

BIODATA OF Dr. R. A. CHRISTIAN

EDUCATIONAL QUALIFICATION:

1 **Ph.D.** REC, Surat January, 2001

South Gujarat Uni.

2 **M. Tech. (Civil) in Env. Engg.** REC, Surat 1988

South Gujarat Uni.

3 **B. E. (Civil)** SP University, 1985

VVNagar

PRESENT POSITION: Professor, Civil Engineering Department, SVNIT, Surat.

TEACHING EXPERIENCE:

U.G. Teaching: Since January 1987 P. G. Teaching: Since January 1989

1. LIST OF PAPERS PUBLISHED / PRESENTED / ACCEPTED:

A) INTERNATIONAL JOURNALS

- 1. "Addressing the complex environmental pollution potential of industries using fuzzy MCDM approach", Advances in Information Sciences and Services, an International Journal of Research and Innovation, Special Issue on ICCIT2007. Volume 2, November 2007. pp. 75-82.
- "Fuzzy modeling for environmental pollution potential ranking of industries" Environmental Progress Volume 27, Issue 1, Pages 84-90, April 2008.
 Online ISSN:1547-5921, Print ISSN:0278-4491, American Institute of Chemical Engineers (AIChE), International Journal for Environmental Progress, American Institute of Chemical Engineers (AIChE). April 2008, Vol. 1, pp.84-90.
- 3. "Fuzzy MCDM approach for addressing composite index of water and air pollution potential of industries", JDCTA, International Journal of Digital Content Technology and Its Application, Volume 2, Number 2, July 31, 2008, pp. 54-61.
- 4. "Fuzzy Rule Based Approach for Addressing Pollution Potential of Industries". International Journal of Environmental Research and Development, Abstracted and Indexed by Chemical Abstracts Service (USA). December 2007, Vol.2, Issue 2, pp. 197-207.

- 5. "Quantitative Analysis of some Pathogenic Bacteria from Municipal Solid Waste", International Journal of Environmental Engineering and Management, Vol. 1, No. 1 (2010), pp. 81 90. ISSN 2231 1391.
- 6. "Respiratory Morbidity among Solid Waste Workers of Surat City (Short communication)." International Journal of Civil, Structural, Environmental and Infrastructure Engineering Research and Development (IJCSEIERD), Volume 1, Issue 1 June- August (2011) pp: 35-41. ISSN: 2249-6866.
- 7. Plasma Gasification Waste Treatment Technology, The IUP Journal of Chemical Engineering, ISSN 00975-6337, December 2010, Vol. II, No 4, Pages 43-53.
- 8. "Evaluating Overall Efficiency of Sewage Treatment Plant Using Fuzzy Composition", World Applied Sciences Journal, November, 2011. Vol.12, (3). pp. 298-2011. ISSN: 1818-4952.
- 9. "Application of Degree of Match and Fuzzy Composite Programming in Modeling Overall Efficiency of Wastewater Treatment Plant: Case Study", International Journal of Applied Environmental Sciences, ISSN 0973-6077, Vol.5 No. 3 (2011), pp. 361-372.
- 10. "Synthesis and Characterization of MgO Nanocrystals using Strong and Weak Bases", Powder Technology, Elsevier Publication, ISSN 0032-5910, (2012), 226, pages 213-221. (IF:2.349)
- 11. "Temperature Prediction in Ambient Atmosphere using Fuzzy Logic for Inland Cities in India", International Journal of Engineering Research and Technology, Vol. 5No. 3 (2012), pp. 329 337. ISSN 0974-3145.
- 12. "A Fuzzy Approach for Modelling Radionuclide in Lake System", Journal of Environmental Radioactivity, ISSN: 0265-931X/S (2013) pp. 37-43. (IF:2.483)
- 13. "Removal of Anthaquinone Dye from Aqueous Solution Using MgO Nanaocrystallite as an Adsorbent", International Journal of Engineering Research and Technology (IJERT), ISSN: 2278-0181, Vol. 2, Issue 11, November 2013, pp. 3045-3048.
- 14. "Statistical Analysis to Identify the Main Parameters to Effecting WWQI of Sewage Treatment Plant and Predicting BOD", International Journal of Research in Engineering and Technology, January 2014. Vol.03, (01).pp186-195 eISSN:2319-1163, ISSN: 2321-7308.
- 15. "Ranking Sewage Treatment Plants with the Application of Fuzzy Composite Programming", International Journal of Scientific Engineering and Technology, February Qf2014. Vol.3 (2), pp. 116-120. ISSN: 2277-1581.
- 16. "Predicting Efficiency of Treatment Plant by Multi Parameter Aggregated Index", International Journal of Environmental Research and Development (JERAD), March 2014 Vol.8,(03), pp.530-539. ISSN: 0973-6921.
- 17. "Transport of Toxic Elements through Leaching in and around Ash Disposal Sites." International Journal of Environmental Science and Development, Vol. 7, No. 1, January 2016, pp. 65-68. ISSN: 2010-0264. (DOI:10.7763/IJESD.2016.V7.742.).
- 18. "Pollution Potential Ranking of Industries Using Classical TODIM Method", Journal of Environmental Protection, Vol. 7, October 2016, pp. 1645-1656. ISSN:2152-2197. (DOI:10.4236/jep2016.711134).
- 19. "Air Pollution Potential Index of Industries: A Fuzzy Approach", International Journal of Futuristic Trends in Engineering and Technology, International Journal of Futuristic Trends in Engineering and Technology ISSN: 2348-5264 (Print), ISSN: 2348-4071 (Online) Vol. 2 (2), 2014.
- 20. "Boosting Biogasification of Urban Wastewater Sludge using Water Hyacinth", European Journal of Advances in Engineering and Technology, 2016, 3(7): pp. 1-4. ISSN:2394 658X.

