**Dr. Arvind Kumar Mungray**
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**Research Interest:** Wastewater treatment (biological), anaerobic treatment, sludge treatment, upflow anaerobic sludge blanket (UASB) reactor, Bio-gas, Microbial fuel cell (MFC), nanotechnology, Decentralization of wastewater, hybrid system (Septic tank + MFC)

**Degree Obtained:**

**(i) B. Tech.:** H.B.T.I. Kanpur/ SSJM Univ. Kanpur (2000) in Chemical Engineering.
**(ii) M. Tech.**: I.T.B.H.U. Varanasi (2002) in Chemical Engineering.
**(iii) Ph.D.:** I.I.T. Roorkee (2007) in Environmental Engineering
**Ph.D. Thesis Title:** Anionic surfactants in sewage: Fate in UASB Process, under Professor Pradeep Kumar

**Employment Record:** Assistant Professor in SVNIT Surat, since 15th January 2007.

**Sponsored research projects: 7** **(*Appendix **1***)**

**Publications (International/National/Journals/Conferences): (Total No. = 82)**
**(*Appendix **2***)**

Total Citation = 527; **h index= 14** (from Google Scholar)
(i) Papers published/accepted in International Journals: 40
(ii) Paper published in National Journals: 2
(iii) Papers published/presented in International Conference/Seminar: 34
(iv) Papers published/presented in National Conference/Seminar: 6

**Patent Details**: Filed Indian Patent: 1 **(*Appendix **3***)**
**Workshops/Summer Schools/ Winter schools/Short term Courses attended: 26**
**Memberships in professional bodies: 7**
**International Recognition:** Reviewer in International Journals
**Event Organized**: Seven Short Term Training Programs STTPs/Workshops (7)
**Awards Received:** 4
**Ph.D. Supervision:** 10
**M. Tech. Dissertations Guided:** 19
**Expert Lectures delivered:** 14
**Administrative duties:** 14

## *Appendix 1*

**Sponsored research projects (7)**

**(i)** R & D Grant of the Institute (Rs. 4.14 Lacs) for *"Evaluate the performance of tertiary treatment in a full scale up-flow anaerobic sludge blanket (**UASB**) based sewage treatment plant (STP)".* (**Principal Investigator: Dr. A.K. Mungray**; Co-Investigator; Dr. S. R. Patel & Dr. Z. V. P. Murthy) **Status: Completed; 2007-2008**).

**(ii)** R & D Grant of the Institute (Rs. 2.25 Lacs) for *"Sonocrystallization for the recovery of valuable products from dairy waste stream".* (Co-Investigator: **Dr. A.K. Mungray;** Principal Investigator: Dr. S.R. Patel), **Status: Completed; 2007-2008).**

**(iii)** Naval Research Board (NRB), Defence Research and Development Organisation (DRDO) Bhavan, New Delhi, India (23.198 Lacs) for *"Application of **Benthic Microbial Fuel Cell (BMFC)** for powering Naval Sensors".* (**Principal Investigator: Dr. A.K. Mungray**; Co-Investigator; Dr. Alka A. Mungray & Dr. K. Suresh Kumar) **Status: Sanctioned for three years, Completed, 2015-2018).**

**(iv)** R & D project grant of the Institute for UG student (Rs. 50,000/- ) for "*Synthesis of Nanoparticles to enhance the performance of the microbial fuel cell*." Name of the Student: Nishant Gupta & Saumya Diveti. Supervisors: Dr. A. K. Mungray & Dr. K. Suresh Kumar. **(status: Completed; Six months granted in 2014)**

**(v)** R & D TEQIP Project Grant of the Institute for Assistant Professors (Rs. 9.80 Lacs) for *"Treatment of Combined Textile and Municipal Wastewater by Bio-Electrochemical Processes using **Novel Cross-linked Microbial Fuel Cell (CMFC)".*** (**Principal Investigator: Dr. A. K. Mungray**; **Status: Completed. (2014-2016)**

**(vi)** Mentoring a Department of Science and Technology (DST), Govt. of India, New Delhi, project (Rs. 17.05 Lacs) under Women Scientist Scheme-A (WOS-A) entitled **"Study of Microbial Consortia in Microbial Fuel Cell"** having project No: SR/WOS-A/ET-1054/2014(G). to Mrs. Ambika Sriniwas Arkatkar, Duration: Three years, **(Status: Ongoing). (2015-2018)**

**(vii)** Integration of Septic Tank and Microbial Fuel Cell: a Novel Hybrid System for Sustainable Treatment of Domestic Wastewater. Sponsored from Science & Engineering Research Board (SERB)-DST, Government of India, New Delhi, India (Amount Rs. 31,18,000). **Status: Ongoing (2017-2020)**

