CURRICULUM VITAE OF DR. VINOD KUMAR SHARMA

EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS:

(Through out First Class/ Top Grade Academic Career)

- **STA Fellow** Science and Technology Agency (STA, Japan) Fellowship, at the National Institute for Environmental Studies, Tsukuba, Environment Agency of Japan, 1995-1997.
- USAEP Fellow United States Asia Environmental Partenrship Fellowship, the Environment and Natural Resources Division, Asia Technical Department, the World Bank, Washington DC, through the USAID, and TAF, 1994-1995.

Ph.D.(Environmental Science and Engineering):

from Indian Institute of Technology, Bombay, India, Centre for Environmental Science and Engineering, (specialization– Air Pollution / Environmental Engg.), 1992.

M.E. (Environmental Engineering):

from Faculty of Engineering, Department of Civil Engineering, University of Jodhpur, Rajasthan, India, (specialization- Water Pollution/ Environmental Engg.), 1986.

B.E. (Civil Engineering):

from Faculty of Engineering, Department of Civil Engineering, University of Jodhpur, Rajasthan, India (specialization-Civil Engineering), 1981.

WORK EXPERIENCE: (Total Experience – more than 29 Yrs)

The work experience includes full-time assignments and several short term parallel assignments, within India and abroad, detailed as follows:

MAJOR ACADEMIC ASSIGNMENTS:

- Dean Academic (2003-05) two years' parallel with Professor's Assignment
- Dean Students (2001-2003) two years' parallel with Professor's Assignment
- Professor (2001-till date) about 10 years
- Professor and HOD (1998-99)- one year
- Associate Professor (2001-98 and 2000-2001)- about 9 years
- Assistant Professor (1982-1991)- about 9 years
- Lecturer (1982) few months

DETAILS OF PRESENT ASSIGNMENT:

a) **Designation**

b) Nature of Job

Professor

Research, Consultancy, Training, & Teaching on Technological, Socio-Economic and Policy aspects of Energy, Environment and Development Issues.

c) About the Present Employers:

Indira Gandhi Institute of Development Research (IGIDR) is an Advanced Research Institute established and funded by the Reserve Bank of India (RBI). It was conceptualized by the present Prime Minister of India, Dr. Manmohan Singh, when he was the Governor of the RBI and was inaugurated in 1987 by Shri Rajiv Gandhi, the then Prime Minster of India. IGIDR is a premier institute recognized as a Deemed University by the University Grants Commission (UGC) of India in 1995. IGIDR has three major areas of research, namely, Environment, Energy and Economics and it also conducts M.Sc., M.Phil. and Ph.D. Programs in these areas focusing on development issues.

d) Areas of Interest:

Technical, Socio-economic and Policy aspects of Development issues with particular focus on the following:

- Local and Global Environmental Issues (Air, Water, Solid Waste Pollution; Greenhouse Gas Emissions and Climate Change; Natural and Environmental Resource Accounting; Trade and Environment Linkages; Life Cycle Assessment)
- Energy Sustainability and various Energy Forms including Renewable / Bioenergy
- Civil and Environmental Engineering Infrastructures
- Rural and Urban Developments

DETAILS OF OTHER ASSIGNMENTS:

• July, 2008-Till date:

Designation: International Expert for AIST and ERIA.

Job Details in Brief: Worked as an expert in the work-group member of a multi-country study team for a research project on "Sustainability of Biomass Energy in East Asia" formed by the National Institute of Advance Science and Technology (AIST) and Economic Research Institute for ASEAN and East Asia (ERIA) July 2008- Till date.

• June, 2007-March, 2008:

Designation: International Expert for JETRO and IDE.

Job Details in Brief: Worked as an expert in the work-group member of a multi-country study team for a research project on "Biomass Utilization Vision for East Asia" formed the Institute of Developing Economies (IDE) and The Japan External Trade Organization (JETRO), June 2007-March 2008.

• September, 2005-March, 2007:

Designation: Consultant for Tata Motors, A blue chip company of Tata Group, India.

Job Details in Brief: This assignment focused on "Integrated Assessment of Air Quality at New Delhi." The objective of this research was to assess the AQ at selected locations within New Delhi. The study used an integrated approach including AQ Monitoring (Field Sampling and Laboratory Analysis), AQ Receptor Modelling (for Source Identification and Apportionment) and empirical analysis of Health Impacts of AQ.

WORK EXPERIENCE: (Contd...)

WORK EXPERIENCE: (Contd...)

• April-May, 2005:

Designation: International Expert for Japan Bank for International Cooperation (JBIC).

Job Details in Brief: This assignment required review of EIA and recommendations for an efficient management of the project on "Swan River Flood Management and Integrated Land Development Project in Himachal Pradesh (H.P.) India." This was a long term project of the Govt. of HP on river basin development involving many environmental and socio-economic issues for which the HP Govt. approached the JBIC for a project assistance of about Rs.350 Crores. A detailed report on the evaluation was prepared and submitted to the JBIC.

• January – February, 2005:

Designation: Lead Consultant for India Canada Environment Facility (ICEF).

Job Details in Brief: This assignment included the mid-term evaluation of ICEF-WBPCB project on "Pollution Prevention and Waste Minimisation of Small Scale Industries in Kolkata Metropolis Area." In this project ICEF and WBPCB initiated a drive for cleaner production technologies by using less polluting fuels. A detailed report on evaluation was prepared and submitted to the ICEF.

• May-June, 2002:

Designation: Team Leader of Consultants' Team for India Canada Environment Facility (ICEF).

Job Details in Brief: This assignment included final performance evaluation of ICEF-WWF project on "Environment Education and Capacity Building for Promoting Nature Conservation and Environmental Protection." In this project WWF-India with the help of 19 partner NGOs has established over 800 Nature Clubs (NCs) in Seven States of India. This work was an extensive field survey of selected NCs in all these states and collect primary for final performance evaluation of NCs. A detailed report on evaluation was prepared and submitted to the ICEF.

• July, 1998 – June, 1999:

Designation: Professor and Head

Organisation: Dept. of PG Studies & Research, SNDT Women's University, Mumbai-400 049. **Job Details in Brief:** The nature of job was Administrative-cum-Academic and involved various activities related to research, consultancy & teaching at Master's and Ph.D. levels in the areas of Environment and Development, Ergonomics and Consumer Education.

• December, 1991 – August , 2001:

Designation: Associate Professor

Organisation: Indira Gandhi Institute of Development Research (IGIDR), Mumbai-400065. **Job Details in Brief:** The nature of job involved advanced research, consultancy & teaching at Master's and Ph.D. levels on various issues related to the Energy, Environment and Development issues with a focus on technological, economic and policy aspects.

• July, 1995 – December, 1996:

Designation: Visiting Scientist (STA Fellow) at NIES of Japan Environment Agency. **Organisation:** National Institute for Environmental Studies, Tsukuba, Ibaraki 305, (JAPAN). **Job Details in Brief:** This selection was through the Science and Technology Agency of Japan under an open international competition. I was among six Indian candidates selected from more than 250 applications. The research topic was on "Climate Change: Application of GIS and computer modeling to estimate the impact of global warming on agricultural crops, water resources and socioeconomic sectors in India and the Asia-Pacific Region."

• May - June, 1996:

Designation: Consultant to the World Bank.

Organisation: Asia Technical Environment Division of World Bank, Washington D.C., (USA). **Job Details in Brief:** The research focused on "Indian Perspectives on Trade and Recycling of Waste Paper," and the report incorporated in a broad study conducted by the Environment and Natural Resource Division of the World Bank, Washington DC, USA.

WORK EXPERIENCE: (Contd...)

WORK EXPERIENCE: (Contd...)

• October, 1994 – January, 1995:

Designation: Visiting Fellow at the World Bank.

Organisation: Asia Technical Environment Division of the World Bank, Washington D.C.(USA) **Job Details in Brief:** This assignment was under Environmental Fellowship Programme of the US-Asia Environment Partnership sponsored by the USAID. The topic of Research was "Trade and Recycling of Wastepaper". Major issues studied were- Trade, Socio-Economic & Environmental impact of Wastepaper Recycling & Policy Aspects for the future of Recycling Programmes.

• November, 1982 - December, 1991:

Designation: Assistant Professor (Civil Engineering).

Organisation: Civil Engineering Dept, University of Jodhpur, Jodhpur-342001, Rajasthan (INDIA). **Job Details in Brief:** This assignment involved teaching and research at postgraduate and under graduate levels to Civil and Environmental Engineering students, Supervising Dissertations at Master's level, officer-in-charge of Environmental Engineering Laboratory and Surveying Field work and many other subjects of Civil Engineering.

• August, 1982 - November, 1982:

Designation: Lecturer (Civil Engineering).

Organisation: Board of Technical Education,Govt.ofRajasthan,Jodhpur-342001,Rajasthan (INDIA).

Job Details in Brief: This job was on teaching to Civil Engineering Diploma students including theory and practical of civil engineering laboratory and surveying field work.

• April, 1982 - August, 1982:

Designation: Civil Engineer.

Organisation: Irrigation Department, Govt. of Rajasthan, Pali, Rajasthan (INDIA).

Job Details in Brief: The assignment involved supervision and execution of construction works for small earthen dams (Anicuts). Handled thousands of skilled and un-skilled workers and sub-ordinate officers during extensive field job some of which required travel in the remote and tribal areas.

ADMINISTRATIVE EXPERIENCE:

During a career of 29 years, various positions / activities involved administrative work / responsibility on academic and other matters. Some of these positions / activities are arranged chronologically as follows.

- Member of IGIDR Committees (2010-Till date): Member of Faculty Recruitment Screening Committee, Member of Infrastructure Committee, Member of Staff Welfare Committee; Trustee of Employees' Provident Fund.
- Member of IGIDR Academic Council (1991- till date)- This is an academic body of the Institute governing its all academic programs and related issues.
- Member, Executive Committee of IGIDR, (2006-2010; 2003-2005 and 1997-99)- I am one of the longest serving members of Executive Committee of IGIDR, which is the highest decision making body at Institute level contributing to its overall governance and policy-making.
- Member of IGIDR Committees (2006-2010): Member of Faculty Recruitment Screening Committee, Member of Computer Committee, Member of RA Allotment Committee, Member of Infrastructure Committee, Member of Ph.D. Students Screening Committee, Member of Ph.D. Interview and Selection Committees.
- **DEAN of IGIDR** (2003-05) Worked for more than two years (about 26 months) as DEAN (Academic Programs) and was responsible for looking after all academic matters of the Institute including academic administration such as convening the executive committee meetings, faculty

meetings, academic council meetings and coordinating their task; supervising and conducting admission process to M.Sc., M.Phil and Ph.D. Programmes; supervising and conducting examinations; dealing with relevant organisations within India and abroad for information on academic matters, student placement, etc. I was the first Dean to formulate the rules and regulations for IGIDR's academic programs.

- **DEAN of IGIDR (2001-2003)** As DEAN (Student Affairs), I headed Students' Welfare and Grievances Redressal Cell- This assignment was for two years (24 months), with a responsibility of students' general matters on "welfare and grievances" such as placement, internship, hostel facilities and allotment, assistance in admission process, allocation of TAs / RAs, etc. I was the first faculty member to head this committee, established at IGIDR during this period.
- Head of Department at Professor's Rank (1998-99) During this assignment, I was responsible for overall performance of a Department of Post-graduate Studies and Research at SNDT Women University, Mumbai. I also developed an inter-disciplinary Postgraduate Program (consisting of six subjects, a dissertation and internship with companies) and Ph.D. Programme on "Environment and Development."
- Member, Students' Welfare and Grievances Redressal Cell (2003-05), IGIDR -This assignment was for 26 months, as an additional charge during Dean (Academic), with responsibility of students' general matters on "welfare and problems" at the Institute.
- Member, Admission Committee, Ph.D. and M.Phil Programmes at IGIDR, 2008.
- Member, Vision Committee for IGIDR, 2007.
- Member, Committee to Assist Review Committee of IGIDR, 2007
- Member, AC-Sub Committee, for Incentives to Faculty/ Students at IGIDR, 2007.
- Member, Admission Committee, Ph.D., M.Phil. and M.Sc. Programs, 2007
- Member, Advisory Committee of IGIDR, 2003 and 2004.
- Member, Computer Committee of IGIDR, 2004-2006.
- Member, M.Sc. Thesis Committee at IGIDR, 2004-05.
- Member, M. Phil. Committee of IGIDR, 1997-98.
- Member, Selection Committee for Ph.D., M.Phil and M.Sc. students at IGIDR, July 2003.
- Member, Teaching / Research Assistant Allocation Committee, IGIDR, 1994-95 and 2002-03.
- Member, Board of Studies, S.N.D.T. University, Mumbai, 1998-99.
- Member, Faculty Member Selection Committee of IGIDR, 1992-98.
- Member, Foreign Travel Grants Committee of IGIDR, 1997-98.
- Member, Screening Committee for the selection of Ph.D. and M. Phil students at IGIDR, 1992-95.
- Took Initiatives for getting Deemed University Status for IGIDR in 1994-95. Subsequently, the Institute got deemed University status in 1995 with the highest level (A++) accreditation by the NAAC.
- Officer-in-charge of Environmental Engineering Laboratory at Graduate/Post Graduate Level, 1986-88.
- Program Officer of National Service Scheme (NSS) at University level, 1987-88.
- Program Officer of National Cadet Corps Officer (NCC), First Raj. Engg. Regt., at University level, 1987-88.
- Warden of a Hostel at University level, 1985-88.
- Administrative duties to handle several sub-ordinate officer and thousands of skilled and unskilled workers during the supervision and execution of Earthen Dams (Anicuts), Govt. of Rajasthan,1982.