- 21. "Prediction of Major Wastewater Characteristics of Urban Wastewater Treatment Plant using Fuzzy Composite Programming", Water Conservation Science and Engineering. September 2017, volume 2, issue 3, pp 99-107.
- 22. "On-field and laboratory measurement of nano-particle emission in the wake of gasoline vehicle", Atmospheric Pollution Research Volume 8, Issue 6, November 2017, Pages 1179-1192. https://doi.org/10.1016/j.apr.2017.05.007.
- 23. "Evaluation of a Performance Index for Municipal Wastewater Treatment Plants using MCDM TOPSIS", International Journal of Technology, 2018, 4: pp. 715-726. ISSN 2086 9614.
- 24. "A Distinct Indicator to Predict Biogasification Potential of Urban Wastewater by Fuzzy Composite Approach", International Journal of Pure and Applied Mathematics, Volume 118, No. 24, 2018. pp 1-14. ISSN: 1314-3395.
- 25. "A review on nano-particle dispersion from vehicular exhaust: Assessment of Indian urban environment", Atmospheric Pollution Research volume 9, March 2018, Pages 342-357. https://doi.org/10.1016/j.apr.2017.10.009.
- 26. "Assessment of Environmental Pollution Index for Re- categorization of Industries in Context of Developing Nations", International Journal of Ecological Science and Environmental Engineering, 2018, 5(2), pp 58-63, ISSN 2375-3854.
- 27. "Prediction of Occupational Risk at Workplace Using Artificial Neural Network A Case Study", Advances in Intelligent Systems and Computing, vol 949. Springer, Singapore, pp 769-776, First online 10th July 2019.
- 28. "Predicting Biogasification Potential of Urban Wastewater Using Multi Parameter Aggregated Index of Influent", Environmental Progress and Sustainable Energy 38 (4), 7 January 2019.
- 29. "A Review on Nanoparticles Dispersion from Vehicular Exhaust: Assessment of Indian Urban Environment", Atmospheric Pollution Research, Volume 9, Issue 2, March 2018, pp.342-357.
- 30. "Evaluation of a Performance Index for Municipal Wastewater Treatment Plants Using MCDM Topsis", International Journal of Technology 9(4), pp. 715.