## *Appendix 2*

**Publications (International/National/Journals/Conferences): (Total No. 82)**

**(i) Papers published/accepted in International Journals: 40**

1. **Mungray, A.K.** and Kumar, P. Degradation of anionic surfactants during drying of UASBR sludges on sand drying beds. **Journal of Environmental Management,** 88(4), 2008, 995-1002**. (Impact factor: 2009: 2.367)**
2. **Mungray, A.K.** and Kumar, P. Anionic surfactants in treated sewage and sludges: Risk assessment to aquatic and terrestrial environments. **Bioresource Technology,** 99(8), 2008, 2919-2929. **(Impact factor: 2008: 4.453)**
3. **Mungray, A.K**. and Kumar, P. Occurrence of anionic surfactants in treated sewage: Risk assessment to aquatic environments. **Journal of hazardous materials.** 160(2-3), 2008, 362-370. **(Impact factor: 2009: 4.144)**
4. **Mungray, A.K**. and Kumar, P. Fate of anionic surfactants in 38 ML/d UASB based sewage treatment Plant. Journal of Environmental Engineering, **American Society of Civil Engineering (ASCE)** 134 (12), 2008, 1014-1022. **(Impact factor 2008: 1.244)**
5. **Mungray, A.K.** and Kumar, P. Tracing anionic surfactants through up-flow anaerobic sludge blanket based sewage treatment plants: Mass balance. **Process Safety and Environmental Protection.** 87 (4), 2009, 254-260. **(Impact factor: 2009: 1.124)**
6. **Mungray, A.K.** and Kumar, P. Fate of Anionic Surfactants in the Environment: A Review. **International Biodeterioration and Biodegradation.** 63(8), 2009, 981-987. **(Impact factor: 2009: 2.252)**
7. Patel, K., Sarve, A., **Mungray A. K.** Hydrodynamics of a Bench Scale Aerated Post Treatment Unit for up-flow anaerobic sludge blanket Reactor. **Chemical Product and Process Modeling.** 4(1), 2009, Article 40.
8. Mungray, A.K., Murthy, Z.V.P., Tirpude, A.J. Post Treatment of Up-Flow Anaerobic Sludge Blanket Based Sewage Treatment Plant Effluents: A Review. **Desalination and Water Treatment,** 22 (2010) 220–237. **(Impact factor: 2010: 0.852)**
9. Dixit, A., **Mungray, A. K.,** Chakraborty, M. Photochemical oxidation of phenol and chlorophenol by UV/H2O2/TiO2 process: A Kinetic Study. **International Journal of Chemical Engineering and applications.** 1(3) 2010. **ISSN: 2010-0221.**
10. **Mungray, A.K.** and Patel K. Coliforms Removal in 43 ML $d^{-1}$ and 100 ML $d^{-1}$ UASB + ASP Based Systems. **International Biodeterioration and Biodegradation, 65,** 2011, 23-28. **(Impact factor: 2009: 2.252)**
11. **Mungray, A.K.** and Patel K. Combination of up-flow anaerobic sludge blanket reactor and a novel cascade sponge reactor for sewage treatment. **Water Science and Technology,** 63 (6), 1255-1264, 2011. **(Impact factor: 2011: 1.112)**

**12.** Dixit A, Tirpude A. J., **Mungray A. K**. , Chakraborty M. Degradation of 2, 4 DCP by sequential biological – advanced oxidation process using UASB and UV/$TiO_2$/$H_2O_2$. **Desalination,** 272**,** 2011, 265-269.

**(Impact Factor: 2012: 2.590)**

**13.** Shilpa, A., **Mungray, A. K.,** Chakraborty, M. Modelling and optimization of process parameters by Taguchi method: Degradation of phenolic compounds by UV/H2O2/TiO2 process. **Chemical Product and Process Modeling.** Article 18, 6(1) (2011) 1-17.

**14.** Mungray, A. A**., Mungray, A. K**., Kulkarni, Removal of Mercury from wastewater using miceller enhanced ultrafiltration. **Research Journal of Chemistry and Environment. 15(4), 2011. (Impact Factor: 2009: 0.623).**

**15.** Mungray, A. A**., Mungray, A. K**., Kulkarni, Removal of heavy metals from wastewater using MEUF technique: A review. **Central European Journal of Chemistry.** 10(1), 27-48, 2012. **(Impact Factor: 2012: 1.167).**

**16.** Dixit, A., **Mungray, A. K.,** Chakraborty, M. Photochemical oxidation of phenolic wastewaters and its kinetic study. **Desalination and Water Treatment.** 40 (2012) 56–62). **(Impact factor: 2012: 0.852)**

**17.** Singala, K. J., Mungray, A. A., **Mungray, A. K.** Degradation Behavior of Polypropylene-Organically Modified Clay Nanocomposites **Industrial & Engineering Chemistry Research.** 2012, 51 (32), 10557–10564 (Publisher: ACS Publications) **(Impact factor: 2011: 2.237)**

**18.** Rikame, S. S., Mungray, A. A., **Mungray, A. K**. Electricity generation from acidogenic food waste leachate using dual chamber mediator less microbial fuel cell. **International Biodeterioration and Biodegradation. 75**, 2012, 131-137. **(Impact factor: 2009: 2.252)**

**19.** **Mungray, A.K**. and Murthy, Z.V.P. Post treatment of up-flow anaerobic sludge blanket reactor effluents in activated sludge process based system for anionic surfactants. **Water and Environment Journal**. 28(2014) 84-94**.**

**(Impact factor: 2011: 0.792)**

**20.** Paliwal, N. R., and **Mungray, A.K**. Ultrasound assisted alkaline hydrolysis of poly (ethylene terephthalate) in presence of phase transfer catalyst. Polymer Degradation and Stability. 98 (2013) 2094- 2101.

**(Impact factor: 2011: 2.770)**

**21.** Yadav, T., Mungray, A.A., and **Mungray, A. K**. Fabricated Nanoparticles: Current Status and Potential Phyto-toxic Threats, A Review. Reviews of Environmental Contamination and Toxicology. 230(2014).

**(Impact factor: 2009: 2.477)**

**22.** Saner, A. B., **Mungray, A.K**., and Mistry, N. J. Performance of a full scale up-flow anaerobic sludge blanket reactor for the treating distillery wastewater. Research Journal of Chemistry and Environment. 18:(5)(2014).