ADMINISTRATIVE EXPERIENCE (Contd...)

ADMINISTRATIVE EXPERIENCE (Contd...

Some Selections on Administrative Positions*

- Selected as Director (Equivalent to Vice-Chancellor) of a proposed Technology University at Ahmedabad, 2008.
- Selected as Principal an Engineering College- An AICTE and Mumbai University Recognised College, Mumbai, 2000.
- Selected as Assistant Engineer, in Irrigation Dept. through Gujarat Public Service Commission (Gujarat, India), 1983.
- Selected as Civil Engineer, Delhi Municipal Corporation (New Delhi, India), 1983.
- Selected as Civil Engineer, Public Works Department, Govt. of Rajasthan (India), 1982.

(* Did not join and worked formally).

INTERNATIONAL EXPERIENCE:

Since 1991, several international collaborations, with individual researchers / organizations, covering several countries across all continents, have been established, as listed below.

• AFRICA:

- KENYA:
 - 1) Invited to present a paper at an international conference on "Sustainable Development of Head-Water Resources" at USIU, sponsored by the UNEP, UNESCO, UNU and UN-HABITAT, Nairobi, September, 4-8, 2002.

• SOUTH AFRICA:

2) Invited to Chair a Session of Civil Society Forum at "WSSD-Johannesburg, the biggest event in the world so far on "Environment and Sustainable Development," August 30-Sept. 2, 2002.

• NORTH-AMERICA:

• USA :

- 3) Invited to work as Environmental Fellow under the auspices of the United States-Asia Environmental Partnership (US-AEP) and The Asia Foundation (TAF) at the WORLD BANK, WashingInvited ton DC, Oct. 1994- Jan., 1995.
- 4) Invited to present paper at the 5th International Conference on ECOMATERIALS sponsored by Ministry for Education, Culture, Sports, Science and Technology, Japan and organised by Society of Non-Traditional Technology Japan, Hawaii (USA), Oct., 2001.
- 5) Invited to participate in the UNEP's International Life Cycle Panel (ILCP) meeting and present a paper in SETAC's 4th World Congress, November 14-19, Portland, USA, 2004.
- CANADA:
 - 6) Invited to present research paper and participate in the International Symposium on Environment and Hazardous Wastes, organised by Alena Chemicals Canada, Toronto, June, 1991.

INTERNATIONAL EXPERIENCE: (Contd....)

• AUSTRALIA:

7) Invited to Chair a Session in the Third Australian Conference on Life Cycle Assessment, sponsored by Australian Greenhouse Office, Queensland Government Environment Protection Agency, and ALCOA, organised by Australian Life Cycle Assessment Society, RMIT, University of QLD, University of NSW and Victoria University, July 17-19, 2002.

• EUROPE:

- 8) **FRANCE:** Invited to participate in the training workshop of regional representatives of International Life Cycle Panel (ILCP) of UNEP's Life Cycle Initiative, organized by the UNEP, Paris, May 27-30, 2005.
- 9) CZECH REPUBLIC: Invited to participate in the International Life Cycle Panel (ILCP) meeting organized by the UNEP under UNEP/ SETAC Life Cycle Initiative Programme and SETAC EUROPE 14th Meeting, also visited Czech Environmental Institute, Prague, April 21-26, 2004.
- 10) **SWEDEN:** Invited to participate and present a paper in the International Conference on EPDs by Swedish Industry Association and to Visit Beijer Institute of Royal Swedish Academy of Sciences, Sept-Oct, 2003.
- 11) **THE NETHERLANDS:** Invited to work for a month at the Institute for Environmental Studies, Amsterdam, under a CREED programme on Substances Flow Information System, April, 1995.
- 12) **GERMANY:** Visited for a week with an interest to know the Environmental Awareness and Concerns of the Country, Frankfurt, January, 1995.

• ASIA:

- JAPAN:
 - 13) Invited to participate in the working group meeting of experts of ERIA, National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, February 10-14, 2011.
 - 14) Invited to participate as an expert in the third meeting of work group of Economic Research Institute for ASEAN and East Asia (ERIA) and National Institute of Advanced Industrial Science and Technology (AIST), Tsukuba, June 02-07, 2009.
 - 15) Invited to participate in the International Life Cycle Panel (ILCP) meeting of UNEP and International Conference "EcoBalance" of AIST Tokyo, Japan, December 06-14, 2008.
 - 16) Invited to present a paper in the APEC-AIST-UNEP Workshop on LCA for Asia-Pacific Region, Tokyo, Japan, March 7-8, 2008.
 - 17) Invited to Chair a Session in the 5th AIST Workshop on LCA for Asia-Pacific Region, Tsukuba, Japan, Nov.14-16, 2006.
 - 18) Invited to present two papers in the 4th AIST Workshops and 6^h International Conference EcoBalance and International Symposium on LCA, sponsored by AIST, APEC, UNEP/SETAC, Research Center for LCA, AIST, Tsukuba, Oct..25-28, 2004.
 - 19) Invited to present two papers in the 3rd, AIST Workshops and 5th International Conference EcoBalance and International Symposium on LCA, sponsored by AIST, APEC, UNEP/SETAC, Research Center for LCA, AIST, Tsukuba, Nov.5-8, 2002
 - 20) Invited to Chair two sessions and present two papers in the 4th International Conference EcoBalance and International Symposium on LCA, sponsored by UNEP, NEDO, AIST and MITI, organised by National Institute for Resources and Environment, Tsukuba, Oct. 29-Nov. 3rd, 2000.
 - 21) Invited to Participate in the 4th International Workshop on Asian-Pacific Integrated Model, Tsukuba, March 16-22, 1999.
 - 22) Invited to Participate in the 3rd International Workshop on Asian-Pacific Integrated Model, Tsukuba, March 25-31, 1998.

INTERNATIONAL EXPERIENCE: (Contd....)

- 23) Invited to participate in the International Symposium on LCA in the Asia-Pacific region, sponsored by UNEP, NEDO and MITI, organised by Nat. Inst. for Resources and Environment, Tsukuba, Nov. 24-27, 1998.
- 24) Invited to work as Environmental Fellow under the Science and Technology Fellowship awarded by the Research Development Corporation of Japan, at the National Institute for Environmental Studies, Tsukuba, Ibaraki, Jul. 1995-Jan, 1997.
- 25) Invited to Participate in the IPCC, EMF and 2nd AIM conferences, Tokyo and Tsuchuira, March 09-18, 1997.
- 26) Invited to Participate in about a month long Training Course on "Resource Conservation and Environmental Protection" sponsored by the Asian Productivity Organisation and Japan Productivity Centre, at Tokyo, Kyoto, Nagoya, Osaka, Oct.-Nov. 1993.

• THAILAND:

- 27) Invited to participate as an expert in the International Conference on "Energy Saving and Biofuel Utilization," organized by PSU (Prince Songkula University), ERIA and IMT_GT (Indonesia-Malaysia-Thailand Growth Triangle), Hat Yai, Thailand, Sept, 2010.
- 28) Invited to participate as an expert in the second meeting of work group of Economic Research Institute for ASEAN and East Asia (ERIA), National Institute of Advanced Industrial Science and Technology (AIST), Bangkok, March 08-11, 2009.
- 29) Invited to Chair a Session and present a paper in the Joint Seminar of The NRCT-ICSSR on Sustainable Development, Bangkok, Thailand, 21-25 May, 2008.
- 30) Invited to participate as an expert in the third meeting of work group of Economic Research Institute for ASEAN and East Asia (ERIA), The Japan External Trade Organization (JETRO) and Institute of Developing Economies (IDE), Chiang Mai University, Bangkok, November 12-14, 2007.
- 31) Invited to participate as an expert in the second meeting of work group of Economic Research Institute for ASEAN and East Asia (ERIA), The Japan External Trade Organization (JETRO) and Institute of Developing Economies (IDE), Chiang Mai University, Chiang Mai, September 05-08, 2007.
- 32) To participate as an expert in the first meeting of work group of Economic Research Institute for ASEAN and East Asia (ERIA), The Japan External Trade Organization (JETRO) and Institute of Developing Economies (IDE), Chiang Mai University, Bangkok, July 16-20, 2007.
- 33) Invited to participate and present a research project proposal in the Consultative Meeting on Environmental Resource Accounting projects at the UN-ESCAP, Statistical Division, Bangkok, May 1994.

MALAYSIA:

- 34) Invited as an expert the fifth meeting of work group of Economic Research Institute for ASEAN and East Asia (ERIA) and National Institute of Advanced Industrial Science and Technology (AIST), Kualalumpur, July, 2010.
- 35) Invited as an expert in the fourth meeting of work group of Economic Research Institute for ASEAN and East Asia (ERIA), The Japan External Trade Organization (JETRO) and Institute of Developing Economies (IDE), January 31, 2008.
- 36) Invited to Participate and present a paper in a Research Seminar jointly sponsored by the Royal Swedish Academy of Sciences and the Beijer Institute, Sweden, held at Kota Kinabalu, Malaysia, May, 1995.

SINGAPORE

37) Invited to participate as an expert in the fourth meeting of work group of Economic Research Institute for ASEAN and East Asia (ERIA), The Japan External Trade Organization (JETRO) and Institute of Developing Economies (IDE), Biopolis, February 01-02, 2008.

INTERNATIONAL EXPERIENCE: (Contd....)

CHINA

38) Invited to participate as an international advisory board member and invited speaker at China Life Cycle Management International Conference, organized by the UNEP and Sichuan University, Chengdu, China, October 18-23, 2008.

INDONESIA

- 39) Invited to participate in the Tenth Asia Biomass Workshop, organized by BPPT, Indonesia, AIST and New Energy Foundation, Japan, Jakarta, Nov. 27- Dec., 02, 2010.
- 40) Invited to participate in the Second Expert Group Meeting on Boifuels / Bioenergy, organized by AIST and ERIA, Jakarta, Feb 26-March 04, 2010.
- 41) Invited to participate in the First Expert Group Meeting on Boifuels / Bioenergy, organized by AIST and ERIA, Jakarta, November 26-29, 2008.

SOUTH-AMERICA:

42) Invited to Chair a session and as key note speaker and present two papers in an international conference in Chile, co-organised by the Chilean Research Center of Mining and Metallurgy (CIMM) in collaboration with the UNEP, France, to be held at City of Pucon, during April 27-29, 2009.

RESEARCH & CONSULTANCY PROJECTS:

Several research and consultancy assignments have been completed / are on-going, sponsored by prestigious international and national organizations such as government, NGOs, corporate, public and private sectors. In most of the projects, I have been the project leader as follows.

- 1. Expert Work-Group Member for the Research on "Investigation of pilot study results in India using ERIA's Sustainability Assessment Method of biomass utilisation and upgrading the assessment method in social aspect." a multi-country joint project of AIST, Japan and ERIA, Indonesia.
- 2. ERIA Expert Work-Group Member of the project team on "Pilot Studies in East Asian Countries for Assessment of Sustainability of Biofuels" the Economic Research Institute for ASEAN and East Asia (ERIA), July, 2009- March, 2010.
- 3. Member, Research Advisory Committee, UNEP Corporate Water Accounting Project/ CEO Water Mandate, Oct., 2009.
- AIST / ERIA Expert Work-Group Member of the project team on "Guidelines for Sustainable Biomass Utilization Vision for East Asia" formed by the National Institute of Advanced Industrial Science and Technology (AIST) and the Economic Research Institute for ASEAN and East Asia (ERIA), July, 2008- March, 2009.
- 5. Expert Work-Group Member of the project team on "Biomass Utilization Vision for East Asia" formed by the Economic Research Institute for ASEAN and East Asia (ERIA), Institute of Developing Economies (IDE) and The Japan External Trade Organization (JETRO), June, 2007-March, 2008.
- 6. Team Leader of "Integrated Assessment of Air Quality in Delhi" Sponsored by Tata Motors Limited, A Leading Company from House of Tatas, India, Sept., 2005 March, 2007.
- 7. Team Leader of "Maharashtra State Development Report" for the Planning Commission, Government of India, prepared by four premier institutions namely, IGIDR, GIPE, TISS and JBIMS, 2002-05.
- 8. Team Leader of "State of Environment Report- Maharashtra, in collaboration with IITs, NEERI, Universities and MCs, for the MoEF, Govt. of India, MPCB and GoM, 2004-07.

RESEARCH & CONSULTANCY PROJECTS (Contd....)

RESEARCH & CONSULTANCY PROJECTS (Contd....)

