Name: Dr. J.S. CHANDRASHEKAR

Designation: Assistant Professor & Chairman

Email: jnuchandu@gmail.com, chandra.ksou@ka.gov.in

Date of Birth: 08th June 1974.

Mobile: 9663061978

Office: 0821 - 2500071

Field of Research: Ecology, Natural Resource Management, Environmental Pollution, Solid

Waste Management

Teaching Experience: 9 years

Professional Experience: 15 Years

Professional Recognition & Research Recognition: see detailed CV.

Academic/Membership in Professional bodies:

1. Indian Science Congress Association-Life Member.

- 2. Society for Environment and Development, New Delhi-Life Member.
- 3. National Environmental Science Academy-Life Member.
- 4. Hind Agri-Horticultural Society, Muzaffarnagar, India-Member
- 5. Board of Studies (UG/PG)-Member/Chairman
- 6. Board of Examiners (UG/PG)-Member/Chairman

Areas of Interest: Bioremediation, Remote Sensing and GIS, EIA.

Research Interest: Ecology, Natural Resource Management, Environmental Pollution, Solid Waste Management, Bioremediation





CURRICULUM VITAE

Dr.J.S. CHANDRASHEKAR

M.Sc., M.Phil., Ph.D., FSED (JRF-NET)

Assistant Professor and Chairman

Department of Environmental Science Karnataka State Open University, Mukthagangothri Mysore – 570006, India

Mobile: +91-9663061978; ***** +91-821-2500071

Email: jnuchandu@gmail.com

EDUCATIONAL QUALIFICATIONS

2005-2010	Doctor of Philosophy in Environmental Sciences from Jawaharlal Nehru University, New Delhi, India. <u>Topic</u> : Impacts of land use on soil fertility: A case study in Garhwal Himalaya.
2003-05	Master of Philosophy in Environmental Sciences from Jawaharlal Nehru University, New Delhi, India. Topic: Impact of land use - land cover on selected soil organisms in a village landscape of Garhwal Himalaya.
1998-2000	Master of Science in Environmental Science from Bangalore University, Bangalore, India. <u>Dissertation</u> : An Examination of Environmental Management Model – A case study of Bellandur Lake, Bangalore.
1994-97	Bachelor of Science in Chemistry, Botany and Zoology from Bangalore University, Bangalore, India.

HONORS and AWARDS

Qualified for Junior Research Fellowship (JRF) and National Eligibility Test for Lectureship (NET) from University Grants Commission (UGC) (June 2004)

Qualified National Educational Test for Lectureship (NET) from University Grants Commission (UGC) (December 2003).

Fellow of Society for Environment and Development (FSED) honored by Society for Environment and Development (SEDINDIA), New Delhi, India **(2010)** (http://www.sedindia.org/index_file/Page355.htm)

Fellow of International Society for Ecological Communications (FISEC) honored by International Society for Ecological Communications, Dumka, India (2011).

Best Paper Presentation Award for the paper titled 'Impact of land uses on soil nematode community in a mid-altitudinal landscape of Garhwal Himalaya, India' in National Seminar on Energy Resources, Environmental Impacts and Industrial Waste Management organized by Department of Environmental Science, Sri Venkateswara University, Tirupati, India held on 28-29 February 2012.

Certificate of Appreciation for successful conduct of Vacation Camp for Visually challenged school students on 'Environmental Awareness' which was organized by All India Confederation of the Blind and its affiliate, Karnataka Welfare Association for the Blind, Bangalore and held at Physical Education College, Bangalore University, Bangalore from 2nd to 12th November 2011.