**(Impact factor: 2014: 0.636)**

**23.** Saner, A. B., **Mungray, A.K**., Mistry, N. J. Treatment of distillery wastewater in an upflow anaerobic sludge blanket (UASB) reactor. **Desalination and Water Treatment,** 2016, 57(10), 4328-4344 **(Impact factor: 2010: 0.987)**

**24**. Pushker P., **Mungray, A.K**. Textile and Domestic Wastewater Treatment by Novel Cross-linked Microbial Fuel Cell (CMFC) Reactor. **Desalination and Water Treatment,** 2016, 57(15), 6747-6760. **(Impact factor: 2014: 1.173)**

**25.** Yadav, T., Mungray, A.A., **Mungray, A. K.** A comparative analysis of a $TiO_2$ nanoparticle dispersion in various biological extracts. **RSC Advances,** 2015, 5, 64421-64432. **(Impact factor: 2015: 3.840)**

**26**. Yadav, T., Mungray, A.A., **Mungray, A. K.** Dispersion of multiwalled carbon nanotubes in Acacia extract and it's utility as an antimicrobial agent. **RSC Advances,** 2015,**5**, 103956-103963.

**(Impact factor: 2015: 3.840)**

**27.** Pardeshi, P., Mungray, A.A., **Mungray, A. K.** Determination of optimum conditions in forward osmosis using a combined Taguchi-Neural approach **Chemical Engineering Research and Design,** May 2016, 109, 215-225.

**(Impact factor: 2015: 2.348)**

**28**. Yadav, T., Mungray, A.A., **Mungray, A. K.** Effect of Multi-walled Carbon Nanotubes on UASB Microbial Consortium. **Environmental Science and Pollution Research,** 2016, 23(5), 4063-4072. **(Impact factor: 2014: 2.757)**

**2016-2017**

**29.** Yadav, T., Mungray, A.A., **Mungray, A. K.** Effect of $TiO_2$ Nanoparticles on UASB Biomass Activity and Dewatered Sludge. **Environmental Technology,** Feb, 2017, 38(4), 413-423. **(Impact factor: 2014: 1.560)**

**30.** Kumar P., **Mungray, A.K.** Microbial Fuel Cell: Optimizing pH of Anolyte and Catholyte by using Taguchi Method. **Environmental Progress and Sustainable Energy,** 2017, 36(1), 120-128 **(Impact factor: 2014: 1.630)**

**31.** Rikame, S. S.,., Mungray, A.A., **Mungray, A. K.** Synthesis, characterization and application of phosphorylated fullerene/sulfonated polyvinyl alcohol (PFSP) composite cation exchange membrane for copper removal. **Separation and Purification Technology,** April, 2017, 177, 29-39.

**(Impact factor: 2016: 3.299)**

**32**. Pardeshi, P., Mungray, A.A., **Mungray, A. K.** Polyvinyl chloride and layered double hydroxide composite as a novel substrate material for the forward osmosis membrane. Desalination 421, November, 2017, 149–159 **(Impact factor: 2016: 4.412)**

**2017-2018**

**33.** Yadav, T., Mungray, A.A., **Mungray, A. K.** Generation of TiO2 nanoparticle-based acacia saturated eggshell biocomposite for pathogen removal. **Environmental Nanotechnology, Monitoring & Management,** May 2018, 9, 50-57. **(**Elsevier Publication)

**34.** Prakash, O., Pushkar, P., **Mungray, A. K**., Mungray, A. A., Kailasa, S. K. Effect of geometrical position of a multi-anode system in power output and nutritional variation in benthic microbial fuel cells. Journal of Environmental Chemical Engineering. 6(1), Feb., 2018, 1558-1568. **(**Elsevier Publication) I F: 1.355

**35.** Prakash, O., Mungray, A. A., Kailasa, S. K., Chongdar, S., **Mungray, A. K**., Comparison of different electrode materials and modification for power enhancement in benthic microbial fuel cells (BMFCs). Process Safety and Environmental Protection. 117, July 2018, 11-21 **(**Elsevier Publication) **I F: 2018: 2.905**

**36.** Rikame, S. S., Mungray, A.A., **Mungray, A. K.** Modification of anode electrode in microbial fuel cell for electrochemical recovery of energy and copper metal. Electrochimica Acta**,** June, 2018, 275(10), 8-17.
**(Impact factor: 2017: 4.798)**

**37.** Pushkar, P., Prakash, O., Mungray, A. A., Kailasa, S. K., Chongdar, S., **Mungray, A. K**., Evaluation of the Effect of Position and Configuration of Electrodes in Benthic Microbial Fuel Cell. Fuel Cells - From Fundamentals to Systems. Accepted. **(**Wiley Publication) I F: 1.706

**38.** Pushkar, P., Prakash, O., Mungray, A. A., Kailasa, S. K., Chongdar, S., **Mungray, A. K**., Effect of Cerium Oxide Nanoparticles Coating On the Electrodes of Benthic Microbial Fuel Cell. Separation Science and Technology. Accepted. **(**Taylor & Francis) **(Impact factor: 2015: 1.240)**

**39.** **Imran, M.,** Prakash, O., Pushkar, P., Mungray, A.A., Suresh Kumar, K., Chongdar, S., Mungray, A.K., Performance enhancement of benthic microbial fuel cell by cerium coated electrodes. Electrochimica Acta (**Accepted**).(Impact factor: 5.1), 2018

**40.** Prakash, O., Pushkar, P., Mungray, A. A., Chongdar, S., Kailasa, S. K. **Mungray, A. K.** Performance of polypyrrole coated metal oxide composite electrodes for benthic microbial fuel cell (BMFC). Journal of Environmental Chemical Engineering. 2018. **(**Elsevier Publication) (Accepted) I F: 1.355

**(iii) Paper published in National Journals: 2**

**1.** Patel, K, **Mungray, A. K.**, Murthy, Z.V.P. Removal of anionic surfactants in100 ML/D UASB reactor with diffused aeration based post treatment system. Journal of Environmental Research and Development. 3 (3) 2009, 796-802.

