में जाना जाता है। वर्तमान समय में जिन वायुमण्डलीय दाबमापक यन्त्र बैरोमीटर, ऊष्मापक यन्त्र कैलोरीमीटर, दिशासूचक यन्त्र कम्पास, प्रकाश मापक यन्त्र फोटोमीटर तथा ध्वनिमापी यन्त्र फोनोमीटर यन्त्र का प्रयोग किया जाता है, ये सभी यन्त्र यजुर्वेद की 'तैत्तिरीय संहिता' में वातयन्त्र, ऋतुयन्त्र, दिशायन्त्र, तेजसयन्त्र तथा वाग्यन्त्र के नाम से वर्णित है।

101

ज्योतिषशास्त्रं शिवशतकञ्च : खगोलविज्ञानदृशा परिशीलनम्

नारायणदत्तमिश्रः

पी.एच.डी शोधछात्रः, विशिष्टसंस्कृताध्ययनकेन्द्रम्, जे०एन्०यू०, नवदेहली

Email : ndmishrasaachin@gmail.com

षड्वेदाङ्गेष्वन्यतमम्प्रत्यक्षपरञ्च ज्योतिषशास्त्रं हि मुख्यतस्त्रिधा विभज्यते। तत्र च सिद्धान्तफलितहोराष्ट्रख्येषु त्रिषु विभागेषु सिद्धान्तज्योतिषो वैज्ञानिकत्वं निःसंशयमभिकल्प्यते। सिद्धान्तज्योतिषभागस्य माहात्म्यं

विज्ञानकालानुगुणं कथञ्चित्तया न्यम्भूतमिव यद्यपि दृश्यते तथाऽपि तत्र प्रतिपादितानां साक्षाद् विज्ञानान्वितानां सिद्धान्तानामप्रतिहतम्प्रामाण्यं सन्तिष्ठत एव। एतादृशानामेव सिद्धान्तज्योतिःशास्त्रतथ्यानां सन्निवेशोऽशशताब्दीकेन, आधुनिकखगोलविज्ञानस्य विकासापेक्षया प्राचीनतरेण च मैथिलविद्वद्वरेण्येन गोकुलनाथोपाध्यायेन स्वीये विविधशास्त्रतत्त्वान्विते शिवभक्तिसुधासंसिक्ते स्तोत्रकाव्येषु, शतककाव्येषु चान्यतमे शिवशतके विहितः।

एतादृशे शिवशतकेऽस्मिन् भूभ्रमण—ग्रहकक्षस्थितिध्रुवावस्थान—पृथिवीस्थित्यादिखगोलविज्ञानसम्बद्धा विषयाः सन्ति विविक्ताः। एवमिह शिवशतकस्थतथ्यान्यभिलक्ष्य ज्योतिःशास्त्रीयस्तत्रापि खगोलविज्ञानसम्बद्धो विमर्शशोधपत्रेऽस्मिन् विधीयते।

102

वास्तु के वैदिक सिद्धान्त एवं वर्तमान में वास्तुकला की प्रासंगिकता

डा० नीलम त्रिवेदी

संस्कृत विभागाध्यक्ष, दयानन्द गर्ल्स कालेज, कानपुर उ.प्र. (भारत)

Email: neelamtrivedi@rediffmail.com

वास्तव में, जिस भी भवन में मानव निवास करता है वहाँ का वातावरण, वहाँ का वायु आगमन निर्गमन, वहाँ का चुम्बकीय क्षेत्र आदि तत्व मानव के संपूर्ण जीवन को प्रभावित करते हैं। हमारा आवास सुखदायी हो, निरापद हो, मानसिक शांति देने वाला हो, ऐसी ही व्यवस्था वास्तु के अंतर्गत किये जाने का विधान है। वैदिक वाङ्मय के अनुसार प्राकृतिक नियमानुसार भवन निर्माण का ज्ञान 'स्थापत्य वेद' कहलाता है, और स्थापत्य वेद के नियमों को मूर्त रूप प्रदान करने वाला शास्त्र ही वास्तुशास्त्र है।

वास्तु की उत्पत्ति 'वस्तु' शब्द से मानी जाती है वस्तु का अर्थ है अस्तित्वयुक्त स्थिति। संस्कृत साहित्य में वास्तु से तात्पर्य केवल मानव ही नहीं वरन देवताओं के भी निवास से लिया गया है। इसका विस्तार देवालय, नगर, ग्राम, राष्ट्र, भवन, सामान्य जन के निवास तथा उसमें विभिन्न प्रकार के साजो सामान, रंग योजना, पेड़ पौधे, भवन निर्माण में प्रयोग आने वाली सामग्री सभी के लिये वास्तु सिद्धान्त अपनाए जाने का विधान किया गया है।

यद्यपि वास्तु विद्या, भवन निर्माण कला भारत में बहुत प्राचीन है किंतु आज से दशको पूर्व वास्तु के प्रति इतनी जागरूकता नहीं थी। हमारे पिता, पितामह ने जब भवन निर्माण किया तो वास्तु का प्रश्न उनके मस्तिष्क में नहीं था किंतु वर्तमान में वास्तु के बिना भवन निर्माण असंभव सा लगता है। आज वास्तुकारों के पास विभिन्न भूखण्डों के माप के अनुकूल जो स्वीकृत नक्शें होते हैं प्रायः वे वास्तु अनुकूल ही बनाए जा रहे हैं क्योंकि सामान्य मनुष्य की वास्तु के प्रति जिज्ञासा बढ़ चली है। उसका मानना है कि यदि वास्तु के नियमों के अनुसार भवन निर्माण किया जाए तो जीवन में सुख—समृद्धि, आरोग्यता की प्राप्ति होती है और यही मानव जीवन का लक्ष्य भी है। भारत ही नहीं अन्य देशों में भी वास्तु तथा इसी से मिलती जुलती अवधारणा देखने को मिलती है। लगभग हर देश के भवन निर्माण संबंधी अपने अलग ही प्रतिमान होते हैं। जो वहाँ की जलवायु, भौगोलिक स्थिति आदि के आधार पर निर्मित होते हैं। जिन देशों में ठंड अधिक पड़ती है, बर्फबारी होती है उन देशों

में मकान की ढालू छत वहाँ की वास्तु योजना की ही सूचक है। इस शोध में यह जानने का प्रयास है कि क्या वास्तु वर्तमान की खोज है यह इसके सूत्र वैदिक वाङ्मय में भी विद्यमान थे।

103

ऋग्वेद एवं अथर्ववेद में पर्यावरण विज्ञान

डा० निशा गोयल

असिस्टेण्ट प्रोफेसर, कालिन्दी महाविद्यालय,
दिल्ली विश्वविद्यालय

पर्यावरण की व्युत्पत्ति परि+आ+वृ+त्युट् से हुई है, जिसका अर्थ है—'वह वातावरण जो मनुष्य को चारों ओर से व्याप्त कर उससे प्रत्यक्ष या अप्रत्यक्ष रूप से जुड़ा है।' प्रकृति के उपादान जैसे—जल, वायु, मिट्टी, वृक्ष तथा विभिन्न प्राणी, यहाँ तक कि स्वयं मनुष्य भी पर्यावरण का एक अंश है। इस पर्यावरण से मनुष्य का तभी से अविभाज्य सम्बन्ध है जब से वह इस पृथ्वी पर अवतरित हुआ है। पर्यावरण के विभिन्न तत्व और मानव अन्योन्याश्रित होकर पृथ्वी पर सन्तुलन बनाए हुए हैं। यही प्रकृति का अनुशासन है और इसमें किसी भी प्रकार का अवाञ्छनीय परिवर्तन इस सन्तुलन को बिगाड़ देता है और वह सम्पूर्ण विश्व के लिए हानिकारक हो सकता है। वर्तमान युग में औद्योगीकरण, वनों की कटाई, वन्य जीवों का विनाश, परमाणु परीक्षण, आधुनिकीकरण आदि के कारण यह असन्तुलन दिनों दिन बढ़ता जा रहा है। इसका मूल कारण है—बढ़ती हुई जनसंख्या और जनसंख्या के कारण मनुष्य की बढ़ती हुई आवश्यकताएँ, जिनकी पूर्ति के लिए वह धड़ाधड़ वृक्ष काट रहा है, जीवों का संहार कर रहा है और औद्योगीकरण कर रहा है। इन सब कारणों से प्रकृति का सन्तुलन बिगड़ रहा है। पर्यावरण के अवाञ्छनीय परिवर्तन ही प्रदूषण कहलाते हैं और आज के इस प्रदूषित वातावरण में पर्यावरण एक अति आवश्यक विज्ञान का रूप धारण कर चुका है।

इसी पर्यावरण का संशोधन करने के लिए अनेक सरकारी एवं गैर सरकारी विभाग भी बनाए गए हैं। आधुनिक यन्त्रों एवं उपकरणों के माध्यम से पर्यावरण को संशोधित करने के सभी वैज्ञानिक उपाय किए जा रहे हैं। वैदिक वाङ्मय समस्त ज्ञान का भण्डार है। इसलिए पर्यावरण सम्बन्धी सभी समस्याओं का वर्णन एवं निवारण भी वेद में ही प्राप्त होता है। उस समय के क्रान्तदर्शी ऋषियों ने सम्भवतः इसीलिए पर्यावरण सम्बन्धी सभी समस्याओं का अवलोकन करके उसके निवारण के उपायों को वैज्ञानिक ढंग से बताया है। प्रदूषण के अनेक कारणों में से एक प्रमुख कारण औद्योगिक प्रदूषण है। प्रदूषण का प्रकार प्रक्रिया के अनुसार भिन्न—भिन्न हो सकता है। खनन कार्य तथा ईंधन जलाने से वायु प्रदूषण, शीतलन तथा प्रक्षालन प्रक्रियाओं से जल प्रदूषण तथा भूमि प्रदूषण, अपशिष्ट पदार्थों के अनुचित व्यवस्थापन से भी मृदा प्रदूषण व जल प्रदूषण फैलता है। औद्योगिक क्रान्ति ने मनुष्य की इच्छाओं की काफी सीमा तक सन्तुष्टि की है। दुर्भाग्यवश इसने समस्त विश्व के लिए एक नई समस्या भी उत्पन्न कर दी है। वह समस्या है— प्रदूषण की। इन प्रदूषणों में मुख्य रूप से वायु, जल, भूमि तथा ध्वनि प्रदूषण को लिया जा सकता है।

