

Dr. T. D. Singh

Curriculum Vitae Summary

A. Educational Background

1. **B.Sc. Honors** (First Class) in Chemistry, Guwahati University, Guwahati, India, 1961.
2. **M. Tech.** (Chemical Engineering and Chemical Technology), Calcutta University, Calcutta, India, 1964.
3. **University Grants Commission Research Fellow**, Government of India, 1964-1966.
4. **Ph. D.** (Physical Organic Chemistry), University of California, Irvine, U.S.A. (worked under Prof. Robert W. Taft.), 1974.
5. **Post Doctoral Research Fellow**, Chemistry Dept., Emory University, Atlanta, Georgia, U.S.A., 1974-76.
6. **Vaishnava Vedanta Studies of Hindu Theology**, 1970-77.

B. Research Experience

1. T. D. Singh worked in the area of fast proton transfer kinetics in non-aqueous solvents using model biological reactions (1969 - 1974) using Stopped - Flow instrumentation. He also worked in the kinetic studies of gas phase reactions using Ion Cyclotron Resonance (ICR) Spectroscopy. His Ph. D. thesis topic was "Base catalysis and Activation Parameters of the Aminolysis and Methanolysis of p-Nitrophenyl Trifluoroacetate in Aprotic Solvents".
2. **National Science Foundation Research Fellow** at the Chemistry Department, Emory University, Atlanta, Georgia, U.S.A. in the kinetic studies of proton transfer reactions using NMR Spectroscopy from 1974 to 1976.
3. **Director, Bhaktivedanta Institute** (1974 onwards). For over 32 years, he has been directing the research activities of the Bhaktivedanta Institute in encouraging and hosting dialogue among scientists and religious leaders and scholars worldwide, while researching on the nature of life and consciousness, bioethics and synthesis of science and religion and presenting the results in many International Conferences. He is working at present on Scientific and Philosophical study of Life and its Origin.
4. **President, Vedanta and Science Educational Research Foundation** (1992 onwards). He had been working to interface between Science and Vedanta, the essence of Hindu Religious traditions. He launched *The Journal of the Bhaktivedanta Institute* aimed at Scientific Exploration for a Spiritual Paradigm. He felt very strongly that the universal principles contained in the Vedanta can make a significant contribution in Science and Spirituality.

C. Conferences Organized and Hosted

He has successfully organized and hosted many International Conferences. These conferences provided an important platform for constructive dialogue between science and religion covering many fields of human concern. The articles are published in the proceeding volumes.

1. **First International Conference on Life Comes From Life**, Vrindavana, India, Nov. 14-16, 1977. Over 200 scientists, religious leaders and medical doctors attended this four-day conference. The theory of molecular evolution was critically examined and the origin of life was discussed from a spiritual viewpoint.
2. **First World Congress for the Synthesis of Science and Religion**, Bombay, 1986. It was attended by more than 1,100 prominent scientists (including **seven Nobel Laureates** in Science) and world religious leaders. **His Holiness the Dalai Lama** was the Chief Guest of the Congress and **Prof. George Wald**, the **Nobel laureate in biology** from Harvard University, delivered the Keynote address. Other key participants included **Prof. Joseph Weizenbaum**, pioneer in artificial intelligence, MIT; **Ernan McMullin**, Department of Philosophy of Science, University of Notre Dame; **Harvey Cox**, Harvard Divinity School; **John Searle**, philosopher, University of California, Berkeley; **Huston Smith**, theologian, MIT; and **Paulos Mar Gregorios**, President of World Council of Churches; **E. C. G. Sudarshan** particle physicist, University of Texas, Austin; and many more.
3. **First International Conference on the Study of Consciousness within Science**, University of San Francisco, 1990. More than **400** scientists and scholars participated in this conference which focused on the scientific study of consciousness in different academic disciplines. **Nobel Laureates Sir John Eccles and Prof. George Wald** delivered the keynote addresses. Other key participants were **Karl Pribram**, neuropsychologist; **Henry Stapp**, quantum physicist; **A.G. Cairns-Smith**, chemist; **Herbert Frohlich**, biophysicist; **John Searle**, philosopher; **Benjamin Libet**, neurophysiologist, etc.
4. **Second World Congress for the Synthesis of Science and Religion**, Calcutta, 1997. **Over 2,000** prominent scientists, religious leaders, philosophers and educationists from all over the world participated in this conference. **Prof. Charles Townes**, the **Nobel laureate in physics from the University of California**,