2. Shilpa, A., **Mungray, A. K.,** Chakraborty, M. Sonochemical degradation of p-chlorophenol assisted by $H_2O_2$ and Ag-$TiO_2$/$TiO_2$ catalyst. **Indian Journal of Chemical Technology,** 2015, 22, 73-77.

**(iii) Papers published/presented in International Conference/Seminar: 34**

1. **Mungray, A.K.** and Kumar, P. Fate of anionic surfactants in sewage treatment. Jordan International Chemical Engineering Conference –V, JICEC-V 2005. September 11- 17, 2005, Amman, Jordan**.**
2. **Mungray, A.K.** and Kumar, P. The concentration and fate of anionic surfactants in UASB and ASP based STPs: Assessment of relative impacts on aquatic environment. International symposium on recent advances in water resource development and management, WRD&M, November 23 – 25, 2005, IIT Roorkee, India.
3. **Mungray, A.K.** and Kumar, P. Fate of anionic surfactants in UASB and Oxidation ponds based STPs. Chemical Engineering conference, CHEMCON, held in December 14-17, 2005 at IIT Delhi, India.
4. **Mungray, A.K.** and Kumar, P. Fate of anionic surfactants in UASB based STPs: A comparison with activated sludge plant. International congress of Chemistry and Environment, December 24-26, 2005, Indore, India.
5. **Mungray, A.K.** and Kumar, P. Treatment of detergents and phosphorous in UASB based sewage treatment plants. International interdisciplinary conference on sustainable technologies for environmental protection, January 7-9, 2006. Coimbatore, India.
6. Hussain, A., **Mungray, A.K.,** Kumar, P., Mehrotra, I. Anaerobic biotransformation of Phenol: Effect of microbial population and nitrogen. International interdisciplinary conference on sustainable technologies for environmental protection, January 7-9, 2006. Coimbatore, India.
7. **Mungray, A.K**. and Hussain, A. Absorption of Sulfur Dioxide in Aqueous Sodium carbonate solution. International conference on Mesoscale processes in atmosphere, ocean and environmental systems, February 14 – 17, 2006, IIT Delhi, India.
8. Hussain, A. and **Mungray, A.K**. Ambient Air Quality Monitoring of Aligarh City and its Health Effect. International conference on Mesoscale processes in atmosphere, ocean and environmental systems, February 14 – 17, 2006, IIT Delhi, India.
9. Gaule, H., Gupta, A. and **Mungray, A.K**. Hazards and Management of E-Waste: A Review. International Conference on E-Waste Management in India A Sustainable Solution, May 18, 2007, Mumbai, India.
10. Konakala, P., Patel, S.R., **Mungray, A.K.** and Murthy, Z.V.P. Treatment of anaerobic reactor effluents: A comparative approach. International Conference on "Environmental Management: Scenario and Strategies to 2020" held in the Department of Chemical Engineering, Ujjain Engineering College, Ujjain (M.P.), Dec. 26-27, 2007.

**11.** Patel, S.R., Jayant, M.B. John, J.V., **Mungray, A.K.** and Murthy, Z.V.P. Sonocrystilization as a method for the treatment of dairy effluents. International Conference on "Environmental Management: Scenario and Strategies to 2020" held in the Department of Chemical Engineering, Ujjain Engineering College, Ujjain (M.P.), Dec. 26-27, 2007.

**12.** Gaule, H., Gupta, A. and **Mungray, A.K.,** Water Reduce, Reuse and Recycle: A Review. CHEMCON 2007, Kolkata, 27-30 December, 2007

**13.** Bajpai, A., Jindal, A., Mungray, A. K., Phytoremediation, An effective technology for wastewater treatment: A review. CHEMCON 2007, Kolkata, 27-30 December, 2007.

**14.** Khushboo Patel, A. K. Mungray, Z.V.P. Murthy, Removal of anionic surfactants in100 ML/D UASB reactor with diffused aeration based post treatment system. International Congress of Environmental Research (ICER-08), 18-20 December, 2008 BITS Pilani Goa Campus.

**15.** **Mungray, A.K.** and Kumar, P. Risk Assessment to the Environment Due to Anionic Surfactants in Treated Sewages and Dried Sludge's. Environmental & Water Resources Institute (EWRI) of the American Society of Civil Engineers (ASCE), World Environmental & Water Resources Congress 2009, May 17-21 in Kansas City, Missouri, USA.

**16.** Patel, K. and **Mungray, A. K.** Performance of 43 ML/d Up-flow Anaerobic Sludge Blanket Reactor with Activated Sludge Process as a Post treatment for Coliform removal. 4th International congress of Chemistry and Environment (ICCE-2009) at Thailand during 21-23 Jan 2010.

**17.** Dixit, A., **Mungray, A. K.,** Chakraborty, M. Photochemical oxidation of phenol and chlorophenol by UV/H2O2/TiO2 process: A Kinetic Study. 2nd International Conference on Chemical, Biological and Environmental Engineering (ICBEE 2010) at Cairo, Egypt during 2-4 November, 2010.

**18.** Mungray, A. A**., Mungray, A. K**., Kulkarni, S. V. Removal of Mercury from wastewater using miceller enhanced ultrafiltration. 5th International congress of Chemistry and Environment (ICCE 2011) at Malaysia during 27 – 29 May, 2011.

**19.** Biswas, S., **Mungray, A. K**., Post treatment of UASB effluents by using slow sand filtration. 5th International congress of Chemistry and Environment (ICCE 2011) at Malaysia during 27 – 29 May, 2011.

