Science and Spiritual Quest

A Tribute to Dr. T. D. Singh on his 70th Birth Anniversary

A Report of the 3rd All India Students' Conference

on Science and Spiritual Quest held at Tirupati, AP, India, Dec 22-23, 2007

The first five Solvay conferences between 1911 and 1927 revolutionized the 20th century physics. The 1927 gathering devoted to quantum physics was attended by Einstien, Planck, Schrodinger, Bohr, Heisenberg, Born, Pauli, De Broglie, and Dirac who changed our world view forever.

With a similar intention to bring revolution in synthesis of science and spirituality, Dr. T. D. Singh, the founder-director of the Bhaktivedanta Insitute, initiated a series of conferences in the field of science and spirituality since 1980s. These conferences along with his publications had major contributions in the rapid developments in the field of science and spirituality in last three decades. He intensified his effort in the year 2005 when he launched a series of annual All India Conferences in the land of spirituality, India, bringing together cream intellectuals and students.

The third in the series, Third All India Students' Conference on Science and Spiritual Quest held during Dec 22-23, 2007, at Tirupati is a ground breaking gathering towards this vision.

The keynote speaker of the conference is none other than Nobel Laureate Professor Roger Kornberg who delivered a remarkable lecture on "The Knowable Nature of Scientific Truth". Professor Kornberg is a Winzer Professor in Medicine in the Department of Structural Biology at Stanford University. He received Nobel Prize in Chemistry in 2006 *"for his studies of the molecular basis of eukaryotic transcription"*.

In order for our bodies to make use of the information stored in the genes, a copy must first be made and transferred to the outer parts of the cells. There it is used as an instruction for protein production – it is the proteins that in their turn actually construct the organism and its function. The copying process is called transcription. **Roger Kornberg** was the first to create an actual picture of how transcription works at a molecular level. Kornberg described how the genetic information is copied from DNA into what is called messenger-RNA. The messenger-RNA carries the information out of the cell nucleus so that it can be used to construct the proteins.

According to Kornberg, the 'quest' for knowing 'what lies beyond', an urge to understand the 'unknowable' is our remarkable characteristic and provides a vital platform for connection between science and spirituality. "What is remarkable is that we try at all, that we feel impelled to do so," says Kornberg. "We will expend enormous effort to do so. We will take mortal risks and endure great suffering to do so. Obvious examples are the exploration of earthly and outer space, the pursuit of knowledge, and the creation of art and literature, to name just a few. The goal is accomplishment, testing the limits of the possible, and knowing what lies beyond."

Streching beyond the limits of known, Prof. Kornberg expressed, "… the subject of science and spirituality … sought to reconcile two very different approaches to the most fundamental questions of our existence, the questions of our origins and of our destiny. Their answers have in common ground an appeal to unknowable aspects of Nature."

The conference was a unique mix of biologists, physicists, chemists, mathematicians, engineers, academicians, students and spiritualists sitting together for a voyage towards the Ultimate Reality, for unfolding the deeper questions of life and the universe. Over 1400 leading scientific and spiritual thinkers, including 750 undergraduate and postgraduate students, from more than 100 leading academic institutions like Indian Institute of Technology (IITs), NITs, IISc, AIIMS, IIMs, ISB, Central and State Universities, etc., and most influential R&D institutions of India such as Bhabha Atomic Research Center (BARC), ISRO, DRDO, IICT, DRDL, etc., and a few top universities like MIT, Stanford, Oxford, etc., from abroad participated in this soul-enriching event.

The Inaugural address was delivered by famous mathematician from Colorado State University, Prof. J.N. Srivastava, the discoverer of 'Srivastava Codes', 'Bose-Srivastava Algebras', and many other mathematical discoveries. He spoke on "Why More of Science and Spirituality but Less of Religion for World Peace and Prosperity?" Abhishek

Tiwari, a Ph.D. student at University of Illinois at Urbana-Champaign, USA, a former B.Tech student of Computer Science from IIT Kanpur delivered a talk on 'Molecular Intelligence'.

One of the landmark events of the conference was honoring the Winners of the Essay Competition. Bhaktivedanta Institute, to stimulate creative thinking in students for a

balanced growth of scientific and spiritual advancement and to support outstanding students in their pursuit of knowledge launched an attractive Essay competition in year 2006. Every year, the institute makes an open announcement to students to write essays on "India should focus on a balanced growth of scientific temper and spiritual wisdom" or similar topic and first three selected candidates are awared cash prizes.

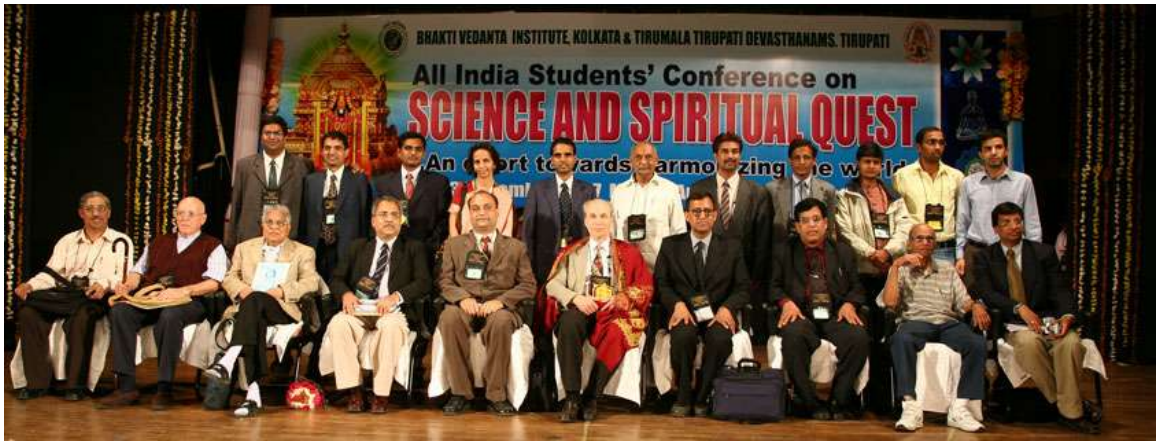
The winners of 2007 prizes were: Vivek Kaul, Georgia Institute of Technology, USA who won the first prize for his brilliant essay ; T.K. Nityashree, NIT Tiruchirapalli, TN, India won second and Chandrakanth Gadipelly, Wilson College, Mumbai University, India was rewarded the Third Prize. The prizes along with medals were handed over to the winners by Prof. Damodar Acharya, Director of the Indian Institute of Technology (IIT) Kharagpur, a leading science and technology institution of India. "Whatever maybe our technological advancements, spiritual elements are equally necessary for a complete

growth of our students," remarked Prof. Acharya, encouraging all the participating students. "It is extremely important to keep track of our moral and ethical values

…education without ethics is disaster," spoke Dr. T. Hanumat Chowdary, former advisor to Dept. of IT, Govt. of AP, and former Chairman and MD of VSNL, Mumbai, India, during his bold exposition.

The conference was jointly organized by the Bhaktivedanta Institute, Kolkata and Tirumala Tirupati Devasthanams, Tirupati. Prof. S. C. Mishra, the Dean of Academic Affairs of IIT Guwahati was the Chairman of this conference along with other Professors from IITs and Bhaktivedanta Institute members, and Sri Srikant Nagulapalli, Joint Executive Officer of the TTD on the orgazining committee.

The two-day packed conference featured special cultural shows on each day – one from the world-famous 'Ranganiketan' troup from the remote Himalayan region of the Eastern India, the state of Manipur whose ecstatic exposition gave a window to the highest stages of devotion mentioned in our spiritual traditions. The other soul-touching show was from Tirupati and depicted the pastimes of Lord Venkateshwara. Undoubtedly, art is no less in going beyond the limits of known and knocking the doors of the Unknown.



Beside two interesting panels where over 10 vice-chancellors and directors of the prominent institutions of India spoke, the other exiciting part of the conference was the vibrant interactive session on "Need for the Synthesis of Science and Spirituality" with Prof. Kornberg, Nobel Laueate, Padmashree Dr. Vijay Kumar Saraswat from DRDO, and Prof. Subhash Mishra, Dean, IIT Guwahati, on the panel. Dr. Anita Goel, CEO of Nanobiosym Diagnostics, USA was the moderator. Dr. Goel, an extraordinary brilliant woman with a PhD in Physics from the Harvard University and BS in Physics from the Stanford University stimulated the entire audience with issues of science-spirituality dialogue.

"Can you mention any concrete example of a scientific discovery which was already mentioned earlier in scriptures?" asked Dr. Goel to the audience and to the panelists which included Prof. Kornberg. From the profound contributions of 'Zero' in mathematics by the genius Ramanujan to present day atomic clocks so vivdly described in the Vedic scriptures, the array of answers by the students and scholars knew no bounds. Though the greatest contribution of spirituality remains to provide meaning and purpose in our life, inspire people towards higher and nobler goals and provide lasting peace and harmony to the self and the society, the questions of these nature raised tremendous interest and reinforced faith and confidence in the indispensible role of spirituality even in our fast scientific and technological e-world.

The conference was a vision of Dr. T. D. Singh (His Holiness Bhaktisvarupa Damodara Swami), the founder Director of the Bhaktivedanta Institute who disappeared from this mortal world in October 2006. The conference was third in the series with the first one personally embarked by him.

Dr. Singh was an unbeleivable blend of a scientist and a saint. While working on his PhD at the University of California, Irvine, in which he discovered an extraordinary phenomenon of decrease in the rate of reaction with increase in temperature, he met the renowned sage His Divine Grace A. C. Bhaktivedanta Swami in Los Angeles. The discussions between the two in the morning walks of Los Angeles beach in early 70's resulted in what is now the famous science-sprituality dialogue promoting body in the world, Bhaktivedanta Institute, very much like the hours of walk of the two outstanding minds Bohr and Heisenberg became a major force in the development of atomic physics.

We have advanced a long path since the Max Planck's 'quantas' and Einstein's space-time. However, the nature of reality still behoves us after a century. One of the greatest messages of this conference was that the Interdisciplinary approach would be the only pathway in this new millennium to further unfold the deeper mysteries of life and universe, in which, along with various scientific disciplines, spirituality will be a major partner. Perhaps, Planck also perceived it when he wrote, "For religion, God is at the beginning; for science, God is at the end."