104

वैदिक साहित्य में रसायनशास्त्र

सुश्री पूजा मिश्रा

शोध-छात्रा, संस्कृत विभाग, दिल्ली विश्वविद्यालय, दिल्ली

Email: mishra-pooja805@gmail.com

भारत में रसायन शास्त्र की अति प्राचीन परम्परा रही है। उल्लेखनीय है कि भारत में किसी भी प्रकार के ज्ञान के प्राचीनतम स्रोत के रूप में वेदों को माना जाता है 'भूतं भव्यं भविष्यति च सर्वं वेदात् प्रसिध्यति'। वैदिक ग्रन्थों में धातुओं, अयस्कों, उनकी खदानों, यौगिकों तथा मिश्र धातुओं की विशिष्ट जानकारी उपलब्ध है। इनमें रासायनिक क्रियाओं में प्रयुक्त होने वाले सैकड़ों उपकरणों के भी विवरण मिलते हैं। अर्वाचीन काल में नये-नये तत्त्वों की खोज का सिलसिला प्रारम्भ हुआ। इसके पूर्व केवल सात धातुओं का ज्ञान मानवता को था। ये हैं— स्वर्ण, रजत, ताँबा, लोहा, टिन, लेड (सीसा) और पारद। इन सभी का उल्लेख वैदिक साहित्य में उपलब्ध है, जिनमें ऋग्वेद, यजुर्वेद एवं अथर्ववेद सम्मिलित हैं। छान्दोग्य उपनिषद् में धात्विक मिश्रण का स्पष्ट वर्णन मिलता है।

इस शोध-पत्र का उद्देश्य यह सिद्ध करना नहीं है कि प्राचीन रसायन आज से अधिक समुन्नत और अधिक सम्भावनाओं से परिपूर्ण था। यह तो निर्विवाद है कि आज के युग में रसायन शास्त्र ने अकल्पनीय प्रगति की है। उद्देश्य तो केवल यह सिद्ध करना कि रसायन के क्षेत्र में हमारी परम्परा वैदिक साहित्य की ही भाँति अत्यन्त प्राचीन और गौरवशाली रही है। साथ ही यह कहना भी समीचीन होगा कि इस पारम्परिक ज्ञान की बहुत सारी अनुद्घाटित बातों पर गहन शोध की अपेक्षा है, जिससे आज का रसायन शास्त्र निश्चित रूप से अधिक समृद्धशाली बनेगा।

105

वैदिक वाङ्मय में नारी-शिक्षा का मनोवैज्ञानिक विश्लेषण

डा० पूनम घई

एसोसिएट प्रोफेसर एवं अध्यक्ष, संस्कृत-विभाग, आर.एस.एम. कॉलेज, धामपुर (बिजनौर)

E-mail: poonamghai3@gmail.com

कई शताब्दियों से आर्य जाति ही नहीं वरन् सम्पूर्ण मानवता जिन ग्रन्थों के अमृत तत्त्व से जिजीविषा अर्जित करती आई है उन्हीं को हम 'वेद'— अपौरुषेय कहते हैं। अपौरुषेय सम्भवतः इसलिए कि उनमें निर्दिष्ट दूरदर्शितापूर्ण शाश्वत एवं बहुआयामी प्रकाश की परिकल्पना मानव मस्तिष्क से निःसृत मानना असम्भव सा लगता है। वैदिक वाङ्मय जो कि स्थूल रूप से धार्मिक कर्मकाण्ड से सम्बद्ध समझा जाता है आश्चर्यजनक रूप से सामाजिक एवं मनोवैज्ञानिक चैन्तनिक निष्कर्षों को प्रकीर्ण करता है। वैदिक ऋषियों की आर्षवाणी अपने अद्भुत आर्जव में भी जीवन में व्याप्त निराशा, अन्धकार, अज्ञान, दुर्विचार, अनाचार आधि-व्याधि एवं दुर्गुणों को दूर करने में पग-पग पर मानवता का पथ आलोकित करती आई है।

वैदिककाल में स्त्रियों की स्थिति आदरसूचक एवं महत्वपूर्ण थी। उनकी शिक्षा-दीक्षा की सुन्दर व्यवस्था थी तथा स्त्रियां सामाजिक कार्यों में प्रधान भूमिकाओं का निर्वाह करती थीं। ऋषिकाएं आदरणीया मानी जाती थीं जिनके दृष्ट मन्त्र उल्लेखनीय थे। वेदों में स्त्रियों के आचार-विचार की आदर्श शिक्षा का सूक्ष्म मनोवैज्ञानिक वर्णन मिलता है जो तत्कालीन सन्दर्भों में ही नहीं वरन् आज भी प्रासंगिक है। निश्चित रूप से स्त्री परिवार के केन्द्र में है अतः दृष्टि संक्षेप से उसकी वाणी उसके मनोविज्ञान का पूरे परिवार पर विशेष प्रभाव पड़ता है। उच्चकोटि की इसी शिक्षा के कारण वैदिक नारी का वहाँ गरिमामय रूप वर्णित है। वहाँ नारी विदुषी, देवी, प्रकाशवती, उपदेशिका, न्यायकर्त्री, योद्धा, राजनीतिज्ञ के रूप में प्रतिष्ठित है। तत्कालीन नारी ने अपनी साधना, सत्यता, सहनशीलता, सौम्यता, सौष्ठवता आदि सहज गुणों से सर्वदा पुरुष की सहज-चेतना को प्रदीप्त किया है। अतः प्रस्तुत शोध-पत्र की यही उद्देश्य है कि वैदिककालीन नारी-शिक्षा जो कि मनोवैज्ञानिक तथ्यों से परिपूर्ण थी उसे यहाँ उद्घृत किया जाए जिससे आज की नारी अपनी शक्ति को पहचाने तथा अपनी स्थिति, प्रतिष्ठा, शक्ति और योग्यता को स्थापित करे।

106

अग्नि विज्ञान : वैदिक दृष्टि

डा० प्रतिभा शुक्ला

एसोसिएट प्रोफेसर, संस्कृत साहित्य, उत्तराखण्ड संस्कृत विश्वविद्यालय, हरिद्वार

Email: pratibhashukla.up@gmail.com

असंख्य ऋचाओं में अग्नि का गुणगान किया गया है। अध्ययन से ज्ञात होता है कि ऋषियों की दृष्टि में अरणि-घर्षण से उत्पन्न अग्नि विद्युत् तथा सूर्य- ये सभी सर्वभूतान्तरात्मा अग्नि के ही प्रतीक हैं। ऋ. 1, 95,2 में कहा गया है कि दस अंगुलियाँ एकत्र होकर निरन्तर काष्ठ-घर्षण करके वायु के गर्भस्वरूप एवं सभी भूतों में विद्यमान अग्नि को उत्पन्न करती हैं। अग्नि के तीन जन्मस्थान बताये गये हैं- समुद्र, आकाश और अन्तरिक्ष।

जीवन के आधायक तत्वों में अग्नि का अत्यंत महत्वपूर्ण स्थान है। ऋग्वेद के प्रथम सूक्त में ही अग्नि की स्तुति की गई है- अग्निमीले पुरोहितम् (ऋ. 1,1,1) अग्नि क्रान्तदर्शी सर्वज्ञ और विद्वान् है (ऋ. 3,19,1) यह घृत की ओर गमन करता है। घी इसका वर्धक तत्व है। (ऋ. 2,3,11)। अग्नि की कृपादृष्टि को अत्यंत मधुर बताया गया है। (ऋ. 4,10,5) अग्नि की श्री प्राप्त करने के लिए मरुतः उसकी सेवा करते हैं। (ऋ. 5,3,3) ऋ. 3,26 में मन से चयन की जाने वाली वैश्वानर अग्नि का उल्लेख है जिसको मातरिश्वा बृहस्पति विप्र, श्रोता, अतिथि आदि विशेषणों से युक्त करके यु-युग में समिद्ध किया हुआ बताया जाता है। इसी जागृवि अग्नि के विविध रूपों को अग्नयः मरुतः विश्ववेदसः, 'मरुतः' विश्वकृष्टयः तथा रुद्रियाः भी कहा जाता है। (ऋ. 3, 26,, 1-5)। इसी सूक्त में अग्नि के जिस रूप को स्मरण किया गया है (ऋ. 3, 26, 7) वह सर्वानुक्रमणी के अनुसार आत्मा ही है। उसी के हृदय से ज्ञातव्य 'मतिं ज्योतिः' अथवा अर्क (ऋ. 3, 26, 8) कहा जाता है। वही एक 'शतध्वारम् अक्षीयमाणं उत्सं' तथा 'सत्यवाचं विपश्चितं आदि विशेषण' भी ग्रहण करता है। 'अग्नयः' कहे

जाने वाले मरुतः जिस अग्नि के रूप हैं वह वस्तुतः आत्मा है। जब मरुतों को अग्नियों के समान (ऋ 2, 34,1) अथवा प्रज्वलित अग्नियों के समान कहा जाता है (ऋ 6, 66, 2) तो अभिप्राय उनके इस आध्यात्मिक स्वरूप से ही समझना चाहिए।

अग्नि देवताओं का मुख है— अग्निर्वै देवानां मुखम् (श.ब्रा. 3, 9,1,6)। अग्नि को सब देवों का आश्रय कहा गया है— अग्निः सर्वा देवताः (निरु. 7, 4,17)। वह देवों का सेनानी है— अग्निर्हि देवानां सेनानी (निरु विवृत्ति 7,4,14) देवों में अग्नि प्रथम स्थान पर है— अग्निर्वै देवानामवमः (ऐ.ब्रा. 1,1) निरुक्त के अनुसार यज्ञादि कार्यों में सर्वप्रथम इसका प्रणयन किया जाता है। अतः इसे अग्नि कहा जाता है— अग्रणीर्भवति अग्रं यज्ञेषु प्रणीयते (निरु. 7,4,14)। प्रस्तुत शोध पत्र में अग्नि की वैज्ञानिकता को वैदिक परिप्रेक्ष्य में समझने का प्रयास किया गया है।

107

सूर्य और चन्द्रप्रज्ञप्ति का वैज्ञानिक वैशिष्ट्य

डा. रजनीश शुक्ल,

प्राध्यापक पालि-प्राकृत, मुक्तस्वाध्यायपीठ, रां.सं.संस्थान नई दिल्ली

Email: rshuklaps@gmail.com

जैन आगमों में प्राचीन प्राकृत के अंश आज भी सुरक्षित है। जैन धर्म के मूल सिद्धान्त महावीर स्वामी एवं अन्य पूर्व तीर्थकरों की परम्परा से प्राप्त माने जाते हैं; किन्तु छठी शताब्दी से पूर्व इन वचनों का प्रामाणिक संग्रह न होने के कारण इनमें एकरूपता नहीं है। वर्तमान में सिद्धान्त ग्रन्थों का विभाजन दिगम्बर एवं श्वेताम्बर शास्त्र के रूप में मिलता है। डा. जगदीश चन्द्र जैन आगमों की प्राचीन परम्परा की ओर संकेत करते हुए लिखते हैं कि जैन-आगमों को श्रुतज्ञान अथवा सिद्धान्त के नाम से भी कहा जाता है। इनमें अंग, उपांग, मूलसूत्र, छेदसूत्र और प्रकीर्णक चूलिका आदि ग्रन्थों की गणना की जाती हैं। वैदिक ग्रंथों में पुराण, त्याग और धर्मशास्त्र को उपांग कहा है। चार वेदों के भी अंग और उपांग होते हैं। शिक्षा, कल्प, व्याकरण, छंद, निरुपक और ज्योतिष ये छह अंग हैं, तथा पुराण, न्याय, मीमांसा और धर्मशास्त्र उपांग। प्रत्येक अंग का एक उपांग होता है। अंग और उपांग में समानता हो, यह वांछनीय है। उपांग एक प्रकार से अंगों के पूरक होने चाहिए। किन्तु अंगों एवं उपांगों का तुलनात्मक अध्ययन करने पर यह प्रतीत होता है कि उनमें विषय वस्तु के विवेचन, विश्लेषण आदि की परस्पर संगति नहीं है। अंग की ही तरह उपांग भी स्वतन्त्र रचनायें हैं। अंगों की रचना गणधरों द्वारा मानी जाती है। उपांग आचार्यों और मुनियों की रचनायें हैं इनमें महावीर स्वामी के मूल उपदेश तो अल्प हैं, किन्तु उनके उपदेशों की सापेक्षता में वे समाहित हैं, अतः अंगों के साथ ये उपांग के रूप में स्वीकृत हैं। इन उपांगों में कथाओं, भौगोलिक धारणाओं (विशेष रूप से पौराणिक) ज्योतिष एवं ऐतिहासिक तथ्यों की दृष्टि से महत्त्वपूर्ण है। कथाओं का रूपान्तरण साहित्यिक ढंग से किया गया है।