**20.** **Mungray, A. K.,** Kumar, P. Removal of Anionic Surfactants in UASB and Polishing Pond Based Sewage Treatment Plants. International congress of Environmental Research (ICER 2011) at SVNIT Surat, India during 15-17 December, 2011.

**21.** **Mungray, A. K.,** Biswas, S. Fate of Up-Flow Anaerobic Sludge Blanket Reactor Effluents in Biologically Activated Carbon Filter. International congress of Environmental Research (ICER 2011) at SVNIT Surat, India during 15-17 December, 2011.

**22.** Mungray, A. A**., Mungray, A. K**., Kulkarni, S. V. Removal of Heavy Metal from Wastewater Using Surfactant by Ultrafiltration. International congress of Environmental Research (ICER 2011) at SVNIT Surat, India during 15-17 December, 2011.

**23.** Mungray, A. A**.,** Kanan, K.P., **Mungray, A. K**. Performance of Dynamic Membranes in Anaerobic Membrane Bioreactor: A Review. International congress of Environmental Research (ICER 2011) at SVNIT Surat, India during 15-17 December, 2011.

**24.** Paliwal, N., **Mungray, A. K**. Treatment of real textile and domestic wastewater in Up-flow anaerobic sludge blanket reactor. International conference on Sustainable technologies for energy and environment in process industries, CHEMCON 2012 at Department of Chemical Engineering, Dr. B. R. Ambedker National Institute of Technology Jalandhar during 27-30 December, 2012.

**25.** Kande, M. J., Pushkar, P., **Mungray, A. K**. Alkaline hydrolysis of Poly(ethylene terephthalate) using ultrasound. International conference on Sustainable technologies for energy and environment in process industries, CHEMCON 2012 at Department of Chemical Engineering, Dr. B. R. Ambedker National Institute of Technology Jalandhar during 27-30 December, 2012.

**26.** Yadav, T., Mungray, A. A**., Mungray, A. K**. Nanotoxicity in Microbial Population and its Utility in Pathogen Removal. 6$^{th}$ International congress of Chemistry and Environment (ICCE 2013) at Antwerp, Belgium during 8$^{th}$ - 10$^{th}$ July, 2013.

**27.** Kande, M., Pushkar, P., **Mungray, A. K**. Performance of Up-Flow Anaerobic Sludge Blanket (UASB) Reactor for Combined Textile and Domestic Wastewaters. 6$^{th}$ International congress of Chemistry and Environment (ICCE 2013) at Antwerp, Belgium during 8$^{th}$ -10$^{th}$ July, 2013.

**28.** Saner, A. B., **Mungray, A. K**., Mistry, N. J. Performance evaluation of full-scale up-flow anaerobic sludge blanket reactor treating distillery spent wash. 6$^{th}$ International congress of Chemistry and Environment (ICCE 2013) at Antwerp, Belgium during 8$^{th}$ -10$^{th}$ July, 2013.

**29.** Dharmadhakari, S., Mungray, A. A**., Mungray, A. K**. Modification, characterization and application of proton Exchange Membrane in microbial Fuel Cell. International congress on Global Challenges: Sustainable wastewater treatment and resource recovery at Kathmandu, Nepal during 28$^{th}$ to 30$^{th}$ Oct. 2014.

**30.** Yadav, T., Mungray, A. A**., Mungray, A. K**. Modification, characterization and application of proton Exchange Membrane in microbial Fuel Cell. International congress on Global Challenges: Sustainable wastewater treatment and resource recovery at Kathmandu, Nepal during 28$^{th}$ to 30$^{th}$ Oct. 2014.

**31**. Thakre, V., and **Mungray, A. K**. Cross-Linked Microbial Fuel Cell For Real Textile And Municipal Wastewaters. International congress on Global Challenges: Sustainable wastewater treatment and resource recovery at Kathmandu, Nepal during 28$^{th}$ to 30$^{th}$ Oct. 2014.

**32. Pushker, P., and Mungray, A. K.,** Electrochemical impedance spectroscopy (EIS) for the nanoparticle coated membranes for microbial fuel cell. International Conference on Membrane based seperations (MEMSEP 2015) at M.S. University Baroda during 21-25 March 2015.

**33.** Yadav, T., Mungray, A. A., and **Mungray, A. K.,** Application of nanoparticles for pathogen removal during waste water treatment. International Conference on Membrane based separations (MEMSEP 2015) at M.S. University Baroda during 21-25 March 2015.

**34.** Yadav, T., Mungray, A. A., and Mungray, A. K., Effect of Cosmetic Based Nanowaste on Sludge and Soil Microflora. International conference on Ecology of Soil Microorganisms 2015, from 29th Nov. 29 to 3rd Dec. 2015, Prague, Czech Republic.

**35.** Arkatkar, A., D., Mishra, P., Mungray., A. K. Effect of enrichment treatment on electron transfer mechanism of MFC inoculum. RECYCLE 2018, International Conference and Waste Management, 22-24 Feb., 2018, IIT Guwahati. JRF, Won Second Prize in Oral Competition.

**36.** Prakash, O., Patel., N., Mungray, A. A., Mungray, A. K. Performance of dual metal oxide coated anodes for benthic microbial fuel cell reactor for bio-electricity generation. RECYCLE 2018, International Conference and Waste Management, 22-24 Feb., 2018, IIT Guwahati.