B) NATIONAL JOURNALS

- 31. "QOL Index A Measure of the Quality of Life of Urban Dwellers", Journal of The Institution of Engineers (India), Environmental Engineering Division, Vol. 70, June 1989.
- 32. "Traffic Flow Characteristics of Metro Region Entry Roads: A case study of Surat." Indian Road Congress, New Delhi, August 1993
- 33. "Pollution Free Planning Strategies for Growing Urban Centers". Journal of Indian Town Planning Institute, March 1994, Vol.12, No.3.
- 34. "Quantitative Analysis of Actinomycetes from Municipal Solid Waste", IUP Journal of Life Science, Vol. VI, No. 1, 2012.

C) INTERNATIONAL CONFERENCES

- 35. "Bio-Medical Waste Generation: A Case Study of Surat", Paper accepted for presentation at the Seventeenth International Conference on Solid Waste Technology and Management, Philadelphia, PA USA, Oct 21-24, 2001.
- 36. "Hearing Impairment due to Noise Pollution under Work Environment Conditions", paper presented at International Interdisciplinary Conference on Sustainable

- Technologies for Environmental Protection, ICSTEP 2006, at Coimbatore Institute of Technology, Coimbatore, India, 7-9 January 2006.
- 37. "Can Fuzzy Modeling Bring Complex Environmental Pollution Potential Hazard Ranking of Industries into Focus?", paper presented at International Interdisciplinary Conference on Sustainable Technologies for Environmental Protection, ICSTEP 2006, at Coimbatore Institute of Technology, Coimbatore, India, 7-9 January 2006.
- 38. "Fuzzy Modeling for River Water Quality Index: A Case Study", Proceedings of Second International Conference on Hydrology and Watershed Management with a Focal Theme on Improving Water Productivity in Agriculture, at Center for Water Resources, JNTU Institute of Science and Technology, Jawaharlal Nehru Technological University, Hyderabad. pp 1104-1110, 5-8 Dec. 2006.
- 39. "Fuzzy Rule Based Approach to Evaluate Roof Top Rain Water Harvesting System A Case Study", Proceedings of Second International Conference on Hydrology and Watershed Management with a Focal Theme on Improving Water Productivity in Agriculture, at Center for Water Resources, JNTU Institute of Science and Technology, Jawaharlal Nehru Technological University, Hyderabad. pp 1377-1385. 5-8 Dec. 2006.
- 40. "Fuzzy Modeling for River Water Quality Index", Proceedings of Second International Conference on Hydrology and Watershed Management with a Focal Theme on Improving Water Productivity in Agriculture, at Center for Water Resources, JNTU Institute of Science and Technology, Jawaharlal Nehru Technological University, Hyderabad.5-8 Dec. 2006.
- 41. "Fuzzy rule based approach for Addressing Environmental Pollution Potential of Industries", International Congress of Environmental Research (ICER-07), Government Geetanjali Girls P. G. College, Bhopal, 28-30 December 2007.
- 42. "A Fuzzy MCDM Framework for the Environmental Pollution Potential of Industries focusing on Air Pollution", WIT Transections on Ecology and the Environment, Vol. 116, 2008 WIT Press, pp. 617-626. ixteenth.
- 43. "Modeling Wastewater Treatment Plant Efficiency: An Integrated Approach", Environmental Science and Technology Conference (ECTEC2009), Kuala Terengganu, Malaysia, December 7-8, 2009. pp. 242-249.
- 44. "Modeling Wastewater Treatment Plant Efficiency: An Integrated Approach" Paper presented at AIChE Annual Meeting, Nashville, TN, November 8-13, 2009. pp. 311.
- 45. "Summer Episode Temperature Inversion and its Impact on CO Concentration in Urban Environment", International Conference on Chemical, Biological and Environmental Engineering, Cairo, Egypt, 2-4 Nov. 2010.
- 46. "Estimation of Reconnaissance Drought Index (RDI) for Bhavnagar District, Gujarat, India", International Conference on Civil, Structural and Environmental Engineering, Zurich, Switzerland, July 30-31, 2013.
- 47. Mehta M., Mukhopadhyay M., Christian R., Mistry N., Regeneration and Reuse of Magnesium Oxide (MgO) Nano-crystallites, International Conference on Nanotechnology Applications: Chemical, Energy and Environment NACEE2017 at Chemical Engineering Department, Sardar Vallabhbhai National Institute of Technology, Surat, 22-23 March 2017, ISBN-978-93-5268-680-3.
- 48. "Occupational Heat Stress Condition According to WBGT Index in Textile Processing Unit: A Case Study of Surat, Gujarat, India. ICCEABME 2017: 19th International conference on the Civil Engineering, Architecture, building materials and Environment at London, United Kingdom during 23-24th November 2017 organized by World Academy of Science, Engineering and Technology.