उपांग ग्रन्थों में भगवान् महावीर ने गौतम गणधर द्वारा सूर्य और चन्द्र से सम्बन्धित प्रश्नों के जबाब स्वरूप दिये गये विस्तृत ज्ञान के लिए ही सूर्यप्रज्ञप्ति तथा चन्द्रप्रज्ञप्ति नामक ग्रन्थों की रचना

की गयी है। चन्द्रप्रज्ञप्ति छठे उपांग के रूप में स्वीकृत है। जबकि सूर्यप्रज्ञप्ति सातवें उपांग के रूप में। चन्द्रप्रज्ञप्ति और सूर्यप्रज्ञप्ति ज्योतिष विषय के उपांग हैं— यद्यपि इनमें गणित अधिक है और फलित अत्यल्प है, फिर भी इनका परिपूर्ण ज्ञाता शुभाशुभ निमित्त का ज्ञाता माना जाता है— यह धारणा प्राचीनकाल से प्रचलित है। चन्द्र प्रज्ञप्ति बीस प्राभूतों में विभक्त है। चन्द्रप्रज्ञप्ति में चन्द्र आदि ज्योतिष्क चक्र का वर्णन है। प्राभूत का अर्थ उपहार या भेंट है। प्रशस्तार्थकता के भाव से इसका यहां खण्ड या अध्याय के अर्थ में प्रयोग हुआ है। सूर्य प्रज्ञप्ति में सूर्य आदि ज्योतिष्क चक्र का वर्णन है। इसमें एक अध्ययन, 20 प्राभूत, उपलब्ध मूलपाठ 2200 श्लोक परिमाण है। गद्यसूत्र 109 और पद्य गाथा 103 है।

सूर्य और चन्द्र की सार्वत्रिक महिमा को वैज्ञानिक दृष्टि से समन्वित चिन्तन—प्रधान असाधारण विवेचना के द्वारा व्यक्त करने वाले महान ग्रंथ “चन्द्रप्रज्ञप्ति” और “सूर्य प्रज्ञप्ति” है। विषय विस्तार की दृष्टि से इसके 20 प्राभूतों में खगोल शास्त्र की जितनी सूक्ष्म विचारणाएं प्रस्तुत हुई हैं, उतनी अन्यत्र कहीं एक साथ प्रस्तुत नहीं हुई है। डा. विन्टरनिट्ज सूर्य प्रज्ञप्ति, चन्द्रप्रज्ञप्ति को वैज्ञानिक ग्रंथ स्वीकार करते हैं। अन्य पाश्चात्य विचारकों ने भी उनमें उल्लिखित गणित और ज्योतिष विज्ञान को महत्वपूर्ण माना है। वैश्विक आचार्य डा. शुब्रिंग ने इनकी महत्ता के बारे में कहा है कि ‘जैन विचारकों ने जिन तर्क सम्मत एवं सुसंमत सिद्धांतों को प्रस्तुत किया वे आधुनिक विज्ञानवेत्ताओं की दृष्टि से भी अमूल्य एवं महत्वपूर्ण है।

108

श्रीमद्भगवद्गीता में सकाम एवं निष्कामकर्म

प्रो० रामसेवक दुबे

इलाहाबाद विश्वविद्यालय

Email: dr.rsdbeyau@gmail.com

अखिल भारतीय ज्ञान परंपरा में कर्म के स्वरूप पर विविध प्रकार से मनीषियों द्वारा चिन्तन प्रस्तुत किया गया है। यथा महर्षि जैमिनि के अनुसार “अथातो धर्म जिज्ञासा”—(1/1/1) जहाँ एक ओर सकाम कर्म पर प्रकाश डालता है तो वहीं दूसरी ओर बादरायण का ब्रह्मसूत्र “अथातो ब्रह्मजिज्ञासा”—(1/1/1) से अपने शास्त्र का उद्घाटन करते हुए निष्काम कर्म की चर्चा करता है तो उपनिषद् शास्त्र—“कुर्वन्नेवेह कर्माणि जिजिविषेच्छतं समाः”—(ईशोपनिषद् 2) कहकर निष्काम कर्म को ही वरीयता प्रदान करते हैं। इसी क्रम में श्रीमद्भगवद्गीता भी व्यवसायात्मिका बुद्धि द्वारा निष्काम कर्म को माध्यम बनाकर जहाँ लब्धसमाधि की अवस्था को प्राप्त करने पर बल देती है वहीं दूसरी ओर अव्यवसायात्मिका बुद्धि सकाम कर्म को माध्यम बनाकर जीवन के विविध भौतिक सुखों के प्राप्ति पर बल देती है। इस प्रकार समग्र भारतीय ज्ञानपरंपरा में कर्मयोग, कर्मकाण्ड एवं कर्मवाद महनीय चिंतन के विषय रहे हैं। प्रश्न उठता है कर्म क्या है? कर्म की व्याख्या करते हुए श्रीमद्भगवद्गीता में भगवान् श्रीकृष्ण कहते हैं कर्म क्या है? विकर्म क्या है? अकर्म क्या है? इन सारे तथ्यों को तत्त्वज्ञानी के लिए जानना आवश्यक है। और इस प्रकार कर्म के अनेक भेद—प्रभेद होने के कारण कर्म की गति

को समझ पाना बहुत ही कठिन है। जब कोई कर्म किसी कामना विशेष द्वारा संलिप्त होकर संपादित किया जाता है तब उसे सकाम कर्म कहते हैं। जब-जब व्यक्ति समस्त कर्मफलों का परित्याग करके निष्कामभाव से किसी कर्म का निष्पादन करता है तो उस कर्म को निष्काम कर्म कहते हैं और यह निष्काम कर्म ही समस्त बन्धनों का उच्छेद करके जीव को मुक्ति की ओर ले जाता है। जैसा कि श्रीकृष्ण स्वयं कहते हैं—

ब्रह्मण्याधाय कर्माणि सङ्गं त्यक्त्वा करोति यः।

लिप्यते न स पापेन पद्मपत्रमिवाम्भसा॥ गीता 5/10

इतना ही नहीं प्रत्येक जीव अपने इन्द्रियों के वशीभूत होकर स्वयमेव बलात् कर्मों के संपादन में लगा दिया जाता है और प्रत्येक मनुष्य जब कर्म करने के लिए बाध्य है ही तो वह क्यों न निष्काम कर्म करे ताकि उसे कर्मों का बंधन किसी भी प्रकार से बांध न सके। वे यह भी कहते हैं कि यद्यपि चारों वर्णों की सृष्टि उन्होंने ही गुणों एवं कर्मों के आधार पर की है फिर भी वे इसके कर्ता न होकर अकर्ता ही है क्योंकि उन्होंने ऐसा निष्काम भाव से किया है इसमें उनका कोई व्यक्तिगत स्वार्थ नहीं है बल्कि लोकसंग्रह ही उद्देश्य मात्र है। वे किसी भी कर्म के संपादन में 5 प्रकार के घटकों का होना अनिवार्य मानते हैं तद्यथा—

अधिष्ठानं तथा कर्ता करणं च पृथग्विधम्।

विविधाश्च पृथक्चेष्टा दैवं चैवात्र पञ्चमम्॥ (गीता 18/14)

इस प्रकार प्रस्तुत शोधपत्र में किस प्रकार निष्काम करते हुए मोक्ष रूपी परम लक्ष्य को प्राप्त करना है इस पर विशेष रूप से दृष्टिपात करने का प्रयास है।

109

वैदिकस्वरविज्ञानम्

डा० रणजित बेहेरा

एसोसिएटप्रोफेसर, संस्कृत-विभाग, दिल्ली-विश्वविद्यालय, दिल्ली

Email: ranjit1213@rediffmail.com

भारतीय-प्राचीन-वाङ्मये वेदानां स्थानं सर्वप्रथमं स्वीक्रियते। प्राचीन-परम्परानुसारं वेदः सर्वासां विद्यानामाकरः वर्तते। आधुनिककाले संस्कृतवाङ्मये उपलब्धेषु सर्वेषु ग्रन्थेषु स्वीकृतं यत् तत्र प्रतिपादितानां विद्यानां मूलस्रोतः वेद एव। ऋषिदृष्टमन्त्राणां संकलनं वेदेषु वरिवर्तते। कोष्पिजनः वैदिकमन्त्राणां व्याख्यां स्वेच्छया कर्तुं दुःसाहसं न करिष्यतीत्येदर्थमृषिभिः सुरक्षायाः विविधा उपायाः प्रकल्पिताः सन्ति। तदनुसारं वेदस्य एकोष्पिवर्णः स्वोच्चारणस्थानात्परिवर्तयितुं न शक्यते। उपायेष्वेषु जटा-माला-शिखा-रेखादयः पाठाः मुख्याः सन्ति। वैदिकभाषामाश्रित्य नैकाधिकाग्रन्थाविरचिताः संकलिताश्चापि।

वेदानां गूढतमज्ञानार्जनाय मन्त्रद्रष्टृभिः ऋषिभिरनेकानि शास्त्राणि विरचितानि, येषु वेदांगानि प्रमुखानि विद्यन्ते। षड्सु वेदांगेषु व्याकरणं सर्वप्रथमं स्वीक्रियते। व्याकरणे निहितेनावयवभूतेन स्वरशास्त्रेण वेदार्थस्य सूक्ष्मतमोष्पिप्रायोष्पवगन्तुं शक्यते। वेदानां यथार्थ-ज्ञानाय यानि साधनान्युपलभ्यन्ते, तेषु स्वरशास्त्रं प्राथम्येन स्वीक्रियते। समुचित-स्वरज्ञानं विनैव मन्त्राणामभिप्रेतोष्पर्थः न प्रतीयते। शोधपत्रेष्वस्मिन् स्वरशास्त्रदृष्ट्या