Berkeley, U.S.A., was the keynote speaker. Other participants included **physicist Prof. Gregory Benford**, University of California, Irvine; **Dr. M. M. Damad**, Iranian Academy of Sciences; **Dr. Joe Kamiya**, Psychologist and pioneer of biofeedback technology, University of California, San Francisco; **Dr. Glenn Bucher**, President of Graduate Theological Union, Berkeley; **Prof. Jonathan Shear**, Virginia Commonwealth University and Founding Editor of *Journal of Consciousness Studies*; **Prof. Amit Goswami**, Quantum physicist, University of Oregon; **Prof. Robert Shaw**, Psychologist, University of Connecticut, etc. **Dr. Robert Muller**, former Assistant Secretary General of the United Nations, delivered the Valedictory address on the topic: "The Promise of a Permanent Religious Organization". The proceeding volume entitled, *Thoughts on Synthesis of Science and Religion* with the Foreword by His Holiness the Dalai Lama was released as a part of annual **Indian Science Congress** on Jan 3, 2002. There are 42 authors having 735 pages. There are five Nobel laureates. Some of the important contributors are **Richard Ernst**, Nobel laureate in Chemistry from Switzerland with the title, "Science in the Third Millennium: Expectations between Hope and Fear"; **Deepak Chopra** with the title, "The Mind of God", **Freeman Dyson** with the title, "Progress in Religion" (Templeton Prize Acceptance Address, reproduced with permission from the author), **Jagdish Srivastava** with the title, "Logic, Godel's Theorem, Rationality and Spirituality", etc.

5. Seminar on **Science, Spirituality and the Future of Humanity**, Imphal, Manipur, April 30, 2000. Over 400 scholars participated in this seminar. The well-known artist of India Mrs. Hema Malini spoke very strongly about the importance of spirituality in art and culture.
6. **International Conference on the Culture of Peace**, Imphal, Manipur, November 17-19, 2000. Over 500 international scholars participated in this conference in Manipur to deliberate upon the issues that humanity faces today and the measures to bring peace in the world. Many felt that accepting the existence of God and knowing that we are all His children will be an important way to conceive world peace. Spirituality was strongly emphasized for bringing world peace.
7. **Second International Congress on Life and Its Origin: Exploration from Science and Spiritual/Religious Traditions**, Rome, Italy (November 11-14, 2004). Over 250 scientists, religious scholars and other thinkers from around the world participated in the Congress. There were 37 distinguished international speakers from different disciplines of science, theology and religious traditions. The Vatican Academy under the patronage of the Pope officially participated in this Congress by sending a speaker from the Vatican Academy and fifteen other scholars from the universities connected with the Vatican.

D. Conferences Participated/Lectures Delivered

Dr. Singh regularly participates and delivers lectures all over the world in academic institutions, International Conferences, and Interfaith programs. Some of them are:

I. Science and Religion Conferences/Lectures

1. **International Conference on Life and its Origin**, Jerusalem, 1980.
2. **International Conference on Science and Religion**, Rome, 1981.
Lecture topic: *The nature of Life and Fundamental Principles of Reincarnation.*
3. **International Conference on Science and Religion**, St. Pittersburgh, Florida, 1982.
Lecture topic: *Theobiology.*
4. Lecture on *Vedantic Views on Evolution: A Response to Prof. Ernan McMullin*, First World Congress for the Synthesis of Science and Religion, Bombay, January 9-12, 1986.
5. Lecture on *The Role of Consciousness in Science*, First International Conference on the Study of Consciousness within Science, University of San Francisco, 1990.
6. Lecture on *Biomedical Ethics*, Udayana Medical Hospital, Denpasar, Bali, Indonesia, 1995.
7. Lecture on *Life and its Origin*, Udayana Medical Hospital, Denpasar, Bali, Indonesia, 1997 & 1998.
8. Lecture on *Religion and Science*, Medical College, Suva, Fizi, 1999.
9. Lecture on *Critical Examination on Evolution Theory*, Udayana University, Denpasar, Bali, Indonesia, May 31, 2000.
10. Lecture on *Science and Moral Values*, Center for Civilizational Dialogue, University of Malaya, Malaysia, June 15, 2000.
11. **Iceland 2000: Faith in the Future** (the common task of Religion and Science), Reykjavik, Iceland, July 5-8, 2000.
Lecture topic: *Science and Religion and Quality of Life - a Vedantic Perspective.*
12. **World Meeting of Rectors and Presidents**, Vatican Jubilee 2000, La Sapienza University, Rome, September 9, 2000.
13. Works of Love: Scientific & Religious Perspectives on Altruism, May 31-jun5, 2003, Metanexus Institute, Philadelphia
14. Science and Religion in Context, Jun 5-9, 2004, Metanexus Institute, Philadelphia
15. Science and Religion: Global Perspectives, Jun 4-8, 2005, Metanexus Institute, Philadelphia
16. Amazing Light: Visions for Discovery, October 6-8, 2005, University of California, Berkeley
17. Continuity + Change, Jun 3-7, 2006, Metanexus Institute, Philadelphia
18. Lecture on *Science and Religion*, Indian Institute of Technology, Guwahati, January 18, 2001.
19. Lecture on *Science, Technology, Spirituality and Human Values*, Indian Institute of Technology, Kanpur, January 4, 2002.

20. Lecture on *Science, Religion and Human Values*, Ricardo Palma University, Lima, Peru, October 19, 2001; Utkal University, Bhubaneswar, December 20, 2001; and Indian Institute of Technology, Bombay, January 12, 2002.
21. Lecture on *Science, Bioengineering and Bioethics*, University of Agriculture and Engineering, Orissa, December 24, 2001.
22. Lecture on *Mechanistic and Non-mechanistic Concepts of Life and its Origin*, Regional Research Laboratory, Orissa, December 31, 2001.
23. Lecture on *Science, Technology and Human Values*, Indian Institute of Technology, Madras, February 25, 2002.
24. Seminar on Indigenous Chemical Tech. in the context of Globalization, January 19, 2002, University of Calcutta. Lecture Topic: *Indigenous Chemical Technologies in the Context of Globalization – Some Reflections on Ethical and Philosophical Aspects*.
25. National Seminar on Development of Science and Technology in Ancient India, Calcutta University, March 18-20, 2002. Lecture Topic: *Human Embryology and Understanding of Life in Ancient India*.

Last few years, Dr. Singh also lectured at important institutions like Stanford University, U.S. A.; Indian Institute of Science, India; Indian Institute of Technology, India; University of Padova, Italy; National University of Singapore; Federal University of Campina Grande, Brazil; Medical College, Suva, Fiji; Udayana University, Bali; University of Malaya, Malaysia; National Institute of Medicine, Italy; University of Malaga, Spain; University of Durban, South Africa; and University of Colorado at Boulder.

II. Interfaith Workshops and Conferences

He plays an active role in United Religions Initiative, which is a worldwide inter-religious organization and constitutes an approximate parallel to the United Nations for the world's great religions and faith communities. He also regularly participates in Vatican assemblies and other prominent inter-religious conferences.