D) NATIONAL CONFERENCES AND SEMINAR

- 49. "Environmental Quality Index for Ahmedabad ", Proceedings of the Times Research Foundation Seminar on Ahmedabad 2001: Imperatives Now Towards a New Metropolitan Management Strategy (Vol.13), Dec. 1-3, 1988, Sardar Patel Institute of Public Administration, Ahmedabad.
- 50. "Abatement of Groundwater Pollution due to Sanitary Landfill Leachates", National Seminar on Advances in Groundwater Hydrology and Management of Irrigated lands. Feb. 25-26, 1989, Civil Engineering Department, S.V. Regional College of Engineering and Technology, Surat.
- 51. "Environmental Protection Act (India) 1986 and National Environmental Act (GDR) 1970 A Comparative Review". National Seminar on The Review of the Environmental Protection Legislation and Strategy Required for its Strict Implementation. Civil Engineering Department, S.V. Regional College of Engineering and Technology, Surat. Dec. 1989.
- 52. "The City and Ecological Concept and Reviews". Proceedings of National Seminar on Urbanization and its Impact on Housing and Land Cost, Surat, March 1993.
- 53. "Fixed Time Traffic Signal Control System Through Micro-processor", Proceedings of National Seminar on Emerging Trends in Highway Engineering, March 10-11, 1995. Center for Transportation Engineering, Faculty of Engineering Civil, Banglore University, Banglore.
- 54. "Optimization of Solid Waste Haulage: A Case Study of Surat", Proceedings of the Silver Jubilee National Seminar on Advanced Technology for Water and Waste Treatment. P.G. Center in Environmental Engineering, Civil Engineering Department S.V. Regional College of Engineering and Technology, Surat. 11th Dec. 1999.
- 55. "Bio-Medical Waste Management: A Case Study of Surat City", Proceedings of The Silver Jubilee National Seminar on Advanced Technology for Water and Waste Treatment. P.G. Center in Environmental Engineering, Civil Engineering Department S.V. Regional College of Engineering and Technology, Surat. 11th Dec. 1999.
- 56. "Waste Minimization: A case Study of Fertilizer Industry". Proceedings of the Silver Jubilee National Seminar on Advanced Technology for Water and Waste Treatment. P.G. Center in Environmental Engineering, Civil Engineering Department S.V. Regional College of Engineering and Technology, Surat. 11th Dec. 1999.
- 57. "Modeling of CO concentration at an Urban Signalized Intersection Approach for Mixed Traffic through Simulation", Proceedings of National Conference on Urban Transport and Environment, Civil Engineering Department, KLE Society's College of Engineering and Technology, Belgaum, 5 7th June 2003.
- 58. "Auto Emission Study for Two and Three Wheelers in Surat City". Proceedings of National Conference on Urban Air Pollution: Issues and Management, Civil Engineering Department S.V. National Institute of Technology, Surat. 11-13 Dec. 2003.
- 59. "A Study of Meteorological Conditions for Monsoon and Post Monsoon Season in Surat City", Proceedings of National Conference on Urban Air Pollution: Issues and Management, Civil Engineering Department S.V. National Institute of Technology, Surat. 11-13 Dec. 2003.
- 60. "Monitoring of RSPM Concentration in an Industrial Area of Surat City", Proceedings of National Conference on Urban Air Pollution: Issues and Management, Civil Engineering Department S.V. National Institute of Technology, Surat. 11-13 Dec. 2003.
- 61. "Effects of Automobile Pollution on Human Health", Proceedings of National Conference on Urban Air Pollution: Issues and Management, Civil Engineering Department S.V. National Institute of Technology, Surat. 11-13 Dec. 2003.
- 62. "Air Pollution: its Effects on Child Health", Proceedings of National Conference on Urban Air Pollution: Issues and Management, Civil Engineering Department S.V. National Institute of Technology, Surat. 11-13 Dec. 2003.