मन्त्रार्थविमर्शविषये सम्यक् प्रतिपादयिष्यते यस्य रूपरेखा इत्थं वर्तते— (क) स्वरपरिचयः। (ख) प्रातिपदिकप्रत्ययस्वरश्च। (ग) स्वरार्थ—सम्बन्धः। (घ) स्वरपरिवर्तनमर्थपरिवर्तनञ्च। (ङ) निष्कर्षः।

110

सामिक ध्वनिपरिवर्तन की वैज्ञानिकता

डा० ऋषिराज पाठक

तदर्थ सहायकाचार्य, संस्कृत विभाग, श्यामा प्रसाद मुखर्जी महाविद्यालय, दिल्ली

Email : rishiraj.pathak.sanskrit@gmail.com

साम की आर्चिक संहिता की ध्वनियाँ सामगान में परिवर्तित हो जाती हैं। सामगान में इन ध्वनियों का परिवर्तन दो प्रकार से हुआ है— अजादि ध्वनियों में तथा गान स्वरों में। ध्यातव्य है कि सामिक ध्वनिपरिवर्तन पूर्णतः वैज्ञानिक है। उच्चारण तथा कण्ठस्वर की स्वाभाविक प्रवृत्ति इसकी वैज्ञानिकता को द्योतित करती है। स्वर, वर्ण, मात्रा, बलाघात, आलाप तथा विस्वर आदि सामिक संगीत—तत्त्वों में जो ध्वनिपरिवर्तन दिखाई देता है, वह पूर्णतः गणितीय तथा एक क्रमिक व्यवस्था पर आधारित है। शोधपत्र में विविध उदाहरणों के माध्यम से प्रकृत विषय का विश्लेषण किया जाएगा।

111

ऋग्वेद में वनस्पति विज्ञान

(Botanical Concepts in Rgveda)

सुश्री सपना यादव

शोध छात्रा संस्कृत विभाग, ए०एम०यू०, अलीगढ़

Email: sapna.jnuskt2k11@gmail.com

आधुनिक समय में वनस्पति विज्ञान या पादप विज्ञान जिसमें कि पादपों का अध्ययन होता है, तथा जितने भी यूनानी तथा आयुर्वेद चिकित्सकों में जड़ी बूटी के द्वारा रोगों का इलाज सम्भव है, तो सिर्फ वेद की ही ये देन है। सारे रोगनाशक औषधियों का वर्णन तो हमारे प्राचीन ग्रन्थ वेद में पहले से ही विद्यमान है। वैदिक ऋषि—मुनियों ने बहुत पहले ही इस का ज्ञान का साक्षात्कार कर लिया था। यूनानी और आयुर्वेद चिकित्सा उस वैदिक ज्ञान का ही परिमार्जित रूप है। अथर्ववेद के पृथिवी सूक्त में जैसा कि बताया है—

‘नानावीर्या ओषधीर्या बिभर्ति। पृथिवी न प्रथतां राध्यतां नः॥

अर्थात् पृथ्वी नाना प्रकार की शक्तियों को धारण करने वाली औषधियों को (वनस्पतियों) उत्पन्न करती है। मानव एवं अन्य जन्तुओं का भोजन (अन्न) वनस्पतियों से ही मिलता है। इसीलिए हमें अन्न का महत्त्व समझना चाहिए। तैत्तिरीयोपनिषद् में अन्न का महत्त्व बताया गया है—“अन्नं न निन्द्यात् । तद्वतम। प्राणो वा अन्नम । शरीरमन्नादम् । प्राणे शरीर प्रतिष्ठितम् । वर्चसेन महान् कीर्त्या॥

अर्थात् अन्न की निन्दा न करें। यह ब्रह्म का व्रत है, प्राण ही अन्न है। प्राण में शरीर स्थित हैं इस प्रकार से सब एक—दूसरे पर आश्रित होने से एक—दूसरे के अन्न हैं क्योंकि संसार में जितने भी प्रकार के अन्न हैं वह सब जल से उत्पन्न होते हैं। जल में ज्योति विद्यमान हैं जबकि जल का स्वभाव ठण्डा होता है, फिर उसमें उष्ण—ज्योति कैसे विद्यमान है? समुद्र में बडवानल विद्यमान हैं। वैज्ञानिक भी जल में से बिजली तत्व को निकालते हैं। इससे भी सिद्ध होता जल में तेज है। प्रत्यक्ष रूप से भी देखा जाता है कि सूर्य अपनी रश्मियों (किरणों) के माध्यम से जल ग्रहण करके पृथ्वी को वृष्टि रूप में देता है। पृथ्वी वनस्पतियों को उत्पन्न करती है। वनस्पतियों से तन्तु, (फाइबर) ईंधन एवं भिन्न-2 प्रकार की रोगनाशक औषधियाँ उत्पन्न होती हैं। अतः इससे स्पष्ट होता है कि वातावरण में सब एक दूसरे पर आश्रित हैं।

112

वैदिक साहित्य में पर्यावरण : एक वैज्ञानिक चिन्तन

डा० शालिनी वर्मा

पी०डी०एफ० (के०एम०आई० संस्कृत विभाग), डा० बी०आर० अम्बेडकर विश्वविद्यालय आगरा

Email: shalinivermaagra@gmail.com

भारतीय संस्कृति का प्राणस्वरूप वैदिक साहित्य सर्वज्ञानमय है। साक्षात्कृत ऋषि वेदों को अपौरुषेय मानते हैं साथ ही ज्ञान—विज्ञान का मूलस्रोत भी स्वीकार करते हैं। पर्यावरण धरा पर जीवन का आधार है जो न केवल मानव वस्तुतः समस्त चेतन—अचेतन प्राणियों एवं वनस्पतियों के उद्भव विकास तथा अस्तित्व का आधार है। पर्यावरण सृष्टि की रचना के उस अंश को माना जाता है जो अनन्त ब्रह्मांडो को आवृत करने वाले प्रमुख तत्व के रूप में है। संसार के केन्द्र बिन्दु पंचतत्व है और मानव शरीर इन पंचतत्वों (पृथ्वी, जल, अग्नि, वायु तथा आकाश) से ही निर्मित है— पंचस्वन्तु पुरुष आविवेशतान्यन्तरु पुरुषे आवितानी। (यजु० २३/५२) वैदिक ऋषि—मुनियों को प्रकृति एवं पर्यावरण प्रणाली का समग्र ज्ञान था साथ ही वह पर्यावरण सजगता के प्रति पूर्ण सजग थे—

पश्येम शरदः शतम्, जीवेम शरदः शतम्।

बुध्येम शरदः शतम्, रोहेम शरदः शतम्॥

इन पंचतत्वों में से किसी एक का भी असंतुलन पर्यावरण के लिए अत्यन्त हानिकारक है। भौतिकवादी युग में मानव के चहुँ ओर सर्वाधिक विकराल समस्या पर्यावरण की है। पर्यावरण संरक्षण के प्रति आज संपूर्ण विश्व सचेत हुआ है। पर्यावरण संरक्षण की भावना की जागृति का प्रारंभ जून १९७२ में स्टॉकहोम में आयोजित विश्व पर्यावरण सम्मलेन हुआ था। वेदों में आकाश, वायु, जल, अग्नि एवं पृथ्वी इन पंचमहाभूतों में परिव्याप्त दिव्य सत्ता की स्तुतियाँ विविध प्रकार से करते हुए उनमें कल्याणकारी बने रहने की प्रार्थनायें तथा इसे विभिन्न वर्गों में विभाजित कर संरक्षण दिया गया। पर्यावरण की रक्षा में वायु का विशेष महत्त्व है। बिना प्राण वायु के क्षण भी जीवित रहना संभव नहीं है। यज्ञ द्वारा वायु को शुद्ध करने का विधान प्रतिपादित है, इसके द्वारा प्राकृतिक चक्र को संतुलित करने की प्रक्रिया है। पर्यावरण शुद्धि के लिए यज्ञ को महनीय तत्व के रूप में स्वीकार किया है। यज्ञ

की प्रक्रिया प्रकृति में निरन्तर चलती रहती है। इसके देवता अग्नि और सोम हैद्य यज्ञ समस्त प्रकार के प्रदूषण का निवारण है। सूर्य सृष्टि की आत्मा व शक्ति के अपरिमित स्रोत कहे गए हैं। जल को अमृततुल्य, औषधीय गुणों से युक्त व 'शिवतम रस' की संज्ञा दी है।

सरकार ने संयुक्त राष्ट्र पर्यावरण कार्यक्रम, पर्यावरण एवं विकास (१९८२), पृथ्वी सम्मलेन आदि का आयोजन किया साथ ही प्रदूषण निवारक कानून भी बनाये गए है। इन सब के अतिरिक्त पर्यावरण शुद्धि के सतत प्रयास ईश्वरीय ज्ञान वेद में निहित है। प्रदूषित पर्यावरण से मुक्ति के लिए वैदिक शिक्षा पर अत्यन्त बल देना होगा क्योंकि इस समस्या का समाधान वेदों में ही निहित है।

113

वेदों के परिपेक्ष्य में यज्ञ का दार्शनिक व वैज्ञानिक चिन्तन

डा० श्वेतकेतु शर्मा

सदस्य, हिन्दी सलाहकार समिति, भारत सरकार, बरेली, उ०प्र०

Email: shwetketusharma@rediffmail.com

वेदों के परिपेक्ष्य में "यज्ञ और योग" यह दोनों ही शब्द वैदिक संस्कृति के प्राण हैं, समस्त वैदिक कर्मकाण्ड, पर्वों, संस्कारों, लोकाचारों, व नित्यकर्मों में यज्ञ को प्रधान माना जाता है। वैदिक ज्ञान में यज्ञ का अत्यन्त व्यापक व मानवीय मूल्यों के उत्थान हेतु सर्वाधिक महत्व दृष्टिगोचर हो रहा है। शतपथ ब्राह्मण में "यज्ञो वै श्रेष्ठतम कर्म" की व्याख्या ने कर्म के वास्तविक स्वरूप को यज्ञ का महत्व प्रदान किया है। यज्ञ ही जीवन का श्रेष्ठतम है जो वैज्ञानिक व दार्शनिक दोनों दृष्टिकोण से मानव मात्र के लिये आवश्यक है। वेदों में परिपेक्ष्य में यज्ञ का दार्शनिक व वैज्ञानिक चिन्तन शोध आलोक में निम्न बिन्दुओं को वैदिक वैज्ञानिक प्रमाणित के आधार पर स्पष्ट किया जा सकता है—

(1) **यज्ञ का दार्शनिक चिन्तन:** अ— प्रचुर मात्रा में अन्न व ऊर्जा का उत्पादन

ब— ज्ञान विज्ञान व धनादि से प्राणिमात्र की सेवा

स— प्रजा व पशुओं का संरक्षण

द— पापी तथा चोर डाकूओं की उत्पत्ति न हो और वे शासन न कर सके ऐसा पुरुषार्थ प्रबल रोगों व विघ्नों का उन्मूलन। सबके लिए निश्चित सुख व परमानन्द की प्राप्ति।

ऋषिदयानन्द ने यज्ञ की दार्शनिक व्याख्या में सार्वजनिक हितार्थ भावार्थ के साथ यजुर्वेद भाष्य के प्रारम्भ में यजु शब्द की व्याख्या की थी।