MEMBER OF BOARDS/SCIENTIFIC SOCIETY

Life Member of Indian Science Congress, New Delhi, India

Life Member of National Environmental Science Academy, New Delhi, India

Life Member of Society for Environment and Development, Delhi, India

Life Member of International Society for Ecological Communications, Dumka, India

Member of Hind Agri-Horticultural Society, Muzaffarnagar, India (2011-12)

Member of **Board of Studies (PG)** for Environmental Science, KSOU, Mysore (From February, 2013)

Member of Board of Examiners (UG) for Environmental Science, KSOU, Mysore (From 2013-14)

Chairman of Board of Studies (PG) for Environmental Science, KSOU, Mysore (From September, 2013 to September 2016)

Chairman of Board of Studies (UG) for Environmental Science, KSOU, Mysore (From September, 2013 to September 2016)

Member of Board of Examiners (UG) for Environmental Science, Bangalore University, Bangalore (2017-18)

Member of Board of Examiners (PG) for Environmental Science, University of Mysore, Bangalore (2017-18)

MEMBER OF EDITORIAL COMMITTEE

Member of Editorial Team for Bulletin of Environmental and Scientific Research. (link: www.besr.org.in/index.php/besr/about/editorialTeam)

Member of Editorial Team for Journal of Environmental Chemistry and Toxicology. (link: http://www.academicjournals.org/JECE/Email.htm)

TEACHING and ADMINISTRATIVE EXPERIENCE

2010 to 2012: Guest Faculty at (M.Sc. Environmental Science) Department of Environmental Science, Bangalore University, Bangalore.

December 2012 to till date: Assistant Professor, Department of Studies and Research in Environmental Science, Karnataka State Open University, Mysore.

December 2012 to February 2015 and February 2017 to till date: Chairman, Department of Studies and Research in Environmental Science, Karnataka State Open University, Mysore

June 2014 to Oct 2015: Coordinator at Examination Branch

June 2016 to till date: Coordinator, Grievance Redressal Cell, KSOU

Dec 2013 to July 2014: Chairman (In-charge) of DOS in Mathematics, KSOU

June 2017 to till date: Nodal Officer, UGC SG Portal, KSOU

June 2018 to till date: Special Officer at Examination Branch, KSOU

March 2019 to till date: Coordinator, Skill Development Programme, KSOU

RESEARCH ACTIVITIES

2012 to till date:	Successfully guiding M.Sc. students for their dissertation works on the areas of Water Quality, Noise monitoring, agroforestry, forest dynamics.
2005-2010	Impacts of land use on soil nematodes and soil fertility: a case study in Garhwal Himalaya: The work involved in this study was to assess soil nematodes and soil fertility in various land uses of mid-altitudinal Himalayan landscape include forest, agricultural lands and home garden and also carried out leaf litter decomposition study for mixed community forest tree species in the area. The work was also a part of Tropical Soil Biology and Fertility program funded by CIAT/TSBF Kenya, Nairobi, where I undertook training on nematode segregation and identification.
2003-2005 2002-2003	Impacts of land use - land cover on mycorrhiza and nematodes in a village landscape of Garhwal Himalayas: The work was included the landscape description with socio-economic aspects and the traditional management practices with reference to sustainable development of mid-altitudinal Himalayan agricultural landscapes. Environmental Impact Assessment – Bangalore Metro Rail Corporation.
2002-2003	Environmental impact Assessment – Bangalore Metro Ran Corporation.
2001-2002	Impact of Stone Quarrying Activities in Karnataka.
2000-2001	Impact Assessment of Bellandur tank water on some crop plants: The work was included the effect of Bellandur tank water on crop plants and to study the

characterization of water and impact on economic yield of the crops with surround area.

2000 Jan-Aug

An Examination of Environmental Management model – A case study of Bellandur Lake, Bangalore: The work was included with the finding of causes of lake pollution, characterization of water and wastewater quality and identifying management deficiencies and the remedial measures for the better management of lake development.

TRAINING/WORKSHOPS

December 2004 A **training programme** on '*Identification of Nematodes*' at Tropical Soil Biology and Fertility Institute, Nairobi, Kenya organized by TSBF/CIAT, Nairobi, Kenya.