1. **United Religions Initiative**, Stanford University, June 23-27, 1997: He made a proposal on the synthesis of Science and Religion as an important aspect in bringing harmony among different religious groups in this week long International workshop where 200 participants from different religious traditions of the world participated.
2. Lecture on *The Role of Science in Bringing Religions Unity in the 21st Century*, on World Religion Day, organized by Inter-religious Organization (IRO), Singapore, January 18, 1998.
3. **United Religions Initiative**, Stanford University, CA, June 20-25, 1999.
4. **Inter-religious Millennium Assembly hosted by the Pope**, October 24-28, 1999.
5. **Inter-religious Friendship Group**, Carter Center, Atlanta, Georgia, Nov. 11-12, 1999: **Hosted by Ex-U.S.A. President Jimmy Carter**. Lecture Topic: Universal Ethics.
6. **Council for a Parliament of the World's Religions**, Cape Town, South Africa, Dec 1-8, 1999. Lecture Topic: *Vedanta and the role of Humankind in the Cosmos*.
7. **URI Global Summit and Charter Signing**, Pittsburgh, PA, June 25-30, 2000.
8. **Uniting for a Culture of Peace** in a time of crisis, UN Plaza, New York, October 10, 2001.
9. **Inter-religious Assembly**, Jubilee Celebrations 2000, Vatican, February 25, 2000.
10. **URI Asia-Pacific Regional Assembly**, Bali, Indonesia, December 13-15, 2001.
11. **A Day of Prayer for Peace**, Assisi, Italy, January 24, 2002: This historic event was organized by Pontifical Council for Inter-religious Dialogue, Vatican. More than 400 world religious leaders were invited and **Pope John Paul II** delivered the welcome address.
12. **URI General Assembly**, Rio de Janeiro, Brazil, Aug 18-25, 2002
13. **URI Global Council Meeting**, San Francisco, May 18-25, 2006

E. Projects Undertaken

1. He is building a University of Bhagavata Culture in Imphal, Manipur, India that will promote the Universal scientific and spiritual relevance of the teachings of *Bhagavad-gita*, *Srimad Bhagavatam*, Vedanta and other Vedic literatures within the framework of modern cultural and educational milieu for the welfare of humanity. A center for science and religion and a center for Inter-Religious dialogue are also included.
2. He has started his magnum-opus work of writing Scientific Commentary on the Vedanta Sutra.

F. Memberships

- **American Chemical Society**
- **American Association for the Advancement of Science (AAAS)**
- **Indian Science Congress** (Life member)
- **Metanexus Institute**
- **United Religions Initiative** (Founding Member and Global Trustee)