इसी के साथ यज्ञ शब्द का अर्थ तीन प्रकार का अर्थात् देव पूजा, संगतिकरण व दान होता है। ऋषिदयानन्द ने यज्ञ से तीन प्रकार के अर्थ आध्यात्मिक, आदि दैविक, आधियाज्ञिक ग्रहण किया है।

(2) **यज्ञ का वैज्ञानिक चिन्तन:** यह एक विलक्षण सत्य है कि शरीर की क्रिया को चलाने वाली रस, रक्त, स्रावविहीन, नाड़ियाँ होती है, जिसमें इससे भी सूक्ष्म प्राण चेतना प्रवाहित होती है। यदि कोई ऐसी पीड़िता हो जो स्नायु संस्थान को प्रभावित कर सके तो उसे आधुनिक इन्जेक्शन चिकित्सा को ही आजकल प्रमुखता से प्रचलित तथा त्वरित लाभप्रद माना जा रहा है, परन्तु इससे

भी कही अधिक सूक्ष्मतर वायु में मिश्रित होकर शरीर में पहुँचने वाली औषधि आयुर्वेदीय यज्ञ में अङ्कित कारगर हो सकती है। भारतीय आयुर्वेदाचार्यो धन्वन्तरि, चरक, सुश्रुत, वाग्भट, आदि ने यज्ञ चिकित्सा को श्रेष्ठ वैज्ञानिक चिकित्सा माना है। यज्ञ आरोग्य की दृष्टि से सर्वोपरि शल्य चिकित्सा कही जा सकती है। वैज्ञानिक स्तर पर डा० हाफकिन, डा० कर्नल किंग आदि ने प्रमाणित भी किया है। यज्ञ में प्रयुक्त होने वाले प्रत्येक पदार्थ कपूर, लकड़ी, घृत, हवन सामग्री आदि का रासायनिक वैज्ञानिक विश्लेषण स्वामी सत्य प्रकाश सरस्वती प्रोफेसर इलाहाबाद विश्वविद्यालय व प्रो० राम प्रकाश, प्रोफेसर चन्डीगढ़, विश्वविद्यालय ने प्रमाणित किया है, अतः यज्ञ शारीरिक, आत्मिक, सार्वभौमिक आदि दैविक आदि में महत्वपूर्ण है।

114

ऋग्वेदीय संवादों का वैज्ञानिक स्वरूप

डा० सुमन शर्मा

पी.डी.एफ., संस्कृत विभाग, दिल्ली विश्वविद्यालय, दिल्ली

Email: suman.du04@gmail.com

संवाद एक ऐसी मानवीय प्रक्रिया है जिसमें बौद्धिक एवं यथार्थवादी तत्त्व शामिल होते हैं। संवाद के माध्यम से ही विचारों का प्रकटीकरण करके व्यक्ति को सन्तुष्टि तथा पूर्णता प्राप्त होती है। जीवन का प्रत्येक आर्थिक, सामाजिक, राजनैतिक, धार्मिकपक्ष किसी न किसी रूप से संवाद से प्रभावित रहता है। संवाद के अभाव में मनुष्य अपूर्ण है। वक्ता, श्रोता तथा विषय संवाद की प्रमुख कड़ी है। प्रत्यक्ष, परोक्ष तथा आङ्गिक प्रमुख संवादों से मानवीय भावों की अभिव्यक्ति श्रेष्ठतम रूप से सम्भव है। ऋग्वेद में उपलब्ध संवादों को तीन शीर्षकों के अन्तर्गत रखा जा सकता है— ऋग्वेद के स्वतन्त्र संवाद, ऋग्वेद व बृहद्देवता से पूर्णसंवाद, ऋग्वेद, बृहद्देवता व ब्राह्मणग्रन्थों से पूर्णसंवाद। ऋग्वेद के अतिरिक्त अन्य ग्रन्थों में यह संवादीय सरंचना उपलब्ध नहीं है। प्रस्तुत शोध-पत्र में संवाद के सैद्धान्तिक तत्त्वों के आधार पर ऋग्वेदीय स्वतन्त्र संवादों का प्रयोगात्मक विधि से यह वैज्ञानिक अध्ययन किया जाएगा कि किन-किन संवादों को प्रत्यक्ष, परोक्ष, वार्तालाप, आङ्गिक या मौनगत संवाद कहा जाए। संवाद समाज की संघटना है। संवाद बिना समाज तथा इसकी पृष्ठभूमि असम्भव है।

115

गर्भकालिक वैदिक संस्कारों की वैज्ञानिकता

Dr. Supriya Sanju

Former casual Sanskrit News-reader, Doordarshan & All India Radio, New Delhi

Email: supriyasaju@gmail.com

मन, कर्म, वचन और शरीर को शुद्ध एवं सुसंस्कृत करना ही संस्कार है, वैदिक सोलह संस्कारों में गर्भाधान से लेकर विद्यारंभ तक के संस्कारों को गर्भसंस्कार कहते हैं। इनमें प्रथम तीन गर्भाधान,

पुंसवन एवं सीमन्तोन्नयन को अंतर्गर्भ संस्कार तथा इसके पश्चात् के छह संस्कारों को बहिर्गर्भ संस्कार कहते हैं। धार्मिक दृष्टि से ही नहीं वैज्ञानिक दृष्टि से भी इन संस्कारों का हमारे जीवन में विशेष महत्व है। गर्भकालिक प्रथम तीन संस्कार अर्थात् गर्भाधान, पुंसवन एवं सीमन्तोन्नयन संस्कार को वैदिक काल से ही अत्यंत महत्वपूर्ण माना गया है क्योंकि ये तीन संस्कार शिशु के पूर्वजन्मों से आए धर्म एवं कर्म से संबंधित दोषों तथा गर्भ में आई विकृतियों के दोष निवारण के लिए किया जाता है। अतः इन संस्कारों को दोष मार्जन अथवा शोधक संस्कार भी कहा जाता है। गर्भकालिक प्रथम तीन संस्कारों में गर्भाधान संस्कार में माता पिता अपने परिवार के साथ गुरुजनों के साथ यज्ञ करते हैं, और ईश्वर से प्रार्थना करते हैं कि मां के गर्भ में पवित्र पुण्यात्मा आए जो अच्छे गुणों से युक्त हो तथा जो अपने परिवार को यश प्रदान करें। पुंसवन संस्कार गर्भस्थ शिशु के लिए किया जाता है इस संस्कार में गर्भ की स्थिरता के लिए यज्ञ किया जाता है। सीमन्तोन्नयन संस्कार गर्भ में पल रहे शिशु में अच्छे गुण, स्वभाव एवं अच्छे कर्म हेतु किया जाता है। आयुर्वेद के इस नित्य, नूतन एवं चिर सनातन विज्ञान में गर्भसंस्कार का काफी महत्व बताया गया है। आचार्य चरक, आचार्य सुश्रुत आदि ऋषि मुनियों ने इसका वैज्ञानिक प्रतिपादन भी किया है। गर्भधारण की नौ मास तक की अवधि में तृतीय मास के बाद शिशु का मन, इंद्रि, बुद्धि आदि का विकास होता है। आयुर्वेद गर्भस्थ शिशु की आत्मा, मन, बुद्धि एवं इंद्रियों के विकास को चिन्हित करता है।

आधुनिक विज्ञान यह मानता है कि गर्भ संस्कार प्रतिपादित नियम अर्थात् अच्छा संगीत सुनकर, अच्छी पुस्तकें पढ़कर, ध्यान-योग एवं आध्यात्म के माध्यम से मां स्वयं ही गर्भस्थ शिशु का सकारात्मक सोच एवं सत्व गुण के साथ विकास कर सकती है। प्राचीन काल से ही इस मान्यता को पूर्णरूप से सिद्ध करने वाली कई कथाएं विद्यमान हैं, कि गर्भ में हि शिशु बातों को सुनने और समझने में पूर्णरूपेण समर्थ होता है, यथा— अभिमन्यु, की कथा, विश्णु भक्त प्रह्लाद की कथा आदि। विद्वानों के अनुसार गर्भ संस्कार केवल गर्भ में विद्यमान शिशु का मानसिक विकास ही नहीं करता अपितु गर्भ संस्कार से मां और शिशु के मध्य एक सुदृढ़ संबंध भी स्थापित करता है एवं शिशु में जो सकारात्मक विचार एवं सत्वगुण उत्पन्न होते हैं, उससे वह जीवन पथ पर सर्वदा जागरूक एवं सफल होता है।

116

जल एवं सूर्य किरण चिकित्सा—अथर्ववेद के सन्दर्भ में

डा० सुषमा चौधरी

असिस्टेंट प्रोफेसर, संस्कृत, कमला नेहरू महाविद्यालय, दिल्ली विश्वविद्यालय, दिल्ली

Email: sushma.choudhary2@gmail.com

महाकवि कालिदास ने कहा है—“शरीरमाद्यं खलु धर्म साधनम्” मानव जीवन न केवल प्राण धारण, भोजन व शयन है अपितु अपनी इन्द्रियों क स्वास्थ्य रक्षण तथा उनके द्वारा श्रेष्ठ कार्यों क सम्पादन भी है। धर्म, अर्थ, काम, मोक्ष रूप पुरुषार्थ चतुष्टय कि सिद्धि ही मानव जीवन का परम लक्ष्य है जैसा कि ईशोपनिषद में कहा गया है—

कुर्वन्नेवेह कर्माणि जिजीविषेत् शतं समाः।

इस परम लक्ष्य की प्राप्ति हेतु आयुर्वेद में वर्णित चिकित्सा विज्ञान की बहुत आवश्यकता है। वस्तुतः आयुर्वेद का अथर्ववेद उपवेद है। आयुर्वेद का सम्बन्ध जीवन के साथ है। अथर्ववेद को भेषज या भिषगवेद कहा गया है— ऋचः सामानि भेषजा, यजुषि। (अथर्ववेद ११/६/१४) गोपथ ब्राह्मण ने अथर्ववेद के मन्त्रों को आयुर्वेद से संबद्ध बताया है और अथर्वा का अर्थ भेषज किया है—“येष्थर्वाणः तद् भेषजम्”। (गो.ब्रा.१/३/४) वैदिक संहिताओं में विशेषतः अथर्ववेद में विभिन्न चिकित्सा पद्धतियों का वर्णन है, जिनके द्वारा आज भी मानव जीवन को स्वस्थ एवं दीर्घायु बनाया जा सकता है।