RESEARCH PUBLICATIONS

- 1. **J.S. Chandrashekar**, K. Lenin Babu and R.K. Somashekar **2003**. Impact of urbanization on Bellandur lake, Bangalore a case study. Journal of Environmental Biology, 24(3): 223-227. **Impact Factor: 1.385**
- 2. **J.S. Chandrashekar 2011**. Litter decomposition of mixed community forest tree species of Garhwal Himalaya, India. Journal of Ecology and Environmental Sciences, 2(1): 15-19. **Impact factor value: 4.53**
- 3. **J.S. Chandrashekar**, B.C. Nagaraja and R.K. Somashekar **2011**. Socio-Economic Status and Environmental Perception of Inhabitants of Bellandur Lake Area, Bangalore: A Case Study. Electronic Journal of Environmental Science, 4: 143-148.
- 4. **J.S. Chandrashekar** and M.A. Khan **2011**. Mycorrhizal Spore Density in Relation to Land Use and Soil Depth in a Village Landscape of Garhwal Himalaya, India. Asian Journal of Environmental Science, 6 (2): 219-223.
- 5. **J.S. Chandrashekar, 2011.** Soil nematode density variation with land use in a midaltitudinal village landscape of Garhwal Himalaya. The Ekologia, 11 (1-2): 87-92.
- 6. Abdul Khayum, N. Nandini, **J.S. Chandrashekar** and R. Durgesh **2011**. Assessment of Drinking Water Quality of Bangalore West Zone, Karnataka, India A case study. Environment and We An International Journal of Science and Technology. 6: 113-122. **Impact factor 2.2 by NAAS**
- 7. **J.S.** Chandrashekar 2012. Soil Fertility Management in a Mid-altitudinal Village Landscape of Garhwal Himalaya, India. Bulletin of Environmental and Scientific Research, 1(1): 3-10.

- 8. N. Sunitha, **J.S. Chandrashekar** and N. Nandini, **2012**. Groundwater Quality in Handigundi State Forest Block of Ramanagaram Taluk, Karnataka, India. International Journal of Biology, Pharmacy and Allied Sciences, 1(4): 569-584.
- 9. K.C. Jagadeesh, R.K. Somashekar and **J.S. Chandrashekar**, **2012**. Seasonal Variation of Physicochemical Characteristics and Statistical Study of Groundwater in The Hipparagi Irrigation Command Area, Karnataka, India Electronic Journal of Environmental Science, 5: 13-20.
- 10. K.C. Jagadeesh, **J.S. Chandrashekar** and R.K. Somashekar, **2012**. Monitoring of water Quality in the Hipparagi Irrigation Command Area, Karnataka, India. International Journal of Nature and Science 3(3): 555-562.
- 11. K.C. Jagadeesh, **J.S. Chandrashekar** and R.K. Somashekar, **2013**. Heavy Metal Concentration of Groundwater in Hipparagi irrigation Command Area, Karnataka. Trends in Life Sciences, 28(1&2): 85-90.
- 12. Shibaji Baghar, Abhishek Chandra, J.S. Chandrashekar, 2014. Status and Distribution of Anthropogenic Pressure in Kedarnath Wildlife Sanctuary in Western Himalaya, India. Bulletin of Environmental and Scientific Research, 3(2-3): 8-15.
- 13. Vincent Sequeira and **J.S. Chandrashekar**, **2015**. Solid Waste Management in Mangaluru City A Case Study. International Journal of Innovation and Applied Studies, 10(1): 420-427.
- 14. Vincent Sequeira and **J.S. Chandrashekar**, **2015**. Vermicomposting of Biodegradable Municipal Solid Waste Using Indigenous *Eudrilus sp.* Earthworms. International Journal of Current Microbiology and Applied Sciences. 4(4): 356-365.
- 15. Sreenivasa and **J.S. Chandrashekar**, **2015**. Effective Agricultural Management Practices for Farmers through Field Farmers' School Programmes A case Study in Chikkaballapura district, Karnataka (India). International Journal of Agriculture Innovations and Research, 4(1): 2319-1473.
- 16. **J.S.** Chandrashekar 2015. Land Use Characterization of a Mid-altitudinal Village Landscape in Garhwal Himalaya, India. Ecology Environment and Conservation, 21(2): 941–947. **Impact factor 3.5 by NAAS**.
- 17. Sreenivasa, **J.S. Chandrashekar**, S.H. Basavarajappa, V.G. Sharath and Azis Kemal Fauzie, **2016**. Evaluation of Conventional and Aerobic Farming Practices in a Paddy based cropping system A case study in Karnataka, India. International Journal of Current Science, 19(2): 122-127.
- 18. Sreenivasa, **J.S. Chandrashekar**, V.G. Sharath and Vahid Sharifi, **2016**. Cost-Effective Technique of Tank Bund Soil Erosion Control by Stylosanthes Hamata A Case Study in Talagawara, Chikkaballapura District, India. Ecology Environment and Conservation, 22: 455-458.