**(iv) Papers published/presented in National Conference/Seminar: 6**

1. Hussain, A., **Mungray, A.K**., and Kumar, P. Air pollution and its impact on health. All India seminar on air pollution & health impacts, February 23-24, 2006, organized by The Institution of Engineers (India), IITR, India.
2. **Mungray, A. K.** Parikh, P. A. Performance of Monolith Bioreactors in Gas-Liquid-Solid Three-phase Systems: A Review. 23rd National convention of chemical Engineers, Them: Recent trends in Chemical Engineering" at the Institution of Engineers (India), Roorkee, organized by Chemical Engg. Deptt., Indian Institute of Technology (IITR) on 5-7 Oct. 2007.
3. Bajpai, A., Jindal, A., **Mungray, A. K.,** Phytoremediation, an option for tertiary treatment of sewage. National Conference on Sustainable Urban Environment: Issues and Management Strategies, 27-29 Feb. 08, Civil Engg. Deptt, SVNIT, Surat.
4. Prakash, K., **Mungray, A. K.** Murthy, Z.V.P. Performance of Up-Flow Anaerobic Sludge Blanket Reactor in India. National Conference on Sustainable Urban Environment: Issues and Management Strategies, 27-29 Feb. 08, Civil Engg. Deptt, SVNIT, Surat.
5. Kanan, K. P., Mungray, A. A., **Mungray, A. K**. Performance of Anaerobic Dynamic Membrane Bioreactor Treating Domestic Municipal Wastewater. Conference on Technological Advancement in Chemical and Environmental Engineering (TACEE-2012), 23-24 March 2012, Chemical Engineering Department, BITS Pilani, India.
6. Rikame, S. S., Mungray, A. A., **Mungray, A. K**. Power Generation from Food Waste Leachate in Microbial Fuel Cell. Conference on Technological Advancement in Chemical and Environmental Engineering (TACEE-2012), 23-24 March 2012, Chemical Engineering Department, BITS Pilani, India.

**Intellectual Property Rights:** Patent Filed: Indian Patent ***Appendix 3***

**Title: UASB Reactor with Mesophelic Jacket**
Publication date: 29/08/2014
Name of Inventors:(i) Mr. Amol B. Saner
(ii) Dr. Arvind Kumar Mungray, Assistant Professor, Chemical Engg. Department, SVNIT Surat
(iii) Dr. N. J. Mistry (Prof. Civil Engg. Dept., SVNIT Surat.

**Workshops/Summer Schools/ Winter schools/Short term Courses attended: 29**

1. Assistance in the **Short-term course** on Physical, Chemical and Biological Phenomena for WW treatment, sponsored by **CPCB** on November 16-20, 2005.
2. Attended workshop on **Special Assistance for Project Sustainability (SAPS)** study on **Yamuna Action Plan Phase-I** conducted by **NRCD**, Ministry of Environment & Forests in Delhi on 15th December 2005.
3. Participated in **Japan International Cooperation Agency** (**JICA)** sponsored training course on "**Basics of sewage treatment**" from 27th January to 1st February at IIT Roorkee.
4. Participated in the **Indo-Australian Workshop on "CFD Approach on fluid Flow, Heat and Mass Transfer"** and symposium on **"CFD Application in Multidisciplinary Areas**" from 12th -14th April, 2007 at IIT Roorkee, India.
5. Participated in the workshop on **"Opportunities in Catalysis and Adsorptive Separation",** conducted by Chemical Engineering Department, S.V. National Institute of Technology, Surat, from 7th – 11th May, 2007.
6. Participated in a **Short Term course** on **"Hazardous Waste Management",** conducted by Chemical Engineering Department, Indian Institute of Technology Roorkee, Roorkee, One week from 9th – 13th July, 2007.
7. Participated in **Short-Term Course** "**Faculty Induction Programme for newly recruited faculty members."** One week from 15th January, 2008 SVNIT, Surat.
8. Participated in **Short-Term Course "Pedagogy & Research Methology for newly recruited faculty members.**" One week from 3-8 May, 2009 SVNIT, Surat
9. Participated in **Short Term course "Sustainable Water and Waste Management Techniques"** conducted by the Civil Engineering Department, SVNIT, Surat, One week during 27-31 July, 2009.
10. Participated in **Short Term course "Advanced Instrumental Methods of Analysis (AIMA)"** conducted by the Chemical Engineering Department, SVNIT, Surat, One week during 24-28 August, 2009.

**11.** Participated in **Short Term course "Advances in Condensed matter Physics"** conducted by the Department of Applied Physics, SVNIT, Surat, One week during 31- 4 September, 2009.

**12.** Participated in the 3rd **INDO-GERMAN** workshop on **"Management of Water Supply and Wastewater System"** at IIT Bombay during 19-20 November 2009.

**13.** Attended **INDO-Australian** workshop on **"Recent Advances in Wastewater Treatment"** at Institute of Chemical Technology, Matunga, Mumbai during 16-17 December 2009.

**14.** Participated in a **Short-term course** on **"Recent developments and future trends of nanotechnology in modern science",** conducted by Applied Chemistry Department, SVNIT, Surat, One week from 21st – 25th December, 2009.

**15.** Participated in two days national Workshop on "**Natural Energies Conservation and use",** conducted by Hindi cell of SVNIT, Surat, from 29-30 September, 2011.

**16.** Participated in four day International training workshop on **"Environmental Statistics for professionals"** conducted jointly by IIT Bombay and TSEC from 27-30 December, 2011.

**17.** Participated in a one day Workshop on Six Sigma and Statistical analytical toos, Conducted by Department of Chemical Engineering, SVNIT, Surat, on 22nd March, 2013.

**18.** Participated in a one week **Short-term course** on **"Mathematical Statistics for Researchers, Engineers and Scientists (MSFRES)",** conducted by Department of Applied Mathematics & Humanities, SVNIT, Surat, during 2nd – 6th September, 2013.