117

गुरुपूर्णिमा के जनक महर्षि व्यास

श्री श्याम सुन्दर शर्मा

शोध-छात्र, संस्कृत विभाग, दिल्ली विश्वविद्यालय

Email: sssharmasanskrit@gmail.com

मानवीय सभ्यता को महर्षि वेदव्यास द्वारा प्रदत्त योगदान के कारण संस्कृत जगत् में ही नहीं अपितु सम्पूर्ण मानवीय संसार में इनका सर्वाधिक सम्माननीय स्थान है। वैदुष्यपरिपूर्ण सर्वाधिक ग्रन्थों का निर्माण करने का श्रेय इन्हें ही जाता है। महर्षि व्यास को विरासत में श्रौत परम्परा मिली थी, इन्होंने उसे लेखन परम्परा में परिवर्तित कर दिया। एतदर्थ माना जाता है कि व्यास ने ही लेखनपद्धति का आरम्भ किया तथा संस्कृत की वैदिक एवं लौकिक इन द्विविध धाराओं के पथ को प्रदर्शित किया है। इस शोधपत्र में व्यास के वैयक्तिक जीवन से सम्बन्धित तथ्यों को प्रस्तुत किया गया है तथा व्यास ने जिन कालजयी कृतियों का सृजन किया है, उनसे सम्बन्धित विविध पक्षों का अन्वेषण किया गया है।

118

वैदिक विज्ञान के तकनीकी यन्त्र

डा० उमेश कुमार सिंह

Ex- Research Associate, Centre for Indic Studies, University of Massachusetts, USA

Email: umeshvaidik@gmail.com

वेद अपने आविर्भाव के काल से ही रहस्य के विषय रहे हैं। इनमें एक ओर जहां पर भारतीय दर्शन का चरम विकास दिखलाई पड़ता है वहीं पर आयुर्वेद जैसा वैज्ञानिक विषय भी प्राप्त होता है। विश्व में गणित जैसा विज्ञान का विषय आया। यही कारण है कि आर्य समाज के संस्थापक स्वामी दयानंद सरस्वती ने यह कहा कि “वेद समस्त सत्य विद्याओं के सार हैं।” वेदों में ही सारे ज्ञान विज्ञान के विषय सूत्र रूप में समाहित हैं।

ऋग्वेदादिभाष्यभूमिका में उन्होंने ऋग्वेद के अस्यवामीय सूक्त के मन्त्रों के आधार पर वायुयान बनाने की तकनीक के बारे में बतलाया वह भी तब जबकि विश्व के किसी अन्य देश में वायुयान का निर्माण नहीं किया गया था। विमानशास्त्र से सम्बन्धित कई लुप्तप्राय ग्रन्थ इसके बाद जाने गए और उनकी पाण्डुलिपियों के बारे में पता चला। इन सारे ग्रन्थों में विमान से सम्बन्धित और उससे इतर कई वैज्ञानिक यन्त्रों के बारे में बतलाया गया है।

विमानशास्त्र में विमान में लगाए जाने वाले ३२ यन्त्रों का नाम प्राप्त होता है तो वहीं अंशुबोधिनी में तमःप्रमापक यन्त्र के निर्माण की विधि बतलाई गई है। इसके अतिरिक्त रत्नप्रदीपिका में कृत्रिम हीरे को बनाने के लिए यन्त्रनिर्माण का संकेत किया गया है जिसमें विद्युत् की शक्ति का प्रयोग किया जाता था। प्रस्तुत शोधपत्र में इन सभी यन्त्रों के ऊपर प्रकाश डालने का प्रयत्न किया गया है।

119

वैदिक साहित्य में सामवेदान्तर्गत मनोवैज्ञानिक तत्व

Dr. V.V. Bhatt

(Samaveda Vidvan) M.A., M.Ed. Ph.D., Kendriya Vidyalaya,

Hassan, Karnataka

Email: vbhatv8@gmail.com

वैदिक वाङ्मय की पारम्परिक अनुक्रमणिका में सामवेद का स्थान तीसरा है। मन्त्र पठन को मधुर बनाने का एक प्राचीन क्रम सामवेद है। 'सहस्रवर्त्सा सामवेदरू' यह उक्ति पतंजलि के महाभाष्य में उल्लेख होते हुए भी चरण व्यूह परिशिष्ट नामक ग्रन्थ में केवल १३ आचार्यों का नामोल्लेख प्राप्त होता है जो आज सामवेद की शाखाओं के नाम से जाने जाते हैं। आज अधिकांश शाखाएँ लुप्त होने पर भी तीन शाखाएँ अस्तित्व में हैं। ये कौथुमीय, राणायनीय और जैमिनीय नामक शाखाएँ हैं। इस राणायनीय सामवेद की संहिता का मनोवैज्ञानिक विश्लेषण करते हुए मुझे हर्ष की अनुभूति होती है। हम सब जानते हैं कि मानव शरीर की संरचना पाँच तत्वों से बनी हुई है। इस को हम भौतिक शरीर मानते हैं। स्थूल शरीर के नाम से भी जानते हैं।

इस के अन्दर जो सूक्ष्म शरीर है या कारण शरीर है उसकी तुलना हम मनोवैज्ञानिक तत्वों के आधार पर सामवेद में उक्त देवताओं के साथ कर सकते हैं। सामवेद संहिता में भी पाँच काण्ड हैं। जो कि आग्नेय काण्ड ऐन्द्र काण्ड पवमान काण्ड आरण्यक, महानाम्यार्चिक के नाम से प्रसिद्ध है।

शरीर भी पञ्च कोशों से रचित है जिन्हें हम अन्नमय प्राणमय मनोमय विज्ञानमय और आनन्दमय कोश के नाम से जानते हैं। संकल्पशक्ति से युक्त अन्नमय कोश और अग्निकाण्ड में कहे गये मन्त्र एवं मन्त्र देवता अग्नि इन दोनों के सम्बन्ध का विश्लेषण किया गया है। क्रियाशक्ति से युक्त चेतन इन्द्रियों का क्रियाकलाप तथा निकृष्ट भावनाओं का निग्रह आदि के साथ ऐन्द्र काण्ड में उक्त मन्त्रों एवं उक्त देवताओं के आधार से तुलना की गई है।

आनन्द का प्रतिनिधित्व करनेवाली ज्ञान शक्ति से युक्त मनोमय कोश की तुलना आनन्द के अधिदेवता के रूप में वर्णित सोम पवमान के साथ की जाती है। भव बन्धन से विमुक्त होकर विशेष ज्ञान पाने का सुअवसर प्राप्त होता है विज्ञानमय कोश में जिसका वर्णन हमें आरण्यक गान में प्राप्त होता है। आत्मज्ञान को आत्मसात् करने के विषय का उल्लेख करते हुए पाँचवें अध्याय महानाम्यार्चिक के मन्त्र के आधार से आनन्दमय कोश का विस्तृत विवरण दिया गया है। इस प्रकार पञ्च-कोश और सामवेद के पञ्च-अध्याय के बीच में जो सम्बन्ध है उसका विस्तृत विवरण इस शोधपत्र में मन्त्रार्थ के साथ मनोवैज्ञानिक दृष्टिकोण से दिया गया है।

120

कालिदास के नाटकों का भाषागत वैशिष्ट्य (नाट्यशास्त्रीय वाचिक अभिनय के सन्दर्भ में)

डा० वन्दना एस. भान

असिस्टेंट प्रोफेसर, लेडी श्रीराम महाविद्यालय, दिल्ली विश्वविद्यालय

Email: vandana_19@live.com

आचार्य भरतमुनि द्वारा विरचित प्रसिद्ध ग्रन्थ नाट्यशास्त्र के 'नाट्योत्पत्ति' नामक प्रथम अध्याय में मनोविनोदार्थ नाट्य की आवश्यकता तथा महत्त्व का विशद विवेचन प्राप्त होता है। इस ग्रन्थ में उत्तम तथा प्रभावशाली नाट्य की रचना एवं प्रस्तुति की दृष्टि से उपादेय सभी तत्त्वों के अन्तर्गत अभिनय के चार भेदों का निरूपण भी प्राप्त होता है। भाषा के सम्यक् व्याकरणात्मक ज्ञान एवं प्रयोग की दृष्टि से वाचिक-अभिनय के सिद्धान्तों का प्रतिपादन किया गया है।

जिनके परिप्रेक्ष्य में महाकवि कालिदास द्वारा रचित नाटकों का विवेचन करना अत्यन्त रुचिकर विषय है। कालिदास के नाटकों में दैवी तथा मानुषी पात्रों का समावेश पाया जाता है। उन्होंने अपने सभी पात्रों के द्वारा यथासंभव स्थान, काल तथा उनकी श्रेणी के अनुरूप भाषा का प्रयोग करवाया है। स्थिति एवं आवश्यकतानुसार संस्कृत, प्राकृत अथवा अन्य भाषा का प्रयोग भी परिलक्षित होता है। कालिदास की प्रतिभा तथा रचना-कौशल का अनूठा निदर्शन विक्रमोर्वशीय में दीख पड़ता है। उर्वशी के वियोगवश उन्मत्त हुए राजा पुरुरवा की प्रलापोक्तियों में अनेकशः प्राकृतापभ्रंश का प्रयोग मिलता है। संस्कृत नाटकों में नायक द्वारा संस्कृतेतर प्राकृत भाषा में सम्भाषण का अनूठा प्रयोग कालिदास द्वारा किया गया है।

वस्तुतः नाटक की भाषा संरचना पात्रानुकूल तथा समाज में प्रचलित होने से नाटक का कथानक दर्शकों के लिए सुगमतापूर्वक बोधगम्य होता है। ऐसी स्थिति में नाटक के प्रमुख उद्देश्य 'रसास्वादन' की पूर्ति होती है तथा वह नाटक रचयिता, प्रस्तौता तथा द्रष्टा-इम सभी की दृष्टि से सफल सिद्ध होता है। कालिदास के नाटकों के अधिक स्वाभाविक तथा यथार्थोन्मुख होने का यह एक प्रमुख कारण कहा जा सकता है।

धनुर्वेदीय व्यूहरचना

श्री योगेन्द्र भारद्वाज

शोधछात्र, जवाहरलालनेहरू विश्वविद्यालय, नई दिल्ली

Email: yogend1993@gmail.com

ऋषियों ने सृष्टि के आदि में व्यवहार हेतु सभी वस्तुओं के नाम तथा कर्तव्य कर्मों का निष्पत्ति वेद से ही किया है। संसार के उपलब्ध साहित्य में वेद प्राचीनतम हैं। इनका ज्ञान चार ऋषियों के हृदय में परमपिता परमात्मा की विशेष प्रेरणा से हुआ। इन चारों वेदों के उपवेद भी प्रसिद्ध हैं। ऋग्वेद का आयुर्वेद, यजुर्वेद का धनुर्वेद, सामवेद का गान्धर्ववेद, अथर्ववेद का अर्थवेद (शिल्पशास्त्र) सुप्रसिद्ध है। युद्ध करने एवं लड़ने की प्रवृत्ति प्राणियों में अनादिकाल से चली आ रही है। देशकाल एवं परिस्थिति के अनुसार इसका विकास या ह्रास होता जा रहा है। कभी प्राचीन महाभारत का धर्मयुद्ध के रूप में अर्वाचीन सर्जिकल स्ट्राइक के रूप में। मनुष्येतर प्राणियों में ये युद्ध प्रवृत्ति नख दन्त तथा अन्य उपायों के द्वारा अपनी रक्षा करने या उदरपूर्ति तक ही सीमित है, किन्तु मानव ने बुद्धि कौशल के प्रयोग से विविध शस्त्रास्त्रों का आविष्कार कर अपनी सुरक्षा तो की ही, अपितु स्वयं को समस्त विश्व के जीव-जन्तु तथा अन्य साधनों का मालिक भी बना लिया।