- International Environment Expert for Japan Bank for International Cooperation (JBIC) on "Review of EIA and Recommendations" for an efficient management of a mega project on "Swan River Flood Management and Integrated Land Development Project in Himachal Pradesh (H.P.) India." April-May, 2005.
- Team Leader & Consultant for India Canada Environment Facility (ICEF) for mid-term evaluation of ICEF-WBPCB project on "Pollution Prevention and Waste Minimisation of Small Scale Industries in Kolkata Metropolis Area", Jan-Feb, 2005.
- Programme Director of two Training Programmes on "Economic Evaluation of Environmental Impacts" for the Senior Officers of Central and State Pollution Control Boards in India, under the World Bank assisted EMCBTA project, through CPCB and MOEF organised at IGIDR, Bombay, September 16-20 and 23-27, 2002.
- 12. Team Leader and Consultant of India Canada Environment Facility (ICEF) and World Wide Fund for Nature (WWF), India project on "Environment Education and Capacity Building for Promoting Nature Conservation and Environmental Protection", May-July, 2002.
- Team Leader of Consultancy Project on "Environmental Economics Forest Valuation Project of Himachal Pradesh" for State Council for Science, Technology and Environment, Kasumpti, Shimla – 9 (Himachal Pradesh), 1997-98.
- 14. Team Leader of Development of Climate Change Impact Model for India, Joint project of NIES, Japan Environment Agency, Japan and IGIDR, Bombay, 1996-98.
- 15. Environmental Economics and Sustainable Development, India's Capacity-21 project, Sponsored by the United Nations Development Program, through Ministry of Environment and Forests, Govt. of India, 1996-98.
- Team Leader of project on International Trade and Recycling in Developing Countries: Case of Wastepaper Trade in India, Joint Project of IGIDR, Bombay and IES, The Netherlands, sponsored by the CREED and IIED (U.K.), 1995-97.
- 17. Team Leader of Consultancy project on "Indian Perspectives on Trade and Recycling of Wastepaper", The World Bank, Washington D.C., May-October, 1996.
- 18. Programme Director of the Training Programme for the Senior Officials (including senior officers such as the Chairmen, Member Secretaries and Chief Engineers) of the Pollution Control Boards in India, under Institutional Development Components project of the World Bank, held at IGIDR, Bombay, Jan. 15-19, 1996.
- 19. Team Member in "Environmental Resource Accounting for India: Some Case Studies", sponsored by the United Nations Economic and Social Commission for the Asia-Pacific (UN ESCAP), Bangkok, Thailand, 1994-96.
- 20. Co-Team Leader in "Trade and Environment Linkages: A Case Study of India," sponsored by the UNCTAD, Geneva,1993-95.
- 21. Team Member in "Economic Valuation of Air Pollution" in Bombay under Inter-Country (involving six countries in the Asian region) under URBAIR/MEIP project sponsored by the World Bank/ UNDP, 1992-94.
- 22. Team Member in "Natural Resource Accounting: A Framework for India," sponsored by the UNDP through Ministry of Environment & Forests, Govt. of India, 1991-93.
- 23. Team Member in "Size Distribution of Atmospheric Aerosols for Rashtriya Chemicals & Fertilizers", Bombay, Sept., 1990.

ACADEMIC EVENTS ORGANISED / PARTICIPATED:

Organized / participated in several academic events such as training programs, conferences, seminars, workshops, etc., some of which are listed as follows.

- 1. Organizing Committee Member of "Biofuels for Sustainability and Rural Livelihoods and Energy Security" organized by the Biodiesel Association of India, New Delhi, Nov. 19. 2010.
- 2. Organized ERIA Experts' Work Group Meeting on Sustainability of Bioenergy, sponsored by ERIA, Jakarta and AIST, Japan, at Hyderabad, India, May 21-27, 2010.
- 3. Organized ISSF-2010 (International Symposium for a Sustainable Future), supported by the UNEP, France, IGES, Japan, CSH, India and PE International, Germany, IGIDR, Mumbai, January 11-13, 2010.
- 4. Organized Two Free LCA Training Programs in collaboration with IFU, Germany and PE International, Germany, IGIDR, Mumbai, January 13-14, 2010.
- 5. Organized a Seminar on Feasibility, Viability and Technicalities of Nuclear Power Programs in India, through NPCIL, Mumbai faculty at IGIDR, November 25, 2009.
- 6. Coordinator, IGIDR and Centre de Sciences Humaines (CSH) collaboration on various Socio-Economic and Environmental Issues, July, 2008 onwards.
- Organised INDO-RUSSIAN Joint Seminar on "Institutional Reforms and Development Units in Transitional Economy" in collaboration with Russian Academy of Sciences, ICSSR under Indo-Russian Joint Commission for Cooperation in Social Sciences, IGIDR, Mumbai, February 12 & 13, 2007.
- 8. Organised Workshop on "State of Environment Report Maharashtra for Ministry of Environment and Forests, Maharashtra Pollution Control Board and Govt. of Maharashtra, IGIDR, January 31, 2006.
- 9. Organised Workshop on "State of Environment Report Maharashtra for Ministry of Environment and Forests, Maharashtra Pollution Control Board and Govt. of Maharashtra, IGIDR, September 09, 2004.
- 10. Organised Workshop on "Maharashtra State Development Report" for the Planning Commission, Government of India, IGIDR, Mumbai, February 12-13, 2004.
- 11. Co-organised Symposium on Energy, Environment and Sustainable Development, (was inaugurated by the President of India), IGIDR, Mumbai, July 5-7, 2003.
- 12. Organised Workshop on "Maharashtra State Development Report" for the Planning Commission, Government of India, IGIDR, March, 2003.
- 13. Organised Training Programme on "Economic Evaluation of Environmental Impacts" for the Senior the State Pollution Control Boards in India, under the World Bank assisted EMCBTA project, through CPCB and MOEF organised at IGIDR, Bombay, September 23-27, 2002.
- 14. Organised Training Programme on "Economic Evaluation of Environmental Impacts" for the Senior Officers of the State Pollution Control Boards in India, under the World Bank assisted EMCBTA project, through CPCB and MOEF organised at IGIDR, Bombay, September 16-20, 2002.
- 15. Organised International Conference on "EcoBalance and LCA in India" sponsored by MOEF (India), AIST (Japan), APO (Japan) and IDBI (India) at IGIDR, Mumbai, Feb, 13-15, 2002.
- 16. Organised One Day Seminar under Indo-British Science Festival, 2002 in collaboration with British Council Mumbai, at IGIDR, Mumbai, Jan, 08, 2002.
- 17. Co-organised an International Workshop sponsored by UNESCO, International Hydrological Programme and Ministry of Environment and Forests, at School of Environmental Sciences, Jawahar Lal Nehru University, JNU, Delhi, Nov.26-29, 2001.
- 18. Organised Three Week's Refresher Course on Topics of Environment, Ergonomics, Consumer Services and Computer Aided Design, for University Teachers from all over India, sponsored by the University Grants Commission, December 1-24, 1998.
- 19. Organised Workshop on "Integrated Solid Waste Management", sponsored by the International Development Research Centre, Canada, SNDT Women's University, August 7-8, 1998.
- Organised Workshop on "Environmental Database of Indian Economy", sponsored by the UNDP's Capacity 21 Project, Ministry of Environment and Forest, India and The Indian Econometric Society, Mumbai, October 15-16, 1997.

ACADEMIC EVENTS ORGANISED / PARTICIPATED (Contd.....)

- 21. Organised IDRC/IFIAS Seminar on "Coastal Cities of India: Responding to Environmental and Socioeconomic issues of Concern," sponsored by the International Federation of Institutes for Advanced Study and International Development Research Centre, CANADA, organised at IGIDR, Mumbai, Jul 16, 1997.
- 22. Organised Training Programme on "Environmentally Sustainable Development for Asia-Pacific Region", sponsored by the United Nations University, Tokyo and UNDP's Capacity 21 Project at IGIDR, Mumbai, April 7-18, 1997.
- 23. Organised International Seminar on "Trade and Recycling of Secondary Materials, joint seminar of CREED-IES-IGIDR, sponsored by CREED, U.K, New Delhi, Jan 17th, 1997.
- 24. Organised Training Workshop for the Senior Officers of Central and State Pollution Control Boards of India, sponsored by the World Bank, UNDP and Capacity 21 Projects, Mumbai, Jan. 15-19, 1996.
- 25. Organised International Workshop on "International Trade and Recycling of Waste Paper," A joint workshop of IES-IGIDR-INTERVENTION sponsored by CREED U.K., Bombay, February, 1995.,
- 26. Organised Seminar on "Global Environment Facility (GEF)", joint seminar of the Bombay Natural History Society and IGIDR, Bombay, Feb. 11, 1993.
- 27. Participated in the training workshop of regional representatives of International Life Cycle Panel (ILCP) of UNEP's Life Cycle Initiative, organized by the UNEP, Paris, May 27-30, 2005.
- 28. Participated in about One month International Training Course on "Resource Conservation and Environmental Protection" sponsored by Asian Productivity Organisation and Japan Productivity Centre, Tokyo, Japan, Oct.-Nov. 1993.
- 29. Participated in Training Workshop on Integrated Assessment Models of Climate Change, organised by the Indian Institute of Management, Ahmedabad, March, 1998.
- 30. Participated in one month Short term course on "Geosynthetics in Civil Engineering" sponsored by Indian Society of Technical Education, and organized by Indian Institute of Technology, Delhi, India, May, 1987.
- 31. Participated in one and a half month Field Training Work on "Construction of Runways" at Military Engineering Services, Jodhpur, Rajasthan, India, May-Jun, 1980.
- 32. Participated in one month Field Training work on "Building Construction" at the Public Works Department, Jodhpur, India, May, 1979.

ACADEMIC INVITATIONS:

Invited by national and international organizations for various academic activities listed below:

- 1. Invited as Examiner for Ph.D. Thesis Examination, Indian Institute of Technology Bombay, Mumbai, March , 2011.
- 2. Invited as Examiner for Ph.D. Thesis Examination, Indian Institute of Science, Bangalore, August 01, 2010.
- 3. Invited as a member of International Programme Committee for the Indo-US Workshop on Designing Sustainable Products, Services and Manufacturing Systems, organized by IISc., India and NIST, USA, Bangalore, India, 18-20 August, 2009.
- 4. Invited faculty expert for delivering a session in a Training Programme on Agriculture Policy Research for Agriculture Scientist of ICAR and other organizations, Organised by IGIDR, Mumbai, September 15-20, 2008.
- 5. Invited faculty expert for delivering two sessions in a Refresher Course on Development Economics for College Teachers, Organised by the Bombay University, Department of Economics, Mumbai, December 21, 2005.
- 6. Invited faculty expert for delivering two sessions in a Faculty Upgradation Programme under EMCAB projects of the World Bank for the University Teachers organised by IGIDR, Bombay, February, 2003.

- Invited to deliver a session in a Training Programme under EMCAB projects of the World Bank for Senior Officers of Pollution Control Boards organised by NIPFP, New Delhi, January, 2003.
- 8. Invited to deliver a session in a Training Programme on "Urban Environmental Management" under EMCAB projects of the World Bank for the Senior Officers of Pollution Control Boards organised by IGIDR, Bombay, December, 2002.
- 9. Invited as Examiner for M.Phil final Examinations, Indian Institute of Technology Bombay, Mumbai, 2002.
- 10. Invited as Expert for assessing Ph.D. proposals and selection of Ph.D. candidates on Environmental issues, S.N.D.T. Women University, Mumbai, January, 2001.
- 11. Invited to contribute a Paper to the Journal of Global Environmental Engineering, published by the Japan Society of Civil Engineers, Feb., 1996.
- 12. Invited to contribute an Article to the STA Today, a monthly international magazine published by the Science and Technology Agency of Japan, Aug, 1996
- 13. Invited as Examiner for M.E. and B.E. (Environmental Engg. and Civil Engg.) final Examinations, JNV University, Jodhpur-342001, Rajasthan, 1995.
- 14. Invited to deliver a session on "Natural and Environmental Resource Accounting" for Interns from South Asian and African Countries under "South and South East Asia Network for Environmental Education", an internship in Environmental Education sponsored by the World Conservation Union and organised by the Centre for Environmental Education, Ahemedabad, India, July, 1994.
- 15. Invited to deliver a lecture in the Training Course for Representatives of the States and Central Pollution Control Boards, sponsored by the World Bank and the Ministry of Environment and Forests, Govt. of India, organised at the Indian Institute of Technology, Bombay, Sept., 1993.
- 16. Invited to deliver lectures to Master of Technology Student Officers at Institute of Armament Technology, Defense Research and Development Organisation, Pune, Feb., 1993.
- 17. Invited as Visiting Faculty for one full semester to deliver lectures to Postgraduate Diploma students on "Environmental Pollution Control Technology", Garware Institute of Career Education and Development, University of Bombay, Bombay, July, 1992.

HONOURS/ AWARDS/ FELLOWSHIPS:

Several academic honors achieved in the form of honorary positions, fellowships, scholarships, etc.