**19.** Participated in a one week Short-term course on "**Recent Trends in Nanomaterials Synthesis, Characterization and Applications**", conducted by Department of Chemical Engineering, SVNIT, Surat, during 14th – 18th October, 2013.

**20.** Participated in a one week **Short-term course** on **"Nanoscale Integration, Fabrication and Characterization",** conducted by Department of Electronics Engineering, SVNIT, Surat, during 21st – 25th October, 2013.

**21.** Participated in a one week **Short-term course** on **"Green Chemistry and Engineering: Towards a Sustainable Future",** conducted by Department of Chemical Engineering, SVNIT, Surat, during 18 th – 22th November, 2013.

**22.** Participated in a one day Workshop on Comsol Multiphysics Modelling, Conducted by Department of Chemical Engineering, SVNIT, Surat, on 6th December, 2013.

**23.** Participated in a one day TEQIP Sponsored Finishing School on Design of Experiment using the Taguchi method: An Overview, Conducted by Department of Chemical Engineering, SVNIT, Surat, on25th April, 2015.

**24.** Participated in a one week TEQIP-II Sponsored STTP on Design of Experiment and Artificial Neural Network, Conducted by Department of Chemical Engineering, SVNIT, Surat, during 22to 26th June, 2015.

**25.** Participated in a five day TEQIP Sponsored Summer course on Water and Wastewater treatment: Recent advances, Conducted by Department of Civil Engineering, IIT Roorkee, from July 21- to 25, 2015.

**26.** Participated in a one week TEQIP-II Sponsored STTP on Interfacial Engineering and Nanotechnology for Sustainable Environment, Conducted by Department of Chemical Engineering, SVNIT, Surat, during 10 to 14 August, 2015.

**27.** Participated in a one week TEQIP-II Sponsored STTP on Waste Management in Smart Cities, Conducted by Department of Civil Engineering, SVNIT, Surat, during 09 to 13 May, 2016.

**28.** Participated in a Three days Intensive Hindi Training Workshop at Sradar Vallabhbhai National Institute of Technology ( SVNIT), Surat, during 23-25 May, 2016.

**29.** Participated in a ten days GIAN (Global Initiative For Academic Networks) workshop on Environmental Electrochemistry, Conducted by Department of Civil Engineering, IIT Kharagpur, Surat, during 20 to 29 June, 2016.

**30.** Participated in a one week TEQIP-II Sponsored STTP on Particle Technology: Characterization and Modeling of Particulate Materials, Conducted by Department of Chemical Engineering, SVNIT, Surat, during 01 to 05 August, 2016.

**31.** Participated in one day training on "right to information act" at SVNIT Surat on May 12, 2018.

**Memberships in professional bodies: 6**

- Life associate Member in **IIChE (Indian institute of chemical engineers) (LAM- 29862)**
- Life associate Member in "**The Institution of Engineers (India)". (AM-093702/1)**
- Life Member in **"Indian Society of Technical Education" (LM 52069)**
- Life Member in **"Indian Water Resources Society" (LM-07-6952)**
- Life Member in **"Indian Environmental Association" (LM-128)**
- Fellow Membership (**F.I.C.C.E.)** in "**International Congress of Chemistry and Environment" FW/A/5055**

**International Recognition:**

- Advisory Editorial Board Member of **International Journal of Environmental Sciences (ISSN: 2249-2127)**

- **Paper Reviewer in International Journals**

(i) Journal of Hazardous Material (Elsevier) (4)
(ii) Desalination and Water Treatment Science and Engineering (Desalination Publications International Science Services) (1)
(iii) Water Science and Technology (IWA, Elsevier 1)
(iv) CLEAN –Soil, Air, Water (Wiley)
(v) Desalination (Elsevier) (3)
(vi) Environmental Technology, Taylor & Francis (2)

(vii) Environmental Progress and Sustainable Energy, Wiley Publications (1)
(viii) Bioresouce Technology, Elsevier (1)
(ix) Marine Environmental Research, Elsevier (2)
(x) Journal of the Taiwan Institute of Chemical Engineers Elsevier (1)
(xi) Environmental Progress (1)
(xii) Ecotoxicology and Environmental Safety Elsevier (2)
(xiii) African Journal of Environmental Science and Technology (1)
(xiv) Brazilian Journal of Chemical Engineering (1)
(xv) Journal of the Taiwan Institute of Chemical Engineers, Elsevier (1)
(xvi) Journal of Renewable and Sustainable Energy (1)
(xvii) Desalination and Water Treatment (4)

- Biographical profile published in the **MARQUIS' Who's Who in the Science and Engineering**, 28th edition, 2011 (Published from New Jersey, U.S.A.).

**Event Organized**:

| Sr. No. | Name of Faculty Member | Name of the associated Faculty Members | Name of Programme | Dates of Programme |
|---|---|---|---|---|
| 1. | Dr. Arvind Kumar Mungray **(Co-Coordinator)** | Dr. H. K. Raval **(Coordinator)** | Faculty Induction Programme for newly recruited faculty | One week from 15th January, 2008 |
| 2. | Dr. Arvind Kumar Mungray **(Coordinator)** | Dr. N. J. Mistry **(Coordinator)** Dr. Z. V. P. Murthy **(Co-coordinator)** Dr. M. Chakraborty **(Co-coordinator)** Dr. Alka A. Mungray **(Co-coordinator)** | AICTE approved STTP on "Treatment and Disposal of Wastewaters" | One week from 5th -9th October, 2009 |
| 3. | Dr. Arvind Kumar Mungray **(Coordinator)** | Dr. Z. V. P. Murthy **(Coordinator)** Dr. N. J. Mistry **(Co-coordinator)** Dr. M. Chakraborty **(Co-coordinator)** Dr. Alka A. Mungray **(Co-coordinator)** | AICTE approved STTP on Anaerobic Digestion of Wastewaters | One week from 22th – 26th February 2010 |

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|---|---|---|---|---|
| 4. | Dr. Arvind Kumar Mungray **(Coordinator)** | Dr. Alka A. Mungray **(Coordinator)** Dr. Z. V. P. Murthy **(Coordinator)** | TEQIP-II Sponsored Workshop on " Nanotechnology and its application" | Three days from 19th to 21st April, 2013 |
| 5. | Dr. Arvind Kumar Mungray **(Coordinator)** | Dr. Alka A. Mungray **(Coordinator)** Dr. Z. V. P. Murthy **(Coordinator)** | TEQIP-II Sponsored Workshop on " Advances on wastewater treatment and energy generation" | One week from 30th Sept. – 04th Oct., 2013 |
| 6. | Dr. Arvind Kumar Mungray **(Coordinator)** | Dr. Alka A. Mungray **(Coordinator)** | Self Sponsored "Waste to Wealth: Fundamentals & Hands on Experience" | One Week from 26th to 30th September 2016 |
| 7. | Dr. Alka A. Mungray **(Coordinator)** | Dr. Arvind Kumar Mungray **(Coordinator)** | Self Sponsored "Advances in Membrane Developments & Hand on Experience" | One Week from 17th to 21st October 2016 |

**Awards Received**

- GATE Scholarship, University Grants Commission, 2000-2002
- MHRD Scholarship, Ministry of human resources & development, from 2002.
- First Prize (Trophy + 5000/- Rs.) in Poster Competition held at Mumbai organized by IIChE in an International Conference on **"E-Waste Management in India A Sustainable Solution".**
- "**Young Engineers Award**" 2011 from Institution of Engineers India.
- Third prize in Vishav Ekta Race organized by Hindi Cell in SVNIT Campus.

**Ph.D. Supervision:** 10

| Sr. No. | Name of Student | Year of registration | Ph.D topic | Supervisor | Co-Supervisor (if any) | Status |
|---|---|---|---|---|---|---|
| 1 | Mr. Amol Balasaheb Saner (PEC) | Jan. 2010 | Treatment of Distillery Wastewater in UASBR and its Post treatment by MFC | Dr. N. J. Mistry | **Dr. Arvind Kumar Mungray** | **Completed** |
| 2 | Mr. Tushar Yadav (FIR) | July, 2012 | Toxicity and Dispersion Characteristics of Nanomaterials and their Antimicrobial applications | **Dr. Arvind Kumar Mungray** | Dr. Alka Mungray | **Completed** |

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|---|---|---|---|---|---|---|
| 3 | Mr. Satish Rikame (PEC) | July, 2013 | Electricity generation and metal recovery from wastewater using microbial fuel cell | Dr. Alka Mungray | **Dr. Arvind Kumar Mungray** | **Completed** |
| 4 | Mr. Priyakant Pushkar (FIR) | Dec. 2013 | Performance evaluation of Microbial fuel cells | **Dr. Arvind Kumar Mungray** | -------- | On-going |
| 5 | Mrs. Ambika Arkerkar (PPF) | May, 2015 | Study of Microbial Consortia in Microbial Fuel Cell | **Dr. Preeti Mishra, VNSGU** | **Dr. Arvind Kumar Mungray** | On-going |
| 6 | Mr. Suransh Jain (PPF) | Aug. 2017 | Integration of Septic Tank and MFC: a Novel Hybrid System for Sustainable Treatment of Domestic Wastewater | **Dr. Arvind Kumar Mungray** | ---------- | On-going |
| 7 | Alok Kumar Tiwari (D17CH007) | Aug. 2017 | Electrode modification and stacking of Microbial Fuel cell | **Dr. Arvind Kumar Mungray** | Dr. Alka Mungray | On-going |
| 8 | Chhatbar Monali Mahendrabhai (D18CH006) | Aug 2018 | Microbial Electrolysis cell | Dr. Arvind Kumar Mungray | Dr. Alka A. Mungray | On-going |
| 9 | Patel Asfak Yunus (D18CH002) | Aug. 2018 | Osmotic Microbial fuel cell | Dr. Alka A. Mungray | **Dr. Arvind Kumar Mungray** | On-going |
| 10 | Bhagat Mandar Suresh (D18CH008) | Aug. 2018 | Recovery of potable water from sewage | Dr. Alka A. Mungray | **Dr. Arvind Kumar Mungray** | On-going |

**<u>M.E./M.Tech. Dissertations Guided</u>: 19**

| Sr. No. | Name of Student | Year of Completion | Thesis Title | Supervisor | Co-Supervisor (if any) |
|---|---|---|---|---|---|
| 1 | Mr. Prakash Konakala | 2007 | To evaluate the performance of tertiary treatment in a full scale up-flow anaerobic sludge blanket (UASB) based sewage treatment plant | Dr. Z. V. P. Murthy | **Dr. Arvind Kumar Mungray** |
| 2 | Ms. Khushbu Patel | 2009 | Removal of Pathogens and Nutrients in up-flow anaerobic sludge blanket (UASB) based | **Dr. Arvind Kumar** | _____ |

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|---|---|---|---|---|---|
| | | | sewage treatment plants | **Mungray** | |
| 3 | Mr. Ashwin Tirpide | 2010 | Degradation of 2,4 Dichlorophenol by sequential anaerobic and aerobic processes | **Dr. Arvind Kumar Mungray** | _____ |
| 4 | Mr. Aantaram N. Sarve | 