शास्त्रास्त्र एवं युद्ध सम्बन्धी ज्ञान-विज्ञान का कथन करने वाले शास्त्र को ही धनुर्वेद कहा गया है। व्यूह-विशिष्ट पद्धति से युद्ध क्षेत्र में सेना को खड़ा करना व्यूह कहलाता है। भाषा में इसको मोर्चाबन्दी कहते हैं। व्यूह में युक्त सेना अल्पसंख्या में होती हुई भी प्रतिद्वन्द्वी सबल सेना जीत सकती है। इसके विपरीत सबल सेना भी बिना व्यूह के छोटी व्यूह सेना को पराजित नहीं कर सकती। सर्वप्रथम व्यूहरचना का संकेत अथर्ववेद में मिलता है। वहीं भोग (सर्पवत् कुण्डलाकृति) द्वारा शत्रु सेना से अपनी रक्षा करने का कहा गया है।

अथर्ववेद, कौटिलीय, अर्थशास्त्र, अग्निपुराण, विष्णुधर्मोत्तरपुराण, वीरमित्रोदय, शुक्रनीति, वाशिष्ठ & अनुर्वेदादि ग्रन्थों में व्यूह संरचना का विशिष्ट वर्णन उपलब्ध है। व्यूह के प्रमुख भेद हैं- सर्पव्यूह, दण्डव्यूह, चक्रव्यूह, मकरव्यूह, मालाव्यूह, गरुडव्यूह, बलाकाव्यूहादि, सिंहव्यूह आदि। भारतीय संस्कृति को श्रेष्ठ बनाने के लिए ऋषिवृन्द ने बहुत सारे ज्ञान की रचना की थी, किन्तु सोचनीय प्रश्न यह है कि ये ज्ञान अभी भी छुपा हुआ है। आज आवश्यकता है ज्ञान को लोक में सबके समक्ष लाने की। जिससे हमारी संस्कृति को आधुनिक परिप्रेक्ष्य में श्रेष्ठता हासिल हो सके।

IV ORGANISATIONS

WAVES (World Association for Vedic Studies)

A Multidisciplinary Academic Society, Tax Exempt in USA

Website- <http://www.wavesinternational.net>

Introduction

World Association for Vedic Studies (WAVES) is a multidisciplinary academic society. It is a forum for all scholarly activities and views on any area of Vedic Studies variously called Indian Studies, South Asian Studies or Indology. WAVES is a non-religious society with no ideology. It is open for membership and for participation to all persons irrespective of their color, creed, ethnicity, and country of origin or any other kind of persuasion. WAVES is an organization of academicians, and of those interested in academics, in all different areas of Indian/Vedic studies in past, present and future. It has a Board of Directors, for corporate responsibilities, a broad based Governing Council for its activities, and several Standing Committees in specific areas.

Board of Directors

- Mr. Sashi Kejriwal
- Mr. Dharendra A. Shah
- Dr. Ramkrishna Puligandla
- Dr. Vinod Deshmukh
- Ms. Candace Badgett
- Dr. T.R.N Rao
- Dr. David Scharf
- Prof. Girish Nath Jha
- Prof. Bal Ram Singh
- Mr. Rajiv Malhotra
- Dr. Shashi Tiwari
- Mr. Ravi Joshi
- Dr. S. Kalyanaraman
- Ms. Aditi Banerjee
- Pandit Ramadheen Ramasamooj

A List of Conferences Organized by WAVES

WAVES has active participants from all over the world during conferences. Participants included leading archaeologists, historians, political-scientists, linguists, religionists, sanskritists, Vedic-scholars, scientists, and persons from different other professions.

1. *Indus Saraswati Age and Ancient India* , Atlanta (Georgia), USA, 1996
2. *History of Ancient Indian Sciences*, USL, Lafayette LA, USA, 1997
3. *New Perspectives on Vedic & Ancient Indian Civilization*, Los Angeles, USA, 1998
4. *Tulsidasa & His Works*, Miami, Florida, USA, 1999
5. *Contemporary View's on Vedic Civilization*, Hoboken, NJ, USA, July 28-30, 2000
6. *India's Contribution and Influences in the World*, University of Massachusetts, Dartmouth, MA, USA, 2002
7. *India's Intellectual Traditions-Contemporary Global Context*, University of Maryland, Washington DC, USA, 2004
8. *Vedic Ideas for Global Harmony and Peace*, University of Houston, TX, USA, 2006
9. *Vedic Heritage for Global Welfare*, Orlando, 2008
10. *Vedic Knowledge for Civilization Harmony*, Trinidad and Tobago, 2010
11. *Vedic Cultures - Epic and Pauranic Phase*, Dartmouth, Massachusetts, USA, 2012
12. *Vedic Living in Modern World*, Fairfield, Iowa, USA, 2014

Publications of WAVES International

- 1. REVISITING INDUS-SARASVATI AGE AND ANCIENT INDIA**
(Proceedings of the 1st International Conference held at USA)
Editor : Prof. Bhu Dev Sharma and Dr. Nabarun Ghose, Edition: 1998,
PRICE: \$25.00 for Members, \$40.00 for Non-Members, \$99.0 for Libraries
Or Rs. 250/- for Members, Rs. 500/- for Non-Members, Rs. 1000/- for Libraries
- 2. NEW PERSPECTIVES ON VEDIC AND ANCIENT INDIAN CIVILISATION**
(Proceedings of the 2nd International Conference held at USA)
Editor: Prof. Bhu Dev Sharma, Edition: 2000
PRICE: \$25.00 for Members, \$40.00 for Non-Members, \$99.0 for Libraries
Or Rs. 250/- for Members, Rs. 500/- for Non-Members, Rs. 1000/- for Libraries
- 3. CONTEMPORARY VIEWS ON INDIAN CIVILIZATION**
{Proceedings of the 3rd International Conference held at USA)
Editor: Prof. Bhu Dev Sharma, Edition: 2003
PRICE: \$25.00 for Members, \$40.00 for Non-Members, \$99.0 for Libraries
Or Rs. 250/- for Members, Rs. 500/- for Non-Members, Rs. 1000/- for Libraries
- 4. INDIA'S INTELLECTUAL TRADIATIONS AND CONTRIBUTIONS TO THE WORLD**
Editor: Bal Ram Singh, Surendra N.Dwivedi, Satish C. Mishra, Bhu Dev Sharma,
Dhirendra Shah
Edition: 2010 PRICE: \$25.00 for Members, \$40.00 for Non-Members, \$99.0 for Libraries Or
Rs. 250/- for Members, Rs. 500/- for Non-Members, Rs. 1000/- for Libraries
- 5. VEDIC HERITAGE FOR GLOBAL HARMONY AND PEACE IN MODERN CONTEXT**
Editor: Bal Ram Singh and Surendra N.Dwivedi, Edition: 2012
PRICE: \$25.00 for Members, \$40.00 for Non-Members, \$99.0 for Libraries
Or Rs. 250/- for Members, Rs. 500/- for Non-Members, Rs. 1000/- for Libraries

WAVES Blog

www.vedicwaves.wordpress.com

WAVES has eighteen plus years of history, since last year WAVES initiated its own blog 'VEDIC WAVES'. Vedic Waves became a tool to bring us all closer together in our efforts to bring Vedic knowledge and discussions to the world. About 10,000 viewers have visited Vedic Waves in past one year. It offers more than thirty peer reviewed articles on various aspects of Vedic knowledge from distinguished international and national scholars such as Dr. Koenraad Elst, Dr. Shashi Tiwari, Prof. Bal Ram Singh, Dr. Sampadananda Mishra, Dr. Jeffrey Armstrong, Ms. Aditi Banerjee, Dr. Shakuntala, Prof. C.L. Prabhakar & many more.

WAVES (Wider Associations for Vedic Studies), Regd.

Brief Introduction

'World Association for Vedic Studies' (WAVES) was incorporated in USA by a group of scholars lead by Professor Bhu Dev Sharma. Soon after WAVES was formed in USA, the scholars, interested in Vedic Studies started a branch of WAVES during early 1997. It was decided to hold a conference to begin its annual activities. First conference was inaugurated by Honourable Dr. Shankar Dayal Sharma ji, Former President of India in New Delhi. With phenomenal success of its conferences and expanding activities, it was thought necessary to have India Branch of WAVES registered in India. On 14th Dec. 2004, WAVES was registered under Societies Act XXI of 1860 in New Delhi with a new name 'Wider Association for Vedic Studies', because of certain restriction from registrar office. Association still maintains its acronym 'WAVES' and is an affiliate of "World Association for Vedic Studies, USA". Presently WAVES has 250 members in India as registered "Life Members". The association has chapters in Bangalore, Haridwar, Jodhpur, Lucknow and Vindya. From Last three years, WAVES's youth wing named "Tarun Tarang" is also actively participating in Vedic Studies.

Presidents of Chapters: Prof. Sheela Misra, **Lucknow** ; Prof. C.L. Prabhakar, **Bangalore** ; Prof. Ram Gopal, **Jodhpur** ; Dr. Y.P. Tiwari, **Vindhya**; Dr.. Pratibha Shukla, Secretary, **Haridwar**; Dr. Ranjit Bahera, **Tarun-Tarang** (Youth Wing);

A List of Conferences Held in India & Nepal

Till date organized conferences on national level with international participation:

- 1st India Conference; *Indian Identity and Cultural Continuity*; New Delhi; 1997
- 2nd India Conference; *Ancient Indian Wisdom & Contemporary Challenges*; New Delhi; 1998
- 3rd India Conference; *Challenges of Modernity: The Vedic View*; New Delhi; 2000
- 4th India Conference; *State & Society : An Ancient Indian Perspective*; New Delhi; 2000
- 5th India Conference; *Vedic Wisdom & Global Issues*; Srisailam, Andhra Pradesh; 2001
- 6th India Conference; *Vedic Intellectual Tradition: Modern Context*; New Delhi, 2002
- Nepal Conference; *Vedic Traditions in South and South-East Asian Region*; Nepal; 2003
- 7th India Conference; *Contemporary World Order: A Vedic Perspective*; Pondicherry; 2003
- 8th India Conference; *Science, Consciousness & Vedic Heritage*; Bangalore, Karnataka; 2005
- 9th India Conference; *Approach to Health & Happiness in Indian Thought*; Jaipur, 2005
- 10th India Conference; *Cultural Consciousness in Ancient Indian Society*; New Delhi; 2006
- 11th India Conference; *Vedic Value System: Contemporary Relevance & Challenges*; Vrindavan, 2007
- 12th India Conference; *Harappan Civilization and Vedic Culture*; New Delhi; 2008
- 13th India Conference; *Creation and Existence: Indian Perspective*, New Delhi; 2009
- 14th India Conference; *Relevance of Ayurveda*, Hyderabad, 2011
- 15th India Conference; *Veda and Thought Revolution*, Haridwar, 2012
- 16th India Conference; *Vedic Views on Man and Nature*, New Delhi, 2012
- 17th India Conference; *Vedic Views on Education and Morality*, Lucknow, 2013
- 18th India Conference; *Vedic Philosophical Traditions: Modern Context*, Varanasi, 2014
- 19th India Conference; *Science and Spirituality in Vedic Traditions : Modern Context*, Delhi, 2015.