- 19. D. Shivalinga and **J.S. Chandrashekar**, **2017**. Sustainable Development through Rural Development Programs: Case Studies of Mysuru District, Karnataka. International Journal of Multidisciplinary Education Research. 6 (7(8)): 80-92.
- 20. C.S. Manjunatha, **J.S. Chandrashekar** and B. Chandrashekhara, **2019**. An Overview of Multidimensional Drivers and Adverse Impacts of Urban Sprawl. Environment and We An International Journal of Science and Technology. 14: 77-87.

BOOK CHAPTERS

- 1. **J.S. Chandrashekar**, H.M. Swaroop Kumar and R. Pavan (**2019**). Arbuscular Mycorrhizal Fungi: Functions and Their Microclimate Interactions: In: Plant Growth Promoting Microorganisms: Microbial Resources for Enhanced Agricultural Productivity (Ed.,). Nova Science Publishers, Inc. USA.
- 2. **J.S. Chandrashekar**, (2019). Coastal Biodiversity: In: Emerging Trends in Environmental Biotechnology (Ed., Mondal, S.). Centre for Agriculture and Bioscience International, UK.

BOOKS

- 3. Sreenivasa and **J.S. Chandrashekar**, **2014**. Environmental Studies. SBS Publishers, Bangalore.
- 4. **J.S. Chandrashekar**, **2016**. Impact of Land Uses on Himalayan Soil Fertility Management. Lambert Academic Publishing, Germany. ISBN: 978-3659964268.

CHAIRMAN/RESOURCE PERSON/RAPPORTEUR IN CONFERENCES

Chairman for technical session in International Conference on "Integrated Solid Waste Management Practices in Developing Countries" Jointly organized by National Environmental Engineering Institute, Govt. Institute of Science and Govt. Institute of Forensic Science, Nagpur held at CSIR-NEERI, Nagpur, Maharashtra on 11th and 12th April, 2017.

Resource Person (Key Speaker) in Two-days National Seminar on Sustainable Rural Development through Government Programmes – Vision and Action" organized by Department of Studies and Research in Economics, KSOU held at Karnataka State Open University, Mysuru on 28th and 29th July, 2017.

Plenary Lecture 'Farmer's Perception on Climate Change in Eastern Dry Zone of Karnataka' at National Conference on Emerging Environmental Challenges and Sustainable Development held at University of Delhi, Delhi from 21st to 23rd March, 2018.

PAPER PRESENTATIONS

International Level (6)