- 63. "Simulation of Mixed Traffic at Signalized Intersection Approach", Proceedings of National Seminar on Strategies in Traffic Engineering and Management, Department of Civil Engineering, M. S. Ramaiah Institute of Technology, Bangalore, February 2004.
- 64. "CFD Simulation of Dispersion of Vehicular Emission in Urban Street Canyons", Proceedings of National Conference on Sustainable Urban Transportation: Issues and Management Strategies, Civil Engineering Department S.V. National Institute of Technology, Surat. 28-29 Dec. 2007.
- 65. "Monitoring of RSPM Concentration at Traffic Intersection: A case Study of Surat", Proceedings of National Conference on Sustainable Urban Transportation: Issues and Management Strategies, Civil Engineering Department S.V. National Institute of Technology, Surat. 28-29 Dec. 2007.
- 66. "CFD Simulation of Dispersion of Pollutants in Asymmetric Urban Street Canyons" Proceedings of National Conference on Sustainable Urban Environment: Issues and Management Strategies, Civil Engineering Department S.V. National Institute of Technology, Surat. 27-29 Feb. 2008.
- 67. "Impact of Transit Mode Shift on Urban Environment: A Case Study of Surat", Proceedings of National Conference on Sustainable Urban Environment: Issues and Management Strategies, Civil Engineering Department S.V. National Institute of Technology, Surat. 27-29 Feb. 2008.
- 68. Environmental Impact Assessment: A Case Study of A Township Project", Proceedings of National Conference on Sustainable Urban Environment: Issues and Management Strategies, Civil Engineering Department S.V. National Institute of Technology, Surat. 27-29 Feb. 2008.

2. A. LIST OF PROCEEDINGS PUBLISHED:

- 1. Editor of Proceedings for National Conference on "Urban Air Pollution: Issues and Management" Organized by Civil Engineering Department, S. V. National Institute of Technology, Surat, 11-13 Dec. 2003.
- 2. Editor of Proceedings for National Conference on "Sustainable Urban Transportation: Issues and Management Strategies", Organized by Civil Engineering Department, S. V. National Institute of Technology, Surat, 28-29 December 2007.
- 3. Editor of Proceedings for National Conference on "Sustainable Urban Environment: Issues and Management Strategies", Organized by Civil Engineering Department, S. V. National Institute of Technology, Surat, 27-29 February 2008.

B. LIST OF BOOKS PUBLISHED:

1. Co-author of book entitled "Wastewater Treatment: Concepts and Design Approach". Prentice Hall of India, January, 2006. (Now in 9th reprint, 2nd Edition).

3. LIST OF SUMMER/WINTER SCHOOL/SHORT TERM COURSES ATTENDED:

- 1. Short term course on Microprocessors and its Applications. ISTE, SVRCET Surat Chapter. 29th Jan.- 3rd Feb. 1990.
- 2. Short term QIP course on Design, Aesthetics and Environment. IIT Kanpur, 2-19 July 1990.
- 3. ISTE Winter School on Transportation Management for Small and Medium size Cities. Civil Engg. Dept. SVRCET, Surat. 28th Jan. 9th Feb. 1991.
- 4. ISTE Summer School on Traffic Operation and Management in Urban Centers. Civil Engg. Dept. SVRCET, Surat. 5-17 June 1995.