- Invited as Chief Guest to address the audience and distribute awards to the participants of "National Essay Competition Award Function-Life in Plastics Era," during the PLASTIVISION INDIA-2011, 8th International Plastics Exhibition & Conference, Mumbai, January 22, 2011.
- 2. Invited to deliver "Indira Gandhi Memorial Lecture" on "Sustainability and Rural Livelihoods" in an event organized by the Biodiesel Association of India, New Delhi, Nov. 19. 2010.
- 3. Invited as Peer Reviewer to assess the academic credentials of a candidate applied for promotion to the post of Professor at Joint Graduate School of Energy and Environment, King Mongkut's University of Technology Thonburi Bangkok, Thailand, 2010.
- 4. Member, Technical Expert Committee for LCA Study on Biodiesel and Bioethanol in Indian Context, TIFAC, Dept of Science and Technology, Govt. of India, January 2010.
- 5. Invited as Chief Guest to Inaugurate Environment Week at Rajhans Vidyalaya, Mumbai, as a part of their Sliver Jubilee Function September 27, 2010.
- 6. Member Scientific Committee, International Cconference on "Frontiers of Infrastructural Finance" (ICFIF 2011), Indian Institute of Technology, Kharagpur, India, 2010.

HONOURS/ AWARDS / FELLOWSHIPS: (Contd.....)

HONOURS/ AWARDS / FELLOWSHIPS: (Contd...)

- Invited as Key Note Speaker by the UNEP, France and Chairman by the CIMM, Chile for an international conference on LCA/ LCM (CILCA-2009), Chile (South America), Pucon City, April 27-29, 2009.
- 8. Chaired a Session at the Joint Seminar of The NRCT-ICSSR on Sustainable Development, Bangkok, Thailand, 21-25 May 2008.
- 9. Invited as Chief Guest on the Republic Day, by the DAV Group of Education (one of the largest education group in India running several hundred schools, colleges and institutions), New Panvel, Navi Mumbai, January 26, 2008.
- 10. Chairman of Two Sessions in the AIST Workshop on LCA for Asia-Pacific Region, Tsukuba, Japan, Nov.14-16, 2006.
- Member of International Advisory Board, the Seventh International Conference on EcoBalance, Sponsored by The Society of Non-Traditional Technology, National Institute for Agro-Environmental Sciences, Japan Environmental Management Association for Industry, LCA Society, Japan, and Center for Environmental Information Services, Tsukuba, Japan, Nov.14-16, 2006.
- 12. Expert in the Selection Committee for the posts of Professors and Lecturers in Environmental Science and Technology, Shivaji University, Kolhapur, Sept 22, 2006.
- 13. Member of Steering Committee, Fifth APEC Workshop on LCA, Tsukuba, Japan, Nov.14-15, 2006.
- 14. Honorary consulting member for the Report on "The India UK Strategic Partnership: A Review of Academic and Educational Links", British Council, India, December, 2004.
- 15. Member of International Advisory Board, the Sixth International Conference on EcoBalance, Sponsored by The Society of Non-Traditional Technology, National Institute for Agro-Environmental Sciences, Japan Environmental Management Association for Industry, LCA Society, Japan, and Center for Environmental Information Services, Tsukuba, Japan, Oct.25-27, 2004.
- 16. Member of Organising Committee, Fourth AIST Workshop on LCA for APEC Member Economies- Capacity Building in the Regions, Tsukuba, Japan, Oct..25-28, 2004.
- 17. Chairman of a Session on "Gender Issues" at the Inception Workshop, organized by the Indo-Canadian Shastri Institute, New Delhi, September 1-5, 2003.
- Panel Member, Thematic Workshop on "Environmental Impacts of Development and Ecosystem Management, under Ministry of Environment and Forests and World Bank aided (EMCaB) project, IGIDR, July 5-7, 2003.
- 19. Member, SHARP Programme Advisory Committee (Environmental Management), Shastri Indo-Canadian Institute, under Canada International Development Agency, 2003.
- 20. Member, of International Life Cycle Board / Panel, the highest decision making authority of UNEP/SETAC Life Cycle Initiative, October, 2002 onwards.
- 21. Chairman of a Session at WSSD-Johannesburg, South Africa, August 30- Sept 2, 2002.
- 22. Member of International Advisory Board, the Fifth International Conference on EcoBalance, Sponsored by The Society of Non-Traditional Technology, Ecomaterials Forum and Japan Environmental Management Association for the Industry, Tsukuba, Japan, Nov.6-8, 2002.
- 23. Member of Organising Commitee, AIST Workshop on "Gateway to LCA in Asia-Pacific Region," Tsukuba, Japan, Nov.6-8, 2002.
- 24. Chairman of a session in the Third Australian Conference on Life Cycle Assessment, sponsored by Australian Greenhouse Office, Queensland Government Environment Protection Agency, and ALCOA, organised by Australian Life Cycle Assessment Society, RMIT, University of QLD, University of NSW and Victoria University, July 17-19, 2002.
- 25. Member of the Core-group on Environment and Pollution Control, State Planning Board, Tenth Five-Year Plan, Govt. of Maharashstra, 2001.

HONOURS/ AWARDS / FELLOWSHIPS: (Contd.....)

HONOURS/ AWARDS / FELLOWSHIPS: (Contd...)

- 26. Member, Task-Force on Energy-Environment Interface, Ministry of Power, Govt. of India, CPRI, Bangalore, 2001.
- 27. Chairman of a Session in The Fourth International Conference on EcoBalance sponsored by The Society of Non-Traditional Technology, Japan Environmental Management Association for the Industry, Tsukuba, Japan, Oct 31-Nov.2, 2000.
- 28. Chairman of a Session in The International Symposium on LCA, sponsored my AIST and METI, Tsukuba, Japan, Oct 31-Nov.2, 2000.
- 29. Member of International Advisory Board, The Fourth International Conference on EcoBalance, Sponsored by The Society of Non-Traditional Technology, Japan Environmental Management Association for the Industry, Tsukuba, Japan, Oct 31-Nov.2, 2000.
- 30. Panel Expert/Consultant for the programmes related to the UNDP/GEF project "Energy Recovery from Urban, Municipal and Industrial Wastes", Housing and Urban Development Corporation, New Delhi.
- 31. Awarded US-AEP and TAF Fellowship: (Environmental Fellowship): USAID, USAEP and TAF to work at the World Bank, Washington DC- It us given to outstanding researchers for research and training in USA, October, 1994 -January 1995.
- 32. Awarded STA Fellowship: (Visiting Research Fellowship for 18 months): STA (Science and Technology Agency) of Japan, through the Research Development Corporation of Japan to work at the National Institute for Environmental Studies (NIES)- It is given to very few young scientist and engineers (below 35 years of age only six from India in that year) for conducting research in Japan, July, 1995-December 1996.
- 33. Awarded Ph.D. Scholarship: (Research Fellowship): Ministry of Human Resources Development, Govt. of India- It us given to very few engineering teachers in India for studying further towards Ph.D., July, 1988-July 1991.
- 34. Awarded National Merit Scholarship: (Under-Graduate Scholarship): Ministry of Human Resources Development, Govt. of India- It is given to selected under-graduate students to complete their studies, October, 1979-December 1981.

EDITOR/ REFEREE/ REVIEWER:

Served / serving on the Editorial Board and acted/ acting as a Referee/ Reviewer for various International Journals/ organizations.

- 1. Editor, IJSI (International Journal for Sustainable Innovations), 2010 onwards.
- 2. Co-editor, "Guidelines to Assess Sustainability of Biomass Utilisation in East Asia," ERIA Research Project Report 2008 No.8-2, July 2009.
- 3. Reviewed an article for Int. J. LCA "Life cycle assessment of natural gas power plants in Thailand" authored by Kamalaporn Phumpradab, Shabbir H. Gheewala and Masayuki Sagisaka, October, 2008.
- 4. Reviewer for UNEP's manual on "Developing a Country's Life Cycle Inventory Data for Background Processes, with a Focus on Energy Systems Using Available Statistics", June, 2007.
- 5. Reviewed an Article submitted to Environmental Monitoring and Assessment (An International Journal), June, 2007.
- 6. Reviewer of UNEP's Life Cycle Initiative Phase Two Strategic Plan for 2007-2010, September, 2006.
- Referee for Int. J. of LCA, (Germany) for article "Environment Impact Assessment and its minimization in Mining and Beneficiation of Coal Using Life cycle Assessment Approach," September 2006.

- 8. Reviewed a book on "Introduction to Environmental Assessment of Products" (Authors: B. Weidema) for Kluwer Academic Publishers, The Netherlands, April 2004.
- 9. Reviewed an Article submitted to Environmental Monitoring and Assessment (An International Journal), Nov., 2003.
- 10. Peer Reviewer, Philip Morris, E xxternal Research Program, USA, 2001-2005.
- 11. Member, Report Editing Committee, APEC/AIST/NEDO Symposium on LCA, JAPAN, 2000.
- 12. Associate Editor, Journal of Global Environment Engineering, Japan Society of Civil Engineers, Tokyo, Japan, 1998 2000.
- 13. Member, Editorial Board, International Journal of Life Cycle Assessment, Ecomed Publishers, Landsberg, Germany, 1999-till date.
- 14. Member, Editorial Advisory Board, Environmental Monitoring and Assessment, Kluwer Academic Publishers, Dordrecht, The Netherlands, 1996- till date.
- 15. Peer Reviewer, Centre for Indoor Air Research, Maryland, (USA), 1995 2000.
- 16. Member, Report Editing Committee, UNEP/APEC/AIST/NEDO Symposium on Life Cycle Analysis (JAPAN), 1998.
- Member, Critical Review Subcommittee, Journal of Air & Waste Management Association (A&WMA), Energy and Environment Engineering Center, Desert Research Institute, Reno, NV 89506, (USA), 1997.
- 18. Member, Editorial Board, Indian Aerosol Science and Technology Association, Bombay, India, 1994-96.
- 19. Referee to several International Journals published from Europe and USA by well known Publishers like Pergamon Press, Academic Press, A&WMA and Kluwer Academic Publishers.

RESEARCH SUPERVISOR/GUIDE:

Guided more than 20 students for their Ph.D./M.Phil/ Master's thesis. In addition, also supervised self-study and term papers for M.Phil/Ph.D. students and several students at under graduate level as listed below.

- 1. Ph.D. (2010): Ms. Ayako Sato, Ph.D. Internship Scholar at IGIDR, Tohoku University, Japan, Carbon Emission Trading for various countries, March, 2010.
- 2. Ph.D. (2005), IGIDR, Mumbai: S. Ghatak: Environment and Infrastructure issues.
- 3. Ph.D.(2004), IGIDR, Mumbai: Barnali Nag: Structural and Efficiency Indicators of Carbon Emission from Commercial Energy Use: A Sectoral Study for India (IGIDR).
- 4. Ph.D. (2000), IGIDR, Mumbai: G.S. Haripriya: Environmental Accounting, Carbon Sequestration Potential and Policies For Carbon Mitigation in India (IGIDR).
- 5. M. Phil (2005), IGIDR, Mumbai: S. Ghatak: A Gate to Grave Life Cycle Assessments of Treatment of Municipal Solid Waste.
- 6. M. Phil (2004), IGIDR, Mumbai: D. N. Dwivedy: Prediction of Global Warming Impacts on Coastal Areas of India.
- 7. M. Phil (2001), IGIDR, Mumbai: Anand Pandey: An Approach for Life Cycle Assessment of Cement Production in India.
- 8. M.A.(2008), University of Rajasthan, Jaipur, Kshipra Jain, on SEZs in India.
- 9. M.Sc.(2006), IGIDR, Mumbai: Mohit Sharma: STATE OF WEEE: Global and Indian Scenario.
- 10. M.Sc.(2006), IGIDR, Mumbai: Vishal Anand: Source Identification and Source Apportionment of Environmental Pollution.
- 11. M.Sc.(2006), IGIDR, Mumbai: Imran Ahmad: Ecolabelling as An Environmental Policy Measure

- 12. M.Sc.(2005), TERI, New Delhi: Sreeja Nair: Impact of Sea Level Rise on Mangroves in India.
- 13. B.Tech.(2003), IIT Madras, Chennai: Amrapali Kata: Environmental Issues in Maharashra
- 14. M.Sc.(2003), University of Cochin: Saliha E.M: LCA of Coir Processing in Kerala, India
- 15. M.Sc.(1999), University of Birmingham, UK:Katherine Wilson: Monitoring of Ambient and Indoor Levels of Nitrogen Oxide in Mumbai.
- 16. M.Sc.(1999), SNDT Women University, Mumbai: Ritu Babel: Ecofriendly Packaging and Consumer Buying Behaviour: A Case Study of Mumbai.
- 17. M.Sc.(1999), SNDT Women University, Mumbai: Mridula Deori: Environmental and Social Impact of Hand Made Paper in Mumbai.
- 18. M.Sc.(1999), SNDT Women University, Mumbai: Shaikh Shama Parveen: Hospital Waste Management: A Case Study of Mumbai.
- 19. M.Sc.(1999), SNDT Women University, Mumbai: Shilpa Sharma: A Study of Travelling Patterns and the Environmental Stress in Mumbai.
- 20. M.Sc.(1999), SNDT Women University, Mumbai: Suri Simer: Life Cycle Analysis of Waste Paper: A Case Study of Mumbai.
- 21. M.Sc.(1999), SNDT Women University, Mumbai: Poonam Makhija: Environment and Socio-Economic Problems of Some Coastal areas in Mumbai.
- 22. M.Sc.(1999), University of Jabalpur: Amitabh Sharma: Low Cost Methods for improving the Water Quality of selected resources at Jabalpur)