- R.K. Somashekar, **J.S. Chandrashekar** and M.N. Sridhara Babu, **2001**. Impact Assessment of Bellandur Tank water on some Crop Plants. *International Workshop on Integrated Water Management* held in Bangalore University, 21st-23rd June 2001.
- K. Lenin Babu, **J.S. Chandrashekar** and R.K. Somashekar, **2002**. Need for New Models for Better Governance of Inland Resources A case Study of Lentic Ecosystem in Bangalore, India. *Stockholm Conference*, Sweden, on August 14, 2001.
- **J.S.** Chandrashekar, 2011. Litter decomposition in forests of Korea and India: A comparative study. An international seminar on "India-Korea Relations Towards Progress" organized by Researcher's Association for the Study of Korea (RASK) held in India International Centre, New Delhi from 25-26, February, 2011.
- **J.S.** Chandrashekar and K.G. Saxena 2011. Climate change and agricultural crops: a view on Garhwal Himalaya. Germany and India Infinite Opportunities, International Humboldt Kolleg "Adaptive Management of Ecosystems: The Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change" held in Centre for Ecological Economics and Natural Resources, Institute for Social and Economic Change, Bangalore, India from 19-21 October, 2011.
- **J.S. Chandrashekar, 2011.** Soil Fertility Management in a Mid-altitudinal Village Landscape of Garhwal Himalaya, India. International Conference on Bioremediation & Environmental Management and Polar Science & Technology organized by Presidency College, Hebbal, Bangalore held in Jnanajyothi Auditorium, Central College Campus, Bangalore University, Bangalore, India from 28-29 December, 2011.
- **J.S. Chandrashekar** and R. Veeregowda, **2017**. Solid Waste Management through Vermicomposting and its Application in Crop Improvement A Case Study. International Conference on "Integrated Solid Waste Management Practices in Developing Countries" Jointly organized by National Environmental Engineering Institute, Govt. Institute of Science and Govt. Institute of Forensic Science, Nagpur held at CSIR-NEERI, Nagpur, Maharashtra on 11th and 12th April, 2017.

National Level (12)

- **J.S.** Chandrashekar, 2003. Water pollution management: A view on inland lakes of Bangalore city. 90th Indian Science Congress, 2003. Bangalore.
- **J.S. Chandrashekar**, Kritika Singh, M.A. Khan, R.K. Maikhuri, K.S. Rao and K.G. Saxena, **2005**. Mesofauna around Nanda Devi Biosphere Reserve. National workshop on 'Conservation and Sustainable Management of Belowground Biodiversity' held in Kerala Forest Research Institute, Peechi, Kerala from 21-23, June, 2005.

(http://www.bgbd.net/Text/Project%20Publications%20List Feb2007%20(2) ver3.doc)

R.K. Maikhuri, Kritika Singh, M.A. Khan, J.S. Chandrashekar and K.S. Rao, 2005. Vesicular arbuscular mycorrhiza: Nanda Devi Biosphere Reserve. National workshop on 'Conservation

and Sustainable Management of Belowground Biodiversity' held in Kerala Forest Research Institute, Peechi, Kerala from 21-23, June, 2005.

(http://www.bgbd.net/Text/Project%20Publications%20List_Feb2007%20(2)_ver3.doc)