- 5. One-day Workshop on Guidance and Counseling. ISTE Surat Chapter SVRCET. 11thNov. 1995.
- 6. One-day Workshop on Induction of Engineering College Teachers. ISTE Surat Chapter SVRCET, Surat. 16th Dec. 1995.
- 7. Short-term course on Construction Management CEP Surat chapter, SVRCET, Surat 2-4 Sept.1996.
- 8. International Workshop to Educate the Educators on Preventive Environmental Management, NetPEM, and IIIEE, Lund University, Sweden, at Nagpur, 15 17th January, 2002.
- 9. Short-term training Program on Hostel Management: Student Health and Welfare, S. V. National Institute of Technology, Surat, 27th 31st Dec. 2004.
- 10. Orientation Course on AUTOCAD 2005, at Civil Engineering Department, SVNIT, Surat, 23 25th January, 2005.
- 11. QIP Short Term Course on "Advanced Technologies for Water and Wastewater Treatment", 20-25 November, 2006. Department of Civil Engineering, IIT Kharagpur
- 12. CEP Short Term Course on "Solid and Hazardous Waste Management", 13-17 August, 2007. Department of Civil Engineering, IIT Kharagpur
- 13. "Sustainable Urban Environment: Issues and Management Strategies", Civil Engineering Department, S. V. National Institute of Technology, Surat, 27-29 February 2008.
- 14. "Management Capacity Development Training for Senior Faculty", organized by Effective Quality Upgradation Assistance for Technical Education, New Delhi, at SVNIT, Surat, 14 15 March 2008.

4. **RESEARCH STUDY:**

Doctoral research project entitled:

Micro Simulation Study of CO Concentration at Signalized Urban Intersection under Mixed Traffic Conditions.

5. RESEARCH PROJECT:

- Research project entitled, "Development of a Model to Predict the Concentration of Radionuclides in the Aquatic System at Kakarapar Atomic Power Station", Sponsored by Government of India, Department of Atomic Energy (DAE), Board of Research in Nuclear Sciences. Rs. 19.25 lakhs. Sanction letter no. 2008/36/59-BRNS/4005. Dt. 23-03-2009. (Status - Completed).
- Research project entitled, "Estimation and Prediction of Near Field Concentrations of KAPS Discharged Radionuclides in the Aquatic Environs of Moticher Lake", Sponsored by Government of India, Department of Atomic Energy (DAE), Board of Research in Nuclear Sciences. Rs. 12.71 lakhs. Sanction letter no. 36(4)/14/05/2014-BRNS/1075, dt. 14 July 2014. (Status - Ongoing).

6. ON GOING RESEARCH STUDIES:

Five students have already completed Ph.D.

At present five students are registered for Ph.D. in the area of Environmental Engineering.

7. CONSULTANCY PROJECTS:

Subject Area	No. of Projects	Amount in Rs.
Environmental Audit 2006	3	7,65,000 = 00

Environmental Audit 2007	3	7,65,000 = 00
Environmental Audit 2008	3	7,65,000 = 00
Environmental Audit 2009	4	26,04,480 = 00
Environmental Audit 2010	87	10,78,854 = 00
	TOTAL	59,78,334 = 00

8. ADMINISTRATIVE WORKS CARRIED OUT IN THE INSTITUTE:

A) Hostel Management:

- 1. Worked as warden in Hostel Section from 14-07-1994 to 22-07-2003.
- 2. Worked as Add. Chief Warden in Hostel Section from 23-07-2003 to 11-04-2004.
- 3. Worked as **Chief Warden** in Hostel Section 12-04-2004 to 19-12-2005.

B) Institute Administration:

- 1. Worked as **Dean, Planning and Development** from 19-12-2005 to 19-12-2008.
- 2. Worked as **Dean, Faculty Welfare** from 14-04-2010 to 17-10-2011.
- 3. Worked as **Dean, Student Welfare** from 17-10-2011 to 17-10-2013.
- 4. Worked as **Dean, Planning and Development** from 1-06-2016 to 31-01-2017.
- 5. Worked as **Dean, Student Welfare** from 31-01-2017 to 31-01-2019.