WAVES-Governing Council

Website- www.waves-india.com

Blog- www.vedicwaves.wordpress.com

PRESIDENT:

Prof. Ram Karan Sharma

(Former Vice Chancellor of Varanasi & Darbhanga Sanskrit Universities)

VICE-PRESIDENT:

Prof. Lallan Prasad

(Former Prof, Business Economics, & Dean, Delhi University, Delhi),

JOINT SECRETARIES:

Dr. Aparna Dhir, dhir.aparna@gmail.com;

Dr. Umesh K. Singh, umeshvaidik@gmail.com

GENERAL SECRETARY: Dr. Shashi Tiwari

(Former Asso. Prof. Sanskrit, Univ. of Delhi),
54 Saakshara Apartments,
A-3 Paschim Vihar, New Delhi-63
0981.069.0322; shashit_98@yahoo.com

TREASURER:

Dr. Sushma Choudhary

(Assist. Prof. Sanskrit, KNC, Delhi Univ.)

PUBLIC RELATIONS:

Mr. Y.K. Wadhwa

(Adviser, JBM Group, Gurgaon)

MEMBERS on BOARD:

Shri Prashant Bharadwaj (Principal Consultant, IT Vision 360, Gurgaon, Haryana)

Dr. (Mrs.) Dharma (Former Asso. Prof. of Sanskrit, Laxmibai College, Delhi University.)

Shri H. L. Kohli (Former Director, Delhi Administration, CAD, Delhi)

Dr. Chand Bhardwaj (Metallurgical Industrialist, Delhi)

Shri S.B. Gogate (Trustee, Prakriti Foundation & Founder of Antahpragya, Noida)

Shri Subodh Kumar (Industrialist and Scientist, Ghaziabad, UP)

Dr. (Mrs.) Asha Lata Pandey (HoD, Sanskrit, Delhi Public School, Delhi)

Prof. V. Kutumba Sastry (Former V-C, Rashtriya Sanskrit Sansthan, Delhi)

Prof. Bhu Dev Sharma (Former Professor, Clarks Atlanta University, Atlanta, USA)

Dr. Ganesh Dutt Sharma (Former Principal, LP College, Sahibabad)

Prof. Radha Vallabh Tripathi (Former V-C, Rashtriya Sanskrit Sansthan, Delhi)

Dr. (Mrs.) Vedawati Vaidik (Former Associate Prof., Sanskrit, SAC, Delhi University)

Shri Vidya Sagar Verma (Former Ambassador of India, New Delhi)

Prof. Yamini Bhushan Tripathi (Prof., Biochemistry, BHU, Varanasi)

Prof. Bhaskar Nath Bhattacharya (Director, SVS, Rabindra Bharati University, Kolkata.)

Publications of WAVES

[Publisher: Pratibha Prakashan, 7259/20, Ajendra Market, Premnagar, Shakti Nagar, Delhi-110007]

1. Contemporary World Order: A Vedic Perspective

(Ancient Indian Literary Heritage-I) (Proceedings–7th India Conference held at Pondicherry)

Editor: Dr. Shashi Tiwari, **Sub-Editor:** Dr. AlkaB. Bakre; **Edition:** 2009, **PRICE:** Rs.1,500/-

2. Harappan Civilization and Vedic Culture

(Ancient Indian Literary Heritage-II) (Proceedings–12th India Conference held at Delhi)

Editor : Dr. Shashi Tiwari, **Edition :** 2010, **PRICE :** Rs.1,200/-

3. Creation and Existence in Indian Tradition (In English and Sanskrit)

(Ancient Indian Literary Heritage-III) (Proceedings–13th India Conference held at Delhi)

Editor: Dr. Shashi Tiwari, **Edition :** 2011, **PRICE :** Rs.995/-

4. Bhartiya Parampara me Sristi Avam Sthiti (In Hindi)

(Ancient Indian Literary Heritage-IV) (Proceedings–13th India Conference held at Delhi)

Editor : Dr. Shashi Tiwari, **Edition :** 2011, **PRICE :** Rs.1250/-

5. Health and Happiness in Indian Perspective

(Ancient Indian Literary Heritage-V) (Proceedings–9th India Conference held at Jaipur)

Editor : Dr. Shashi Tiwari, **Edition :** 2016, **PRICE :** Rs.2,495/-

Bharatiya Vidya Bhavan **(Promoting *Sanskrit* and *Sanskriti* Since 1938)**

Bharatiya Vidya Bhavan, founded in 1938 with the blessings of Mahatma Gandhi, is a premier cultural institution with an international outlook. Its founder Kulapati K.M. Munshi, a far-sighted visionary, lawyer, statesman, constitution expert and a creative writer, looked upon the Bhavan as an “Adventure in Faith” and faith in the India’s past, present and future. It is also a faith in Indian freedom with its rich cultural heritage. He expected the people to live up to the values of the past and work in the present within the democratic framework for equity, justice, religious tolerance, promotion of harmony and peace so that the legacy of values is upheld generation after generation. On account of such laudable ideas, the Bharatiya Vidya Bhavan got the support of eminent personalities like Dr. Rajendra Prasad, Pt. Jawaharlal Nehru, Sardar Patel, Bharat Ratna C. Rajagopalachari, Dr. S. Radhakrishnan, Prince Charles HRH The Prince of Wales, Lord Callaghan, Mahamahopadhyaya Dr. P.V. Kane and a galaxy of distinguished personalities.

For its yeoman services to the society, Bhavan received ‘National Integration Award’ (1992) and ‘Communal Harmony Award’ (1999) and was declared, as an “Educational Institution of National Eminence” (2001) and awarded the prestigious “International Gandhi Peace Prize” (2002).

Bhavan is today one of the biggest ‘non- profit’ /Charitable and a Non-Governmental Organisation continuing to serve the Nation by promoting India’s cultural heritage through **Sanskrit and Sanskriti** and age old moral values through its 367 constituent institutions, 119 Kendras (branches) in India and 8 Centres abroad in New York, London, Sydney, Abu Dhabi, Doha, Kuwait, Bahrin Sultanate of Oman and 86 schools in India and 4 schools abroad in Abu Dhabi, Kuwait, Doha, Sultanate of Oman. It has also 26 colleges of Science, Arts, Commerce, Teachers Education, Engineering, Communication, Management, and Research including world class Shriyans Prasad Jain Institute of Management & Research in Mumbai.

Since its inception, Bhavan has published more than 2000 titles on History, Culture, Philosophy, Yoga, Management, etc. The most popular are the books under:

- ‘**Bhavan’s University Book Series**’,
- The eleven volume series–**History and Culture of the Indian People**,
- Popular are **60 years old “Bhavan’s Journal”** and **“Navneet (Hindi).”**

Bhavan is promoting through lectures, seminars, conferences, discussions and deliberations, musical events, kavi gosthis and an array of cultural activities, our rich heritage.

Bhavan's Centre of Indology organized a number of seminars on topical subjects such as India's Philosophy, Culture and Sanskrit language and literature. Some of the important seminars organized covered the following subjects:-

1. National Seminar on Sanskrit Literature–Past and Present
2. International Seminar on Sanskrit on the Silk Route
3. International Seminar on Sanskrit on the Maritime Route
4. International Seminar on Sanskrit and Europe

In order to provide insight into our heritage on Nritya, Natya and Sangeet (Performing Arts), Bhavan has also brought out digests and books on the following themes:-

- (a) Our Heritage in Classical Music and Dance
- (b) Instruments in Classical Music
- (c) Dance Traditions in India
- (d) Abhinavagupt
- (e) Bharat Muni's–Natyashastra
- (f) Silappatikaram
- (g) Matang's Brhaddesi
- (h) Sarangadeva's Sangitaratnakara

**Bhavan being a living organization,
it continues to absorb new ideas and evolve programmes and courses
to meet emerging socio-cultural and educational needs. The Bhavan is a
movement for resuscitation of ethical, moral and spiritual values.**



वैदिक प्रार्थना

ओम् आ ब्रह्मन् ब्राह्मणो ब्रह्मवर्चसी जायतामा राष्ट्रे
राजन्यः शूर इषव्योऽतिव्याधी महारथो जायतां दोग्धी
धेनुर्वोढानड्वानाशुः सप्तिः पुरन्धिर्योषा जिष्णू रथेष्ठाः
सभेयो युवास्य यजमानस्य वीरो जायतां निकामे निकामे
नः पर्जन्यो वर्षतु फलवत्यो न ओषधयः पच्यन्तां योगक्षेमो नः कल्पताम्॥

—शु० यजु० 22/22



—हे ब्रह्मन् महान् शक्तिशाली परमेश्वर। हमारे राष्ट्र में ब्रह्मवर्चस्वी ब्रह्मवेत्ता ब्राह्मण उत्पन्न हों। वीर, बाणवेधन में कुशल, शत्रुओं को भली-भांति परास्त करने वाले महारथी, क्षत्रिय उत्पन्न हों। इस यजमान की गाय दूध देने वाली हो। बैल वहनशील हो। घोड़ा शीघ्र गमन करने वाला हो। स्त्री सर्वगुण सम्पन्न हो। इसका रथ में बैठने वाला, महावीर, जयशील, पराक्रम करने वाला, सभ्य, युवा पुत्र हो। हमारे राष्ट्र में प्रत्येक योग्य अवसर पर मेघ बरसें। हमारी ओषधियाँ फल से युक्त होकर पकें और हमारी अप्राप्त वस्तुओं की प्राप्ति (योग) और प्राप्त वस्तुओं की रक्षा (क्षेम) उत्तम रीति से होती रहे।



World Association for Vedic Studies (WAVES) is a multidisciplinary academic society. It is a forum for all scholarly activities and views on any area of Vedic Studies variously called Indian Studies, South Asian Studies or Indology. WAVES is a non-religious society with no ideology. It is open for membership and for participation to all persons irrespective of their color, creed, ethnicity, and country of origin or any other kind of persuasion.



Bharatiya Vidya Bhavan, founded in 1938 with the blessings of Mahatma Gandhi, is a premier cultural institution with an international outlook. Its founder Kulapati K.M.Munshi, a far-sighted visionary, lawyer, statesman, constitution expert and a creative writer, looked upon the Bhavan as an “Adventure in Faith” and faith in the India’s past, present and future. It is also a faith in Indian freedom with its rich cultural heritage.



Wider Association for Vedic Studies (WAVES) was registered under Societies Act XXI of 1860 in New Delhi with a new name ‘Wider Association for Vedic Studies’. Association still maintains its acronym ‘WAVES’ and is an affiliate of “World Association for Vedic Studies, USA”. Presently WAVES has 250 members in India as registered “Life Members”. The association has chapters in Bangalore, Haridwar, Jodhpur, Lucknow and Vindya.