- **J.S.** Chandrashekar, S. Baghar, D.K. Choudhary, A. Chandra, **2010**. Impact of climatic variation on land use-crop system in Garhwal Himalaya. *National Conference on "Climate Change and Its Impact on Natural Resources"* held in Bangalore University, Bangalore from 18-20, October, 2010.
- A. Chandra, S. Baghar, D.K. Choudhary, **J.S. Chandrashekar**, **2010**. Land use-land cover change: An important agent of global climate change. *National Conference on "Climate Change and Its Impact on Natural Resources"* held in Bangalore University, Bangalore from 18-20, October, 2010.
- **J.S. Chandrashekar**, K.G. Saxena, **2011**. Litter dynamics of mid-altitudinal forest of Garhwal Himalaya. National Conference on "Recent Trend in Environment and Development" organized by Society for Environment and Development (India), New Delhi held in High Altitude Plant Physiology Research Centre (HAPPRC), H.N.B. Garhwal University, Uttarakhand, India from 6-7, August, 2011.
- **J.S. Chandrashekar, 2012**. Impact of land uses on soil nematode community in a midaltitudinal landscape of Garhwal Himalaya, India. National Seminar on Energy Resources, Environmental Impacts and Industrial Waste Management organized by Department of Environmental Science, Sri Venkateswara University, Tirupati, India held on 28-29 February 2012.
- **J.S. Chandrashekar** and Kavita, **2016**. Waste to Energy: An alternate method for Municipal Waste Management. Two Days **National Workshop** and Training on Renewable Energy Laws, Policy and Climate Change: Indian Perspective held at ISEC, Bangalore on 26th and 27th February, 2016.
- **J.S. Chandrashekar** and Deepak, **B. 2016**. Diversity of Actinomycetes and Termite Hill in Western Ghats Nagarhole Region, Karnatak. **National Conference** on Science and Technology for National Development Health, Environment and Agriculture held at Jain University, Bangalore from 5th to 7th October, 2016.
- **J.S.** Chandrashekar and D. Shivalinga 2016. Sustainable Natural Resource Management through Agri-Horti-Forestry Development: Case Studies of Mysore District, Karnataka. National Seminar on Science and Technology for National Development organized by Indian Science Congress Association Kanpur Chapter and Department of Zoology, D.B.S. College, Kanpur held at Kanpur from 29-30, September, 2016.
- **J.S.** Chandrashekar, 2017. Strategies for Conservation of Medicinal Plants A Case Study of Central Himalaya. National Conference on Medicinal and Aromatic Plants organized by Department of Studies and Research in Botany, Tumkur University and Department of Biotechnology, Sridevi Charitable Trust held at Tumkur, Karnataka on 12th and 13th June, 2017.
- **J.S.** Chandrashekar and D. Shivalinga 2017. Sustainable Development through Rural Development Programs: Case Studies of Mysuru District, Karnataka. Two-days National Seminar on Sustainable Rural Development through Government Programmes Vision and

Action" organized by Department of Studies and Research in Economics, KSOU held at Karnataka State Open University, Mysuru on 28th and 29th July, 2017.

POSTER PRESENTATION

International Level (3)

- **J.S. Chandrashekar**, **2007**. Conflicts of coastal zone regulation policies: An Indian context. International conference on 'Coastal Zone Environment and Sustainable Development Vulnerability, Adaptation and Beyond' held in Jawaharlal Nehru University, New Delhi on 12-14 February, 2007.
- **J.S.** Chandrashekar and Ashritha, A., 2016. Diversity and Distribution of Spiders from Kukkarahalli Tank. International Conference on 'Science and Technology Future Challenges and Solutions (STFCS-2016)' held from 8th 9th August 2016 at Vijnana Bhavan, University of Mysore, Mysuru organized by Indian JSPS Alumni Association, Japan Society for the promotion of Science (JSPA), University of Mysore, Dept. of Nanotechnology, Visvesvarayya Technological University.
- **J.S. Chandrashekar, 2018**. Effect of Nanoparticles on Biodiversity of microbes: A review. International Conference on '*Nanoparticles and Their Applications*' held from 1st 2nd March 2018 at University of Mysore, Mysuru organized by UGC-CPEPA, UPE and DST-PURSE.
- J.S. Chandrashekar, Deepak, B. and Pavan, R. The Role of Actinomycetes in Termite Hills: A case study in Western Ghats nagarahole Region, Karnataka. International workshop on Biology and Applications of Actinomycetes held during 31st October-1st November 2019 organized by University of Mysore, Mysore and Helmholtz Centre for Infection Research and Technical University of Braunschweig, Germany held at Mysuru, India.

National Level (3)

- **J.S.** Chandrashekar and N. Nandini, **2010**. The Importance of Agroforestry: A view on Central Himalaya and Western Ghat landscapes. National workshop on 'Biodiversity and Sustainable Coffee Farming Systems' held on 28th December 2010 at The Capitol, Bangalore organized by Coffee Board of India, Bangalore. (National Level)
- **J.S.** Chandrashekar, 2017. Diversity of Multipurpose Trees and their Uses: A Case Study of Western Ghats, Shivamogga Region. Indian Science Congress held at Tirupati, Andhra Pradesh from 3-7, January 2017.
- **J.S. Chandrashekar, 2018**. Traditional and Sustainable use of wild edible fruits in the vicinity of Sagar Forest Range, Shivamogga district, Karnataka. National Conference on Biodiversity and Bio-prospecting for Sustainable Development 2018 held at University of Mysore, Mysore from 23-24th February 2018.