B) Lab In-Charge and Lab development:

- 6. Worked as In-Charge of Computer Section, Civil Engineering Department Sept. 1996 Dec. 2000.
- 7. Working as In-Charge of Environmental Engineering Laboratory, Civil Engineering Department since 11th Nov. 2000.
- 8. Worked for the Modernization of Environmental Engineering Laboratory with Prof. G. L. Karia during Sept. 1991.
- 9. Worked on the proposal for developing REACH Center of Excellence in Environmental Engineering Laboratory, a Lab-development project worth Rs. **4.00 Crores**.
- 10. Project In-Charge for "Modernization and Upgradation of Air Pollution Laboratory", a Lab-development grant of Rs. **15,00,000 = 00**, financed by MHRD, 2000 –01 Plan.
- 11. Project In-Charge for "Modernization and Removal of Obsolescence in Environmental Engineering Laboratory" a Lab-development grant of Rs. **10,00,000 = 00**, financed by MHRD, 2001-02 Plan.

C) Cultural and Academic Programs:

- 12. Worked as a Coordinator for various committees for the annual function of the college.
- 13. Worked as a Coordinator for various committees for Mind-Bend, a National level paper presentation program for students.
- 14. Working as Chairman of Social and Cultural Activities Committee.

9. MEMBERSHIP OF PROFESSIONAL BODIES:

- 1. Member, Institution of Engineers, INDIA.
- 2. Life Member, ISTE.

10. MEMBER OF GOVERNMENT BODIES:

Nominated as Environmental Audit Committee member at Gujarat Pollution Control Board, Gandhinagar, Gujarat since 29-10-2013.

10. EXPERT LECTURES DELIVERED:

- 1. Expert lecture on "Hostel Management: Some Specific Issues", presented at Applied Mechanics Department, SVNIT Surat. National Training Program on "Hostel Management: Health and Student Welfare", during 27-12-04 to 31-12-04.
- 2. Expert lecture on "Fuzzy Set Theory and its Application to Environmental Engineering", PGCHEMEET, at Chemical Engineering Department, SVNIT, Surat, on 29th Sept. 2005.
- 3. Expert Lecture on "Fuzzy Logic Application to Rank Pollution Potential of Industries", National Conference on Water and Waste Management. Department of Civil Engineering, JNTU College of Engineering, Kakinada, AP, India. 23 24 April 2007
- 4. Expert Lecture on "Fuzzy Logic Application to Rank Pollution Potential of Industries", Theme Meeting on "Methodology for Quantification and Propagation of Uncertainty in Safety Assessment of NPP and Fuel Cycle Facilities", at Bhabha Atomic Research Centre, Mumbai, 15-16 November 2007.
- 5. Expert Lecture on "Fuzzy Modeling for Environmental Pollution Potential Ranking of Industries". Short term Program on Advanced Engineering Optimization through Intelligent Techniques, Department of Mechanical Engineering, SVNIT, 16-20 June 2008.
- 6. Expert Lecture on "Fuzzy Modeling for Environmental Pollution Potential Ranking of Industries". Short term Program on Advanced Engineering Optimization through Intelligent Techniques, Department of Mechanical Engineering, SVNIT, 30 June 4 July 2008.
- 7. Expert Lecture on "Fuzzy Modeling for Environmental Pollution Potential Ranking of Industries". Short term Program on Advanced Engineering Optimization through Intelligent Techniques, Department of Mechanical Engineering, SVNIT, 13 17 July 2009.
- 8. Expert Lecture on "Simulation of Vehicular Flow at Signalized Intersection Under Mixed Traffic Condition". Short term Program on Advanced Research Techniques in Urban Planning and Management, Department of Civil Engineering, SVNIT, 13 17 July 2009.
- 9. Expert Lecture on "**Reactors and reactor kinetics**". Workshop on Advanced Water and Wastewater Treatment, Faculty of Technology, CEPT, Ahmedabad, 19-22 January 2011.
- 10. Expert Lecture on "Air Pollution Control Technology". Training Course on Air Pollution Control and Water Management in Textile Processing, organized by en-Vision and SGTPA, Surat, 1-2 June 2012.