TEACHING RESPONSIBILITIES:

Since the beginning of Academic Career in 1982, I have been involved in teaching at Graduate and Postgraduate Levels. During 1982-1991, shared a teaching load of as high as 15-20 hours per week. Other major teaching and related assignments completed so far are mentioned below:

- 1. Course titled as "Tools for Sustainability Assessment" to M.Phil./Ph.D. students, IGIDR, for Academic Session 2010-11 (Semesters July-Dec, 2010 and Jan-May, 2011).
- 2. Course titled as "Tools for Sustainability Assessment" and "Socio-economic issues in Energy and Environment" to M.Phil./Ph.D. and M.Sc. students, IGIDR, Jan-May, 2009.
- 3. Course titled as "Tools for Sustainability Assessment" to M.Phil./Ph.D. and M.Sc. students, IGIDR, July-Dec., 2008.
- 4. Course titled as "Socio-economic issues in Energy and Environment" to M.Phil./Ph.D. and M.Sc. students, IGIDR, July-Dec., 2008.
- 5. Course on "Advance Issues in Environment and Development" to M.Phil./Ph.D. and M.Sc. students, IGIDR, Jan-May, 2008.
- 6. Course on "Energy and Environment" to M.Sc. and M.Phil./Ph.D. students, IGIDR, 2005.
- 7. Compulsory Course on "Energy and Environment" to M.Sc. and M.Phil./Ph.D. students, IGIDR, 2004.
- 8. Course on "Environmental Science and Engineering" at Postgraduate Level, IGIDR, 2002.
- 9. Compulsory Course on "Energy and Environment" at Postgraduate Level, IGIDR, 2001.
- 10. Designed an Inter-Disciplinary Syllabus and introduced Postgraduate and Ph.D. Programme on Environment (six subjects and dissertation) at SNDT University in 1998.
- 11. Compulsory course on "Environment & Development" at Postgraduate level, SNDT University, 1998.
- 12. Compulsory course on "Regional and Global Environmental Issues" at Postgraduate level, SNDT University, 1999.
- 13. Compulsory course on "Environment Economics and Policy" at Postgraduate level, SNDT University, 1999.
- 14. Designed an Inter-Disciplinary Syllabus for and introduced one compulsory course at Postgraduate Level, IGIDR in 1992.

- 15. Framed and Introduced four optional courses on Environment at Postgraduate Level, IGIDR, 1992 and 1993.
- 16. Compulsory Course on "Energy and Environment" at Postgraduate Level, IGIDR, 1992.
- 17. Compulsory Course on "Energy and Environment" at Postgraduate Level, IGIDR, 1993.
- 18. Compulsory Course on "Energy and Environment" at Postgraduate Level, IGIDR, 1994.
- 19. Course on "Environmental Science and Engineering" at Postgraduate Level, IGIDR, 1997
- 20. Compulsory course on "Environmental Chemistry" at Postgraduate level, University of Jodhpur, 1987.
- 21. Compulsory course on "Environmental Micro-biology" at Postgraduate level, University of Jodhpur, 1987.
- 22. Various subjects on "Civil and Environmental Engineering" such as "Environmental Engineering, Hydraulics and Fluid Mechanics, Surveying, Building Design, Engineering Geology, at Graduate (BE) level, University of Jodhpur, during 1982-1986.
- 23. Taught and supervised field and laboratory work at Graduate and Postgraduate Levels, in Environmental Engineering Laboratory, Surveying Laboratory, Hydraulics and Fluid Mechanics Laboratory, University of Jodhpur, during 1982-1987.
- 24. Delivered invited lectures at various organisations such as IIT Bombay, University of Bombay, Institute of Armament Technology, DRDO, Pune, Center of Environment Education, etc. during 1992-2001.

IMPACT OF RESEARCH ON POLICY:

Output of several research and consultancy assignments and publications, in the form of journal articles, books, reports, monographs, etc., has made contribution to policy making in India and abroad. Some of them are mentioned below briefly.

• Sustainable Biomass Utilization Vision in East Asia:

This project was sponsored by the Japan External Trade Organization (JETRO) and Economic Research Institute for ASEAN and East Asia (ERIA). The project investigated various aspects of "Sustainable Biomass Utilization in East Asia." An elaborate research was conducted by a multidisciplinary, multi-national expert working group (WG) formed by the Economic Research Institute for ASEAN and East Asia (ERIA). The WG experts were specialized in various disciplines such as energy, environment, social-sciences and economics, within the East Asian region. The WG highlighted various crucial issues and suggested some necessary steps, which could be useful for achieving a sustainable biomass utilization in the production and consumption of bioenergy in the region. The policy recommendations of the report prepared by the WG were accepted by the Energy Ministers' of the East Asian countries including India.

• State of Environment Report- Maharashtra:

This project was sponsored by the Maharashtra Pollution Control Board in Collaboration with the Ministry of Environment and Forests, Govt. of India. Under my supervision, the report was coordinated and prepared by the Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India and other collaborating partners were IIT Bombay, NEERI, Universities and Municipal Corporations of Maharashtra. The objective of this Report was to assess the state of the art of natural resources and environment in the state of Maharashtra. The report covered all major environmental sectors, including local and global issues, and suggested the policy measures for various sub-sectors of environment. The report could be useful for the decision and policy makers and other stakeholders responsible for environmental management who could frame policies in such as way that the state of Maharashtra can achieve an eco-friendly development.

• Maharashtra State Development Report:

This project was sponsored by the Planning Commission, Govt. of India. Under my supervision, the report was co-ordinated and prepared by the Indira Gandhi Institute of Development Research (IGIDR), Mumbai, India. Other collaborating partners were Gokhale Institute of Politics and Economics (GIPE), Pune, Jamnalal Bajaj Institute of Management Studies (JBIMS), Mumbai and Tata Institute of Social Sciences (TISS), Mumbai. The objective of Maharashtra State Development Report was not merely to state policies and achievements of the Government, but rather a concerted

effort to provide a document with guidelines for accelerated, improved and sustainable development in the state. It recognises that development is an all-encompassing process, which requires the State Government, the Civil Society, the Panchayati Raj Institutions and all stakeholders to work in tandem. Thus, the report could act as the ready reference material to review the reasons for success and failures on various fronts and as a useful tool for the policy makers to decide the strategy for future development in the state. The report was released in a high profile function organized by the Chief Minister's office by Shri M.S.Ahluwalia, Dy. Chairman of the Planning Commission in November, 2005. It was well received by print and TV media and covered by all major national newspapers and TV channel.

• Environmental and Natural Resource Accounting:

These projects were sponsored by the UNDP and the UN-ESCAP through the Ministry of Environment and Forests, Govt. of India. These aimed at internalizing the environmental costs into the development process. They have made significant impact on Government Policy, and as a result, several research projects across the country were initiated on various resources suggested through these projects. Some resource specific studies gave useful input to formulation of policies related to the monetary estimation of damages to these resources caused by pollution and other anthropogenic activities.

• Trade and Environment Linkages:

This project was sponsored by the UNCTAD and made a significant impact on international policies related to the Environment and Trade. The project added to the ongoing debate on trade and environment issues in the international and Indian forums. The study suggested guidelines to frame policies which could minimize the damages to local ecology and environment due to trade related activities and, at the same time, the trade is not restricted due to international environmental barriers.

• Sustainability Approach and LCA:

Through involvement in various activities such as organizing the biggest conference related to sustainability assessment from a life cycle approach in India in 2002, establishing ISLCA, and by representing in several forums including AIST, Japan and UNEP, France, has resulted in substantial increase in awareness on the LCA concepts in India.

• Waste Paper Trade and Recycling:

This research was jointly conducted by the Institute for Environmental Studies, Amsterdam, The Netherlands, Indira Gandhi Institute of Development Research, Bombay and INTERVENTION India Pvt. Ltd., Bangalore. I was project leader and principal researcher from IGIDR and lead several researchers from IGDIR and other Institutions in India. This project came out with some important findings related to trade and recycling of waste paper at international, national and local levels. The study suggested various policy measures on trade, environment and socio-economic aspects of waste paper recycling which could be adopted to improve the solid waste management and recycling infrastructure in India.

• Urban Air Pollution:

The book on Atmospheric Pollution by Aerosols focused on air pollution in Mumbai. I was one of the members of the committee of experts in Metropolitan Environment Improvement Programme which was supported by the World Bank, USA and executed by the Environment Dept., Government of Maharashtra. The study focussed on several aspects of air pollution in Bombay. The study suggested various measures which could be followed to abate air pollution in metropolitan and urban regions of India. Introduction of Catalytic converters in the vehicles and use of unleaded petrol were some of the recommendations of this study which have been introduced in India since 1995.

• Climate Change Impacts:

This research was a joint project of National Institute for Environmental Studies, Tsukuba, Environment Agency of Japan and Indira Gandhi Institute of Development Research, Bombay. I was the project leader for this project in the area of international and regional importance. The objective of the research was to find out the impact of climate change on agriculture, water resources and socio-economic sectors in India. Since the Climate Change Impacts form a bridge between green house gas emissions and policy for their abatement, the results of this research would be of immense help for policy makers.

ENVIRONMENTAL MONITORING/ SURVEYS/ FIELD WORK:

- Field visits for survey and data collection on social, economic and environmental aspects of sustainability of bioenergy / biofuels, in Malaysia (Carrey Island and Kualalumpur), July 10-12, 2010.
- Field visits for survey and data collection on social, economic and environmental aspects of sustainability of bioenergy / biofuels, in Indonesia (Jakarta and Lampung Regions), Feb-March 2010.
- Field visits for survey and data collection on social, economic and environmental aspects of sustainability of bioenergy / biofuels, in The Philippines (Manila and Los Banos Regions), March 2010.
- Field visits for survey and data collection on social, economic and environmental aspects of sustainability of bioenergy / biofuels, in The Philippines (Manila and Los Banos Regions), March 2010.
- Field visits for survey and data collection on social, economic and environmental aspects of sustainability of bioenergy / biofuels, in Thailand Chiang Mai University and Bangkok, July 16-20, 2007.
- Field visits for survey and data collection on social, economic and environmental aspects of sustainability of bioenergy / biofuels (Palm Oil Production), Malaysia, January, 2008.
- Field visits for survey and data collection on social, economic and environmental aspects of sustainability of bioenergy / biofuels Palm Oil Production), Singapore, February, 2008.
- Survey / Field work to collect primary and secondary data for conducting EIA of Swan River Flood Management and Integrated Land Development Project in Himachal Pradesh (H.P.) for Japan Bank for International Cooperation (JBIC), 2005.
- Survey / Field work to collect primary and secondary data on Pollution Prevention and Waste Minimization of Small Scale Industries in Kolkata Metropolis Area for India Canada Environment Facility (ICEF), February-March, 2005.
- Survey / Field work for evaluation of performance of more than 800 Nature Clubs spread across seven states in India set up by ICEF and WWF for environmental education and awareness, 2002.
- Economic, Trade, Energy and Environmental Data Collection (base line and secondary data) for Wastepaper and Plastic Waste in India and the Asia-Pacific region, 1995-96.
- Socio-economic, export, health & environmental data collection survey for Indian Leather Tanning Industry, 1994-95.
- Socio-economic, export, health & environmental data collection survey for Indian Fish and Shellfish Industry, 1994-95.
- Economic and environmental data collection survey for Pollution Monitoring & Abatement Industry in India, 1992-93.
- Several field visits in Japan (Tokyo, Kyoto, Nagoya, Osaka) of recycling centers, forestry conservation methods, waste treatment facilities, lake conservation techniques, etc. under the program on "Resource Conservation and Environmental Protection" Oct.-Nov. 1993.
- Field Sampling of Particulate and Gaseous Air Pollutants using High-Vol. Samplers, Respirable Dust Samplers, Cascade Impactor, QCM-CI, Gas Analyzers, Stack Samplers, etc., 1988-90
- Field Sampling of Water Pollutants for various pollutants like BOD, COD, DO, Color, TDS, Conductivity, pH etc. Laboratory Analysis of Air and Water Pollutants using AAS, Spectrophotometers, ICPES, XRF, INAA, CAS, IAS, etc., 1988-90.

MEMBERSHIP OF TECHNICAL / PROFESSIONAL GROUPS:

- 1. Chairman EEIU, India Chapter (Eco-Ethics International Union, Germany)
- 2. MA&WMA (Member, Air & Waste Management Association, USA).
- 3. MAERE (Member, Association of Environmental and Resource Economists, USA)
- 4. MIFTA (Life Member, Indo-French Technical Association, India)
- 5. MIE (Member, Institution of Engineers, India)
- 6. MISDT (Life Member, Indian Society of Desert Technology, India)
- 7. MIASTA (Member, Indian Aerosol Science & Technology Association, India)
- 8. MCERS (Member, Consumer Education and Research Society, India)
- 9. President, ISLCA (Indian Society for Life Cycle Assessment, India)
- 10. Chairman, NEEF (National Ecology and Environment Foundation, India)

COMPUTER AND MODELLING:

- Geographical Information System (GIS) using GRASS and ARC/INFO Methods.
- Trade Analysis and Reporting System (TARS) of the World Bank for retrieving trade data.
- Dispersion Modelling of Air Pollutants using Guassion Plume Model.
- Receptor Modelling of Air Pollutants using Statistical Techniques like Correlation and Regression, Chemical Mass Balance, Factor Analysis-Multiple Regression, Composite Receptor Model, Cluster Analysis, etc.
- Expertise to work on several computer softwares such as SPSS, STATA, Statgraphics, Harvard Graphics, Supercalc5, Lotus 1-2-3, Matlab, MSOFFICE- Word, Excel, Power Point, Word Perfect, Wordstar, Chiwriter, Grapher, Flow, News, etc..
- Knowledge of Programming Languages such as Basic, Quick Basic, and Fortran.

EXTRA-CURRICULAR:

- Always among toppers, class monitors and best students at school level.
- First prize in Dramatics as best actor and director at Indian Institute of Technology, Bombay.
- First prize in Essay Writing Competition at College Level, University of Jodhpur.
- Worked as General Secretary and Cultural Secretary at IIT, Bombay.
- Organised and Participated in several Sports, Music and Cultural Activities at District/ School/ College Levels.

- Selected as Director (Equivalent to Vice-Chancellor) of a proposed Technology University at Ahemedabad, 2008.
- Selected as Professor at National Institute of Industrial Engineering (NITIE) A premier Institute of Government of India, Mumbai, 2000.
- Selected as Principal of Rizvi College of Engineering- An AICTE and Mumbai University Recognised College, Mumbai, 2000.
- Invited and joined as Professor and HOD at SNDT University, Mumbai, 1998-99.
- Selected Twice, Assistant Professor, Sardar Patel College of Engineering, Bombay, 1989 and 1991.
- Selected Assistant Engineer, in Irrigation Dept. through Gujarat Public Service Commission (Gujarat, India), 1983.
- Selected as Civil Engineer, Public Works Department, Govt. of Rajasthan (India), 1982.
- Selected as Civil Engineer, Delhi Municipal Corporation (New Delhi, India), 1983.
- Selected for Ph.D. at Dundee University, UK and Stuttgart University, Germany, 1986-87.
- Considered for interview for the post of Director Institute of Engineering and Technology, JK Lakshmipat University, Jaipur, 2011.
- Considered for interview for the post of Director General of Bureau of Energy Efficiency, Ministry of Power, Govt. of India, November, 2008.
- Considered for interview and was listed among first three candidates and considered for appointment for the post of the Director, National Institute of Technologies, India, 2006 and 2011.
- Considered for interview twice for the post of the Chairman, Central Pollution Control Board, New Delhi, 2003 and 2007.
- Considered for interview for the post of Member Secretary- AICTE, New Delhi but opted for not to attend the interview, 2006.
- Considered for interview twice for the post of the Director, Indian Institute for Forest Management, Bhopal, 2003.
- Considered for interview for the post of the Director, Gujarat Environment Management Institute, Baroda, 1999.

LIST OF PUBLICATIONS

Authored / Edited 115 publications in total, which include Papers in Refereed Journals/ Proceedings/ Magazines; Books / Conference Proceedings/ Project Reports; and Presentations in Conferences / Workshops/ Symposiums/ Seminars categorized as follows:

(I) BOOKS / CHAPTER IN BOOKS AUTHORED / EDITED

- 1. VINOD K. SHARMA (Co-Editor): Policy Report on search on "Impact Assessment of Biomass Utilisation in East Asia: Estimation of Economic, Environmental and Social Impacts of Bioenergy at the State and Province Levels" a multi-country joint research project of AIST, Japan and ERIA, Indonesia, 2011, published by ERIA (forthcoming).
- 2. VINOD K. SHARMA: A chapter on ""Investigation of pilot study results in India using ERIA's Sustainability Assessment Method of biomass utilization and upgrading the assessment method in social aspect" (edited by WG of ERIA), published by AIST and ERIA, 2011 (forthcoming).
- 3. VINOD K. SHARMA: A Chapter on "Environmental Challenges of Development Strategies in India" published in India Development Report (Edited by D.M. Nachane), IGIDR and Oxford University Press, 2011 (forthcoming)
- 4. VINOD K. SHARMA (General Editor): Policy Report on "Sustainability Assessment of Biomass Energy Utilization in East Asia" published by Economic Research Institute for ASEAN and East Asia (ERIA), Jakarta, Indonesia, 2010 (forthcoming).

- 5. VINOD K. SHARMA: A chapter on "Social Dimension of Bioenergy Development In India", in a book titled "Designing Sustainable Products, Services and Manufacturing Systems, (Editors, Amaresh Chakrabarty, et al.), Research Publishing Services, Singapore, 2010.
- VINOD K. SHARMA: Chapter on "Guidelines for Social Impacts of Biomass Energy in East Asia" in a book titled "Biomass Utilisation Vision for East Asia" (Editor Dr. Masayugi Sagisaka), published by National Institute of Advanced Industrial Science and Technology (AIST), Japan, June 2009.
- VINOD K. SHARMA: Chapter on "Social Aspects of Biomass Energy in India" in a book titled "Biomass Utilisation Vision for East Asia" (Editor Dr. Masayugi Sagisaka), published by Japan External Trade Organisation (JETRO), Institute for Developing Economies (IDE) and Economic Research Institute for ASEAN and East Asia (ERIA), March 2008.
- 8. VINOD K. SHARMA (Editor): MAHARASHTRA STATE DEVELOPMENT REPORT, A Major Policy Document on Development issues in Maharashtra, prepared for the Planning Commission, Government of India, Oxford University Press, New Delhi, 2007.
- 9. VINOD K. SHARMA (Editor): STATE OF ENVIRONMENT REPORT- MAHARASHTRA, A Major Policy Document on Environment issues in Maharashtra, prepared for the MoEF, Govt. of India, MPCB and GoM, 2007.
- 10. VINOD K. SHARMA (Author): HANDBOOK OF ENVIRONMENT, Bookwell Publishers, Delhi 100 009, January, 2004.
- 11. VINOD K. SHARMA (Editor): ENVIRONMENTAL PROBLEMS OF COASTAL AREAS IN INDIA, Bookwell Publishers, Delhi 100 009 (India), 2000.
- 12. VINOD K. SHARMA and PIETER VAN BEUKERING (Editors): WASTE PAPER TRADE AND RECYCLING IN INDIA, Scientific Publishers, Jodhpur 342001 (INDIA), 1997.
- V. K. SHARMA (Author): ATMOSPHERIC POLLUTION BY AEROSOLS: Scientific Publishers, Jodhpur, (India), distributed by State Mutual Book and Periodical Services Ltd., New York-100017 (USA) and N.C.Traders, Reading, RG5 4EW, Berks, (U.K.), 1994.
- R.S. PATIL AND V. K. SHARMA: Role of Environmental Impact Assessment in Financing of Rural Projects. Commissioned paper, Proceedings of NABARD Consultation National Workshop (Chapt. 11 of the Book edited by. J. P. Painuly), IGIDR, Bombay, April, 1994.

(II) PUBLICATIONS IN PEER- REVIEWED JOURNALS

- 15. BASANT KUMAR SAHU AND VINOD KUMAR SHARMA: Sustainable Development: Principles and Challenges in Developing Economies, International Journal for Sustainable Innovations, Vol.1, No.1, January 2011
- VINOD K. SHARMA: Guest Column paper on "Importance of Source Apportionment Modeling in Air Pollution Abatement Policy" Clean Technologies and Environmental Policy, Online Publication of Springer, December 2009.
- 17. VINOD K. SHARMA AND YAMINI S. KURANI: State of Environmental Product Declarations (EPDs) in India, International Journal of LCA, Vol.9, No.1, 2004.
- 18. VINOD SHARMA: Report on the International Conference on EcoBalance and Life Cycle Assessment in India, International Journal of LCA, Vol.7, No.3, 2002.
- 19. ABHAYSINGH CHAVAN AND VINOD SHARMA: Overview of Life Cycle Assessment Activities in India, International Journal of Life Cycle Assessment, Vol.7, No.3, 2002.
- ANJANA SHARMA, DEEPALI KHOKHALE, MEENAL BUDHOLIA, AMITABH SHARMA, VINOD K. SHARMA AND SUSHMA RAJPUT Prevalence and Distribution of Aeromonads in different Chlorinated Water Samples, Indian Journal of Environmental Health, Vol.44, No.4, P.314-319, October, 2002.
- 21. VINOD K. SHARMA and RITU BABEL: Eco-Friendly Packaging and Consumer Buying Behaviour: A Case Study of Mumbai, Journal of Advanced Science, Vol. 13, No.3, 2001.
- 22. VINOD K. SHARMA: Wastepaper In Mumbai (India): An Approach for Abridged Life Cycle Assessment, The International Journal of Life Cycle Assessment, Int. J. LCA, 5(1) 2A, 12-18, 2000.
- 23. VINOD K. SHARMA: Problems of Marine Ecosystems and Sustainability of Coastal Cities: A Focus on Mumbai, India, Indian Journal of Environmental Health, Vol.42, No.2, P.82-91, April, 2000.
- 24. VINOD K. SHARMA: Development of Air Quality Indices for Mumbai, India, International Journal of Environment and Pollution, Vol. 11, No.2, 141-146, 1999.
- 25. VINOD K. SHARMA: GAPS IN ENVIRONMENTAL POLICY: A Focus on General and Air Pollution Problems, Environmental Policy and Law, Vol. 28, No.2, 90-96, 1998.
- 26. VINOD K. SHARMA, UPAL GHOSH and G. S. HARIPRIYA: Economic Analysis and Ecological Impacts of Fish and Shellfish Industry in India, ENCOLOGY, Vol. 11, No. 10, 1997.

- 27. VINOD K. SHARMA, PEITER VAN BEUKERING AND BARNALI NAG: Environmental and Economic Policy Analysis of Waste Paper Trade and Recycling in India, Resources, Conservation and Recycling, Vol. 21 No. 1, 55-70, 1997.
- V. K. SHARMA: Environmental Issues and Economic Development in India: Challenges for Civil Engineers, Journal of Global Environmental Engineering, the Japan Society of Civil Engineers, Vol. 2, 1-8, 1996 (Invited Paper).
- 29. PIYUSH TIWARI, JYOTI K. PARIKH AND VINOD K. SHARMA: Performance Evaluation of Cost Effective Buildings: A Cost, Emissions and Employment Point of View, Building and Environment, Vol.31, No.1, 75-90, 1996.
- JYOTI PARIKH AND V. K. SHARMA: Economic and Policy Analysis of Trade and Environment Linkages in India, Journal of Indian Association for Environmental Management, Vol. 23, No. 2, June, 1996.
- 31. V. K. SHARMA: Wastepaper Recycling: Trade, Environmental and Socio-Economic Aspects, ENCLOLOGY, Vol.10, No. 9, Feb. 1996.
- 32. V. K. SHARMA AND R.S. PATIL: Factor Model Applied to Water Soluble Components of Precipitation Samples. Indian Journal of Environmental Health, Vol. 36, No. 2, 1995.
- 33. V.K. SHARMA: Environmental Regulatory Measures and their Economic Impact on Indian Leather Industry. Natural Resources Forum- A United Nations' Journal Vol.19, No.2, 153-160, 1995.
- 34. V.K. SHARMA AND R.S.PATIL: Chemical Mass Balance Model for Source Apportionment of Aerosols. Environmental Monitoring and Assessment, Vol.29,No.1, 75-88, 1994.
- V. K. SHARMA AND R.S. PATIL: Source Apportionment of Suspended Particulate Matter Using A Composite Receptor Model. Indian Journal of Environmental Health, Vol. 35, No. 4, 1993.
- 36. V. K. SHARMA AND R.S. PATIL: Chemical Composition and Source Identification of Bombay Aerosols. Environmental Technology, Vol. 13, 1043-1052, 1992.
- V. K. SHARMA AND R.S. PATIL: Size Distribution of Atmospheric Aerosols and Their Source Identification Using Factor Analysis in Bombay, India. Atmospheric Environment, Vol.26B(1), 135-140, 1992.
- 38. V. K. SHARMA AND R.S. PATIL: *In Situ* Measurements of Spatial and Temporal Variation of Atmospheric Aerosols in Bombay. Journal of Aerosol Science, Vol. 22, No. 4, 501-507, 1991.
- V. K. SHARMA, P.P. JOSHI AND R.S. PATIL: Chemical Composition of Precipitation and Their Role in Determining Its Acidity in Bombay. Environmental Technology, Vol.11, No.8, 777-784, 1990.

(III) CONFERENCE PROCEEDINGS EDITED

- 40. VINOD K. SHARMA (Editor): International Symposium on a Sustainable Future-2010, (ISSF-2010), Proceedings of ISSF-2010, organized by IGIDR, January 11-14, 2010.
- VINOD K. SHARMA and O. MALYAROV (Editors): "Institutional Reforms and Development Units in Transitional Economy" Proceedings of Indo-Russian Seminar of Russian Academy of Sciences, ICSSR and IGIDR, 2007.
- 42. VINOD K. SHARMA(Editor): ECOBALANCE AND LIFE CYCLE ASSESSMENT IN INDIA, Proceedings of International Conference, AIST and APO, Japan, MoEF and IDBI, India, Feb, 2002.
- 43. V. K. SHARMA, A. BHATANAGR, S. PHADKE AND B. DASGUPTA (Editors): Proceedings of Refresher Course on Topics of Environment, Ergonomics, Consumer Services and Computer Aided Design, for University Teachers from all over India, sponsored by the University Grants Commission, SNDT Women University, December 1-24, 1998
- 44. VINOD K. SHARMA(Editor): Proceedings of the Seminar on "COASTAL CITIES OF INDIA: Responding to Environmental and Socio-economic Issues of Concern," sponsored by the International Federation of Institutes for Advanced Study and International Development Research Centre, CANADA, organised at IGIDR, Mumbai, July, 1997.
- 45. JYOTI PARIKH AND VINOD K. SHARMA (Editors): "Environmental Database of Indian Economy", Proceedings of National Workshop on sponsored by the UNDP, The Indian Econometric Society, and the Ministry of Environment and Forests, IGIDR, Mumbai, October 15-16, 1997.

(IV) RESEARCH REPORTS AUTHORED / EDITED

- 46. VINOD K. SHARMA (Author): Report on "Review of EIA of Swan River Flood Management and Integrated Land Development Project in Himachal Pradesh (H.P.) India." for Japan Bank for International Cooperation (JBIC), April-May, 2005.
- 47. VINOD K. SHARMA (Lead Author) and YASHPAL SINGH: Report on "Mid Term Evaluation of Pollution Prevention and Waste Minimisation of Small Scale Industries in Kolkata Metropolis Area", for India Canada Environment Facility (ICEF), February-March, 2005.

- 48. VINOD K. SHARMA (Editor): State of Infrastructure in Maharashtra, prepared as an input to Chapter on "Infrastructure Development" of MSDR, 2004.
- 49. VINOD K. SHARMA (Editor): Urbanisation Scenario in Maharashtra, prepared as an input to Chapter on "Urbanisation" of MSDR, 2004.
- 50. VINOD K. SHARMA, YASHPAL SINGH, SUDHANSHU SINHA AND PPS GOSAIN (Lead Author): Environment Education and Capacity Building for Promoting Nature Conservation and Environmental Protection, for India Canada Environment Facility and World Wide Fund for Nature, India, August, 2002.
- 51. V. K. SHARMA (Author): Development Of Climate Change Impact Model For India (Water Resources Sector) submitted to the National Institute for Environmental Studies, Japan Environment Agency, Japan, March, 1998.
- 52. JYOTI K. PARIKH AND VINOD K. SHARMA (Co-author): Environmental Database Of Indian Economy, sponsored by the UNDP's Capacity 21 Project, Ministry of Environment and Forest, India and The Indian Econometric Society, Mumbai, October , 1997.
- 53. VINOD K. SHARMA (Co-author): Environmental Accounting For India: Some Case Studies, Prepared for UN Economic and Social Commission foe Asia and Pacific, February, 1997.
- 54. PETER VAN BEUKERING AND VINOD K. SHARMA (Editors): International Trade And Recycling In Developing Countries: The Case Of Waste Paper Trade In India, for Collaborative Research in the Economics of Environment and Development (CREED), The Netherlands and IIED, U.K., Nov. 1997.
- 55. V. K. SHARMA (Author): Indian Perspectives On Trade And Recycling Of Waste Paper: Paper contributed to the broad study on the International Trade and Recycling of Secondary Materials conducted by the Environment and Natural Resources Division, Asia Technical Department of the World Bank, Washington D.C., Oct., 1996.
- 56. V. K. SHARMA (Author): Development Of Climate Change Impact Model For India (Agriculture Sector), submitted to the National Institute for Environmental Studies, Japan Environment Agency, Japan, December, 1996.
- 57. V. K. SHARMA (Author): International Trade And Recycling Of Waste Paper: Environmental and Socio-Economic Aspects in India, Report prepared at the World Bank and submitted to the Asia Foundation, under Environmental Fellowship Programme of US-AEP, January, 1995.
- 58. JYOTI PARIKH, V. K. SHARMA (Co-athor): UPAL GHOSH AND MANOJ PANDA: Trade And Environment Linkages: A Case Study Of India, For UNCTAD, April, 1995.
- KIRIT PARIKH, JYOTI PARIKH, V. K. SHARMA (co-author) AND J. P. PAINULY: NATURAL RESOURCE ACCOUNTING: A Framework For India, For Ministry Of Environment, Govt. Of India And UNDP, Nov., 1993.
- 60. S. PATNAIK, A. VINOD KUMAR, V. K. SHARMA (co-author) and R. S. PATIL: Size Distribution Of Atmospheric Aerosols, For Rashtriya Chemicals & Fertilizers, Bombay, Sept., 1990.

(V) PAPERS IN CONFERENCE PROCEEDINGS / PRESENTATIONS

- 61. VINOD K. SHARMA: Social Dimension of Bioenergy Development In India, invited paper at the Indo-US Workshop on Designing Sustainable Products, Services and Manufacturing Systems, organized by IISc., India and NIST, USA, Bangalore, India, 18-20 August, 2009, also published as a book, Research Publishing Services, Singapore, 2010.
- 62. VINOD K. SHARMA and SANGEETA SHARMA: LCA/LCM in India, presented at China Life Cycle Management International Conference, organized by the UNEP and Sichuan University, Chengdu, China, October 18-23, 2008.
- 63. VINOD K. SHARMA: Sustainability of Bioenergy in India and Some Other Asian Countries, presented at the Joint Seminar of The NRCT-ICSSR on Sustainable Development, Bangkok, Thailand, 22-23 May 2008.
- 64. VINOD K. SHARMA and SANGEETA V. SHARMA: Life Cycle Approach for Impact Assessment of Bioenergy in India, presented at International Workshop on LCA for APEC Member Economies, Organised by the Research Center for LCA of National Institute of AIST in Cooperation with APEC, NEP/SETAC LCI and GALAC, Tokyo, March 06-07. 2008.
- 65. SANGEETA THAKORE, PUSHPA TRIVEDI, D.PARTHASARATHY and VINOD SHARMA: Application of Life Cycle Approaches to Household Waste Management in Mumbai, India, Proceedings of the Seventh International Conference EcoBalance, organised by sponsored by SNTT, AIST and MITI, Tsukuba, Japan, November, 2006.
- 66. SANGEETA THAKORE and VINOD K. SHARMA: Life Cycle Approaches for Appraising Sustainability, presented at UNEP-MoEF India Roundtable on Sustainable Consumption and Production, Mumbai (INDIA), 29 September 2006.

- 67. SANGEETA THAKORE, PUSHPA TRIVEDI, D.PARTHASARATHY and VINOD SHARMA: Integration of Social Issues using Life Cycle Approaches in Household Waste Management in India, Proceedings of the Fifth International Workshop organised by sponsored by SNTT, AIST and MITI, Tsukuba, Japan, November, 2006.
- 68. VINOD K. SHARMA: A Framework for Promotion of LCA in India, presented at UNEP/SETAC Symposium/ meetings, November 14-19, Portland, USA, 2004.
- 69. VINOD K. SHARMA AND YAMINI KURANI: STATE OF EPDs IN INDIA: Some Observations, presented during the International Conference and Workshops On Environmental Product Information, organised by Nordic Council of Ministers, UNEP, GED-Net, Swedish Industry Association (Sinf), NUTEK and UNEP-SETAC-LCI, Stockholm, Sweden , 29-30 September 2003.
- 70. YAMINI KURANI AND VINOD K. SHARMA: Review of Life Cycle Assessment Activities in India, presented at 2nd International ISIE Conference on Industrial Ecology for Sustainable Future, University of Michigan, Ann Arbor, MI, USA, June 29-July 02, 2003.
- 71. VINOD K. SHARMA: WATER FACTS IN INDIA: A Focus on Water Quantity, Quality and Regulatory Measures, presented at International Seminar on "WATER MANAGEMENT", Organised by the Centre de Sciences Humaines and India International Centre, New Delhi, December 17, 2002.
- 72. VINOD SHARMA AND YAMINI KURANI: ECOSENCE INDIA–2002: Environmental Issues and Development in India, Proceedings of AIST Workshop: Gateway to Life Cycle Impact Assessment for APEC Member Economies, Tsukuba, Japan, November, 2002.
- 73. VINOD SHARMA AND M.N. RAO: LCA Activities in India-2002, Proceedings of The Fifth International Conference on EcoBalance, Sponsored by SNTT, EcoMaterials Forum, JEMAI, November, Tsukuba, Japan, 2002
- 74. ANUBHA DADHICH AND VINOD SHARMA: A Case Study of Domestic Defluoridation of Ground Water in Jaipur, India, proceedings of International Conference on Sustainable Management of Head Water Resources, sponsored by UNU, UN-HABITAT, UNESCO and UNEP, organised by USIU, Nairobi, September, 4-8, 2002.
- 75. ABHAYSIGH AND VINOD SHARMA: Overview of Life Cycle Assessment Activities in India presented during International Conference on "EcoBalance and Life Cycle Assessment in India" sponsored by MOEF (India), AIST and APO (Japan) and IDBI (India) and organised by IGIDR, Mumbai, India, February 13-15, 2002.
- 76. VINOD K. SHARMA: Hydrology and Aerosols, presented during International Workshop sponsored by UNESCO, IHP and MOEF and organised by School of Environmental Sciences, Jawahar Lal Nehru University, JNU, Delhi, Nov.26-29, 2001.
- 77. VINOD K. SHARMA and RITU BABEL: Eco-Friendly Packaging and Consumer Buying Behaviour: A Case Study of Mumbai, presented at the Fifth International Conference on ECOMATERIALS, Balance, sponsored by Ministry for Education, Culture, Sports, Science and Technology, Japan and organised by the Society of Non-Traditional Technology, Hawaii (USA), Oct.2-4, 2001.
- 78. V. K. SHARMA: Abridge Life Cycle Assessment of Waste paper in Mumbai, presented at the Fourth International Conference on EcoBalance, sponsored by The Society of Non-Traditional Technology, Japan Environmental Management Association for the Industry, Tsukuba, Japan, Oct 31, 2000.
- 79. V. K. SHARMA: Energy Scenario in India, Proceedings of the International Symposium on LCA, APEC/AIST/NEDO Symposium, NIRE, Tsukuba, Japan, December, 2000.
- 80. V. K. SHARMA: Some Insights into the Status of LCA through a Case Study of Wastepaper Recycling in India, Proceedings of International Symposium on LCA in the Asia-Pacific region, Sponsored by UNEP, APEC, AIST NEDO and METI, organised by National Institute for Resources and Environment (NIRE), Tsukuba, Nov. 24-27, 1998.
- 81. V. K. SHARMA: Environment and Development: An Overview, presented at Refresher Course on Topics of Environment, Ergonomics, Consumer Services and Computer Aided Design, for University Teachers from all over India, sponsored by the University Grants Commission, SNDT University, Mumbai, December 1-24, 1998.
- 82. V. K. SHARMA: Water Resources of India, presented at the Third AIM Workshop organised by the National Institute for Environmental Studies, Japan Environment Agency, Japan, March 25-31, 1998.
- 83. VINOD K. SHARMA: AIM Application to India, International Workshop on Integrated Assessment Modelling for climate Change Policy Analysis, sponsored by Asia-Pacific Network, Japan and organised by Indian Institute of Management, Ahemedabad, India, March 8-13, 1998.
- 84. VINOD K. SHARMA, PIYUSH TIWARI AND RANJANA JAISWAL: Environmental and Socio-Economic Problems of the Coastal Ecosystems In India: A Focus on Mumbai, Seminar on "Coastal Cities of India: Responding to Environmental and Socio-economic issues of Concern," sponsored by

the International Federation of Institutes for Advanced Study and International Development Research Centre, CANADA, organised at IGIDR, Mumbai, July 16, 1997.

- 85. VINOD K. SHARMA: Sustainable Solid Waste Management: A Case Study of Waste Paper Recycling in India, "Environmentally Sustainable Development for Asia-Pacific Region", sponsored by the United Nations University, Tokyo, and the UNDP's Capacity 21 Project., IGIDR, April 7-18, 1997.
- V. K. SHARMA: Development of Climate Change Impact Model for India, presented, International Conference on "Asian-Pacific Integrated Model", organised by National Institute for Environmental Studies, Tsuchuira, Japan, March 15-17, 1997.
- 87. V. K. SHARMA: Policy Dimension of Trade and Recycling of Waste Paper in India. CREED-IES-IGIDR joint International Seminar, New Delhi, Jan 17th, 1997.
- VINOD K. SHARMA: Air Quality Data Management in India, Proceedings of National Workshop on "Environmental Database of Indian Economy", sponsored by the UNDP, The Indian Econometric Society, and the Ministry of Environment and Forests, IGIDR, Mumbai, October 15-16, 1997.
- 89. BARNALI NAG AND V. K. SHARMA: Climate Change Impacts: The Indian Impact Model, Proceedings of National Workshop on Science and Economics of Climate Change organised by the Centre for Science and Environment, New Delhi, INDIA, Sept. 9, 1996.
- 90. BARNALI NAG AND VINOD SHARMA: Climate Change: Policy Issues and Applicability of Economic Instruments, Proceedings of National Workshop on Science and Economics of Climate Change organised by the Centre for Science and Environment, New Delhi, INDIA, Sept. 9, 1996.
- V. K. SHARMA: Database for Estimating Global Warming Impacts in India, International Workshop organised by National Institute for Environmental Studies, Japan Environment Agency, Tsukuba, Japan, Feb., 1-3, 1996.
- 92. PIYUSH TIWARI AND VINOD SHARMA: Ghareloo Kshetra mein Urja Upbhog ka Vishleshna (Analysis of Household Energy Consumption Patterns), presented in the Hindi Seminar organised by the Hindi Vigyan Sahitya Parishad and Bhabha Atomic Research Centre, Pune, May 20-21, 1995.
- 93. HARIPRIYA S., PIYUSH TIWARI AND VINOD SHARMA: Haritgraha Gas ki matra mein Parivartan ka Vishleshna (Analysis of changes in the Concentration of Green House Gas Emissions), presented in the Hindi Seminar organised by the Hindi Vigyan Sahitya Parishad and Bhabha Atomic Research Centre, Pune, May 20-21, 1995.
- 94. V. K. SHARMA, K.V. RAMASWAMY, R.R. VAIDYA AND N.HADKAR: INTERNATIONAL TRADE AND RECYCLING OF WASTE PAPER: Environmental and Socio-Economic Aspects in India, presented in the IES-IGIDR-INTERVENTION joint workshop under CREED project, Bombay, February, 1995.
- 95. V. K. SHARMA: Waste Paper Recycling: Trade, Environment and Socio-economic Aspects, presented at International Seminar organised by the Royal Swedish Academy of Sciences and the Beijer Institute Sweden held at Kota Kinabalu, Malaysia, May, 1995.
- KIRIT S. PARIKH AND VINOD K. SHARMA: System of Environmental and Resource Accounting for India, Conceptual paper presented in the Consultative Meeting at the UN-ESCAP, Bangkok, Oct. 3-4, 1994.
- 97. R.S. PATIL AND V. K. SHARMA: Role of EIA in Financing of Agriculture and Rural Development Projects. Commissioned paper presented at NABARD Consultation National Workshop, IGIDR, Bombay, April, 1994.
- JYOTI K. PARIKH, V. K. SHARMA, UPAL GHOSH AND M.K. PANDA: Trade and Environment Linkages: a Case Study of India. Presented at South Asian Regional Workshop and National Seminar on Trade and Environment, Organised by UNCTAD and TERI, New Delhi, Jan., 27-29, 1994.
- 99. V. K. SHARMA: Some aspects of Trade and Environment Linkages. Presented at 12th National Conference on New Corporate Environment Policy, Organised by Environmental Medical Association of India and Save New Bombay Committee, Bombay, Dec. 20, 1993.
- 100.V. K. SHARMA: Resource Conservation and Environmental Protection in India. Presented during the Training Course sponsored by Asian Productivity Organisation(APO), Tokyo, JAPAN, Oct, 11-Nov. 06, 1993.
- 101.V. K. SHARMA AND USHA NATESAN: METHANE EMISSIONS: Indian Scenario. International Workshop on Global Warming Issues in Asia. AIT, Bangkok, Thailand, Sept., 1993.
- 102.V. K. SHARMA AND R.S. PATIL: Monitoring and Modelling of Atmospheric Aerosols in Bombay. International Workshop on "Urban Air Quality Management" Sponsored by MEIP, UNDP and the World Bank, Bombay, April, 1993.
- 103.V. K. SHARMA AND R.S. PATIL: A Receptor Model for Source Identification of Acid Rain. International Conference on Sustainable Development Strategies and Global/Regional/Local Impacts on Atmospheric Composition and Climate, Indian Institute of Technology Delhi, New Delhi, Jan., 1993.

- 104.V. K. SHARMA AND R.S. PATIL: Receptor Models for Source Apportionment of Aerosols. National Symposium on Environment, BARC, BOMBAY, Feb. 1992.
- 105.V. K. SHARMA AND R.S. PATIL: Simple Methods of Air Quality Assessment from Monitored Data for Indian Industries. International Symposium on Environmental Pollution, Toronto, Canada, Jun 6-7, 1991.
- 106.V. K. SHARMA AND R.S. PATIL: Application of PC based Software Packages for Identification and Apportionment of Pollution Sources. International Conference on Science and Technology, New Delhi, India, Nov. 6-7, 1991.
- 107.V. K. SHARMA AND R.S. PATIL: Size Distribution of Atmospheric Aerosols using QCM-CI. Proceedings of II Annual Conference of IASTA, BARC, BOMBAY, Feb. 1990.
- 108.V. K. SHARMA AND R.S. PATIL: Data Reduction Techniques for Industries having Monitoring Stations within their Premises. Proceedings of National Seminar, BARC BOMBAY, Sept. 1989.

(VI) ARTICLES IN NEWSPAPERS AND MAGAZINES

- 109.V. K. SHARMA: Niku Nasi, Sakana Nasi, Yasai Dake...., an international monthly magazine of the Science and Technology Agency of Japan, STA Today, Aug, 1996 (Invited Article).
- 110.V. K. SHARMA: Global Waste Trade, Mind Your Garbage, The Economic Times, January 23, 1995.
- 111.V. K. SHARMA: Tanneries Feel the Heat. Business Standard, April 02, 1994.

(VII) OTHERS: PAPERS COMMUNICATED / THESES / SEMINAR REPORTS

- 112. V. K. SHARMA: Ph.D. Thesis: Monitoring and Modelling of Atmospheric Aerosols in an Industrial Region of Bombay, Indian Institute of Technology Bombay, 1992.
- 113. V. K. SHARMA: Seminar Report on "Pollution in Sugar Industry," Indian Institute of Technology Bombay, 1988.
- 114.V. K. SHARMA: M.E. Thesis: A Study of the Effect of Paddle Velocity and Dose of Chemical Coagulant on the Removal of Water Turbidity, University of Jodhpur, 1986.
- 115.V. K. SHARMA: Seminar Report on "Health Hazards Associated with the Land Application of Municipal Waste Water", University of Jodhpur, 1986.

CONFERENCES/ SEMINARS PARTICIPATED

- Participated as a discussant in ESRC-ICSSR Workshop on "Environmental Sustainability and Climate Change, Organised by London School of Economics and Institute of Economic Growth, New Delhi, November 17-18, 2008.
- Participated in the Programme Advisory Committee (PAC) of Shastri Applied Research Projects (SHARP), New Delhi, February 18-19, 2006.
- Participated in the function organised by the Chief Minister's office for the release of "Maharashtra State Development Report" by Shri M.S. Ahluwalia, Dy. Chairman, Planning Commission, Government of India, Mumbai, November 09, 2005.
- Participated in the "International Teleconference of ILCP of UNEP at Baltimore, USA, November 17, 2005.
- Participated in "Doordarshan's live Telecast of Mahacharcha- A programme on ban on plastic bags"" Doordarshan Kendra, Mumbai, Sept, 23, 2005.
- Participated on invitation in a workshop on "Clean Development Mechanism: Opportunities for the Corporate Sector", as a part of National Strategy Study for CDM implementation in India, organized by TERI, Mumbai, August 21, 2004.
- Participated on invitation in "World Environment Day" organised by the Maharashtra Pollution Control Board (MPCB) and Indian Environment Association, Mumbai, June 5th, 2004.
- Participated on invitation in the Seminar on "Environmental Solutions from the UK" organised by the British Council, Mumbai, February 3rd, 2004.
- Participated in the Inception Workshop, organized by the Indo-Canadian Shastri Institute under Shastri Applied Research Projects on three thrust areas namely, Economic Reforms, Social and Health and Environmental Management, New Delhi, September 1-5, 2003.

- Participated in Workshop on Sound Management of Persistent Organic Pollutants (POPs), Sponsored by Resources Future International, Canada, the World Bank and Confederation of Indian Industry, New Delhi, March 5-7, 2002.
- Participated in Workshop for organising Four Week Interdisciplinary Faculty Upgradation Program for the Environmental Scientist and Engineers in India, Institute for Economic Growth, New Delhi, March 4, 2002.
- Participated in First National Grassroots Technological Innovation and Traditional Knowledge Awards, Sponsored by Department of Science and Technology, Govt, of India, IARI, New Delhi, Nov.29-30, 2001.
- Participated in World Commission on Dams Meet, Organised by SNDT Women's University, Mumbai, May 17, 2001.
- Participated in Asian Development Bank's Workshop on Environmental Policy, Organised by Tata Energy Research Institute, April 30, 2001, New Delhi.
- Participated in Workshop on Climate Change and Health, Organised by National Physical Laboratory, August 03, 2000, New Delhi.
- Participated in the Seminar on Information Technology, Organised by The British Council, India, Sponsored by Indo-British Partnership, Oberoi Towers, April 11, 2000, Mumbai.
- Participated in the Third International Conference on EcoBalance- Progress of LCA for a Sustainable Society, Organised by ECOMATERIALS Forum, The Life Cycle Assessment Society of Japan and JAPAN LCA Forum and Supported by STA, and Environment Agency, Ministry of Forestry and Fisheries and MITI of Japan, Nov. 25-27, 1998.
- Participated in IPCC Asia-Pacific Workshop on Integrated Assessment Models, Organised by Intergovernmental Panel on Climate Change, Government of Japan and United Nations University at UNU, Tokyo, Japan March 10-12, 1997.
- Participated in TOKYO MODELLING FORUM Workshop, Organised by Energy Modelling Forum and Government of Japan at UNU, Tokyo, Japan March 13-14, 1997.
- Participated in IIASA Days in Japan: Asia Towards the 21st Century, sponsored by NEDO, Global Environmental Forum, CRIEFI, MITI and Environment Agency, UNU, Tokyo, April 11-23, 1996.
- Participated in The Fourth Japan-US Workshop on GLOBAL CHANGE: Land Use/Cover Change and Global Environmental Conservation, Tsukuba, Japan, Feb. 26-29, 1996
- Participated in UNU Conference on "The Sustainable Future of the Global Systems" organsied by the UN University, Tokyo and the National Institute for Environmental Studies, Tsukuba at Tokyo, Oct. 16-18, 1995.
- Participated in Seminar on "Economic Valuation of Air Pollution: Case Study of Taiwan". Resources for the Future, Washington D.C., (USA), December 21, 1994.
- Participated in A&WMA and U.S.EPA Conference, "Computing in Environmental Management" speciality conference sponsored by the Air & Waste Mangt. Assoctn. and the U.S. Environment Protection Agency, Raleigh,NC,Nov.30-Dec 2, 1994.
- Participated in Second International Workshop URBAIR-Bombay, Organised by the UNDP, the WORLD BANK and MEIP Bombay, May 30-31, 1994.
- Participated in 76th Platinum Jubilee Conference of Indian Economic Association, Organised by Dept. of Economics, University of Bombay and IGIDR, Bombay, Feb. 19-21, 1994.
- Participated in Conference on "Aerosol Science and Technology" Organised by Indain Aerosol Science and Technology Association(IASTA), BARC, Bombay, January 10-12, 1994.
- Participated in International Exhibition and Conference on "Industrial Pollution Monitoring, Control and Safety" ENVIROTECH'93, Sponsored by CHEMTECH Foundation, Federation of Indian Chambers of Commerce and Industry(FICCI) and UNDP, Bombay, Mar.31-Apr. 3, 1993.
- Participated in Workshop on "Strategies for Environmental Improvement in BMR" organized by M/S Coopers and Lybrand(UK) and M/S AIC(India), Bombay, May 7-8, 1993.
- Participated in National Workshop on "Environment Action Programme-India" Organised by Ministry of Environment and Forests, Govt. of India sponsored by UNDP/WORLD BANK, New Delhi, Sept., 1993.

- Participated in International Seminar on "Environment and Economic Development" Sponsored by Beijer Institute, IGIDR, SIDA and WIDER organised by IGIDR, Bombay, Nov. 1-6, 1992.
- Participated in UNDP Symposium on "Economic Growth, Sustainable Human Development and Poverty Alleviation in India" Jan 3-6,1992.
- Participated in Seminar on "Characterization and Source Apportionment of Aerosols" organised by Indian Institute of Technology, Bombay, Sept. 1992.
- Participated in Workshop on "Development and Environmental Sustainability" organised by IGIDR, Bombay, Nov. 11-13, 1991.
- Participated in International Symposium on "Industrial and Hazardous Wastes" held at Indian Institute of Technology, Bombay, Jan. 1990.
- Participated in Seminar on "Factor Analysis and its Application to Environmental Assessment", Organised by Environment Assessment Division, BARC, Sept, 1990.
- Participated in International Workshop on "Environmental Science and Engineering Education" Organised by Indian Institute of Technology, Bombay, Jan. 1988.