CONFERENCES/SEMINARS/WORKSHOPS PARTICIPATED

International Level (6)

- Participated in 'International Workshop on Integrated Water Management' held in Bangalore University, 21st-23rd June 2001.
- Participated in **International conference** on 'Coastal Zone Environment and Sustainable Development Vulnerability, Adaptation and Beyond' held in Jawaharlal Nehru University, New Delhi on 12-14 February, 2007.
- Participated in **International Seminar** on "India-Korea Relations Towards Progress" organized by Researcher's Association for the Study of Korea (RASK) held in India International Centre, New Delhi from 25-26, February, 2011.
- Participated in **Germany and India** Infinite Opportunities, **International Humboldt Kolleg** "Adaptive Management of Ecosystems: The Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change" held in Centre for Ecological Economics and Natural Resources, Institute for Social and Economic Change, Bangalore, India from 19-21 October, 2011.
- Participated **International Conference** on Bioremediation & Environmental Management and Polar Science & Technology organized by Presidency College, Hebbal, Bangalore to be held in Jnanajyothi Auditorium, Central College Campus, Bangalore University, Bangalore, India from 28-29 December, 2011.
- Participated in **International Conference** on 'Science and Technology Future Challenges and Solutions (STFCS-2016)' held from 8th 9th August 2016 at Vijnana Bhavan, University of Mysore, Mysuru organized by Indian JSPS Alumni Association, Japan Society for the promotion of Science (JSPA), University of Mysore, Dept. of Nanotechnology, Visvesvarayya Technological University.

National Level (11)

- Participated in 'Ninth **National Symposium** on Environment' held in Bangalore University on 6th June 2000.
- Participated in 'Workshop on Livestock & Environment' held in Bangalore University on 30th March 2001.
- Participated in 90th Indian Science Congress, 2003. Bangalore.
- Participated in *National Conference* on "Climate Change and Its Impact on Natural Resources" held in Bangalore University, Bangalore from 18-20, October, 2010.
- Participated in **National workshop** on 'Biodiversity and Sustainable Coffee Farming Systems' held on 28th December 2010 at The Capitol, Bangalore organized by Coffee Board of India, Bangalore.

- Participated in **National Conference** on "Recent Trend in Environment and Development" organized by Society for Environment and Development (India), New Delhi held in High Altitude Plant Physiology Research Centre (HAPPRC), H.N.B. Garhwal University, Uttarakand, India from 6-7, August, 2011.
- Participated in **National Seminar** on "Sustainable Urban Waste management" organized by Department of Geography, Bangalore University, Bangalore from 11, May, 2012.
- Participated in Workshop on "Self Learning Material Development" organized by Karnataka State Open University held in Karnataka State Open University, Mysore, India from 7th – 8th October, 2013.
- Participated in **Workshop** on "Technology in Higher Education" organized by University of Mysore and Karnataka Jnana Aayoga held in Senate Bhavan, University of Mysore, Mysore, India on 7th February, 2015.
- Participated in **Workshop** on "Accelerating Gross Enrolment Ratio in Education Issues and Challenges" organized by Department of Higher Education, Govt. of Karnataka and Karnataka State Open University held in Karnataka State Open University, Mysore, India on 14th May, 2015.
- Participated in **National Seminar** on "Chemistry and Chemical Biology" organized by organized by University of Mysore held in Sri Nalwadi Krishnaraja Wadeyar Auditorium, University of Mysore, Mysore, India on 26th May, 2015.
- Participated in **National Workshop and Training** on Renewable Energy Laws, Policy and Climate Change: Indian Perspective held at ISEC, Bangalore on 26th and 27th February, 2016.