G. Articles and Books

1. T.D. Singh, "Novel Activation Parameters and Catalytic constants in the Aminolysis and Methanolysis of p-Nitrophenyl Trifluoroacetate", *Journal of American Chemical Society*, Vol. 97, No. 13, June 25, 1975.
2. T.D. Singh, "Application of Ion Cyclotron Resonance Spectroscopic Gas-Phase Basicities to the study of Tautomeric Equilibria", *Journal of American Chemical Society*, Vol. 98, No. 97, Sept. 15, 1976.
3. T.D. Singh, "Nitrogen to Nitrogen Proton Transfer. The significance of large negative entropies of Activation", *Journal of American Chemical Society*, Vol. 98, No. 16, Aug 4, 1976.
4. T.D. Singh and R.L. Thompson, *What is Matter and What is Life?*, Boston, Massachusetts (U.S.A.), 1977.
5. T.D. Singh, *Theobiology*, Bhaktivedanta Institute, San Francisco, CA, 1979.
6. T.D. Singh, *Fundamental Principles of Reincarnation*, Bhaktivedanta Institute, San Francisco, CA, 1979.
5. Eds. T. D. Singh and Ravi Gomatam, *Synthesis of Science and Religion: Critical Essays and Dialogues*, San Francisco, USA, 1987.
6. Eds. T.D. Singh and S. Bandyopadhyay, *Thoughts on Synthesis of Science and Religion*, Calcutta, 2001.
7. Chief Editor, *Savijnanam: Scientific Exploration of a Spiritual Paradigm*, Journal of the Bhaktivedanta Institute (The first volume will be forthcoming around the end of August 2002).
8. T.D. Singh, "Vedantic Views on Evolution: A Response to Prof. Ernan McMullin", *Synthesis of Science and Religion: Critical Essays and Dialogues*, San Francisco, 1987, pp.87-103.
9. T.D. Singh, "A vision for the Synthesis of Science and Religion" and "Science and Religion: Present and Future", *Thoughts on Synthesis of Science and Religion*, Calcutta, 2001, pp.81-90 & pp.562-579.
10. T. D. Singh, Vedanta and Science – I: Human Life and Evolution of Consciousness, *Savijnanam: Scientific Exploration for a Spiritual Paradigm*, Journal of the Bhaktivedanta Institute, Vol.1, 2002
11. T. D. Singh and Werner Arber (Dialogue), Life and Its Origin, , *Savijnanam: Scientific Exploration for a Spiritual Paradigm*, Journal of the Bhaktivedanta Institute, Vol.1, 2002
12. T. D. Singh, Vedanta and Science – II: A Glimpse of the Origin of the Universe, *Savijnanam: Scientific Exploration for a Spiritual Paradigm*, Journal of the Bhaktivedanta Institute, Vol.2, 2003
13. T. D. Singh and Charles Townes (Dialogue), Science and Spiritual Exploration, *Savijnanam: Scientific Exploration for a Spiritual Paradigm*, Journal of the Bhaktivedanta Institute, Vol.2, 2003
14. T. D. Singh (ed.), *Seven Nobel Laureates on Science and Spirituality*, Calcutta, 2004.
15. T. D. Singh (ed.), *Science, Spirituality and Nature of Reality: A Discussion between Sir Roger Penrose and Dr. T. D. Singh*, Calcutta, 2005
16. T. D. Singh, *Life and Spiritual Evolution*, Calcutta, 2005, pp. 48
17. T. D. Singh, *Vedanta and Science Series: Life and Origin of the Universe*, Calcutta, 2004, pp.84.
18. T. D. Singh, *Essays on Science and Religion*, Calcutta, 2005, pp.104
19. T. D. Singh (ed.), *Towards a Culture of Harmony and Peace*, Calcutta, 2005, pp.324
20. T. D. Singh, Vedanta and Science – III: Reality of God's Existence – Scriptural and Scientific Evidence, *Savijnanam: Scientific Exploration for a Spiritual Paradigm*, Journal of the Bhaktivedanta Institute, Vol.3&4, 2005
21. T. D. Singh and Roger Penrose (Dialogue), Science, Spirituality and Nature of Reality, *Savijnanam: Scientific Exploration for a Spiritual Paradigm*, Journal of the Bhaktivedanta Institute, Vol.3&4, 2005
22. T. D. Singh (ed.), *Scienza e Spiritualita: il pensiero di sette premi Nobel* (Italian language), Italy, 2005
23. T. D. Singh , *Seri Vedanta & Sains: Kehidupan Dan Asal Mula Jagat Raya* (Bhasha Indonesia language), Indonesia, 2005.
24. T. D. Singh, *Science et Spiritualite: les revelations de 7 Prix Nobel* (French language), 2005
25. T. D. Singh(ed.) *God is A Person: Reflections of Two Nobel Laureates* (Charles H. Townes and William D. Phillips), Calcutta, 2006, pp.115.
26. T. D. Singh, *Life, Matter and their Interactions*, Calcutta, 2006, pp.124.
27. T. D. Singh (Editor-in-chief), *Savijnanam: Scientific Exploration for a Spiritual Paradigm*, Journal of the Bhaktivedanta Institute
28. T. D. Singh, Aging and Dying – The Vedantic Perspective (Keynote Address), *Proceedings of the National Conference on Aging and Dying: Relevance of Indic Perspectives to End-of-Life Care*, IIT Kharagpur, India (in Press)

(N.B. The above data are as of June 2006. Publications of Dr. T.D. Singh after June 2006, are not included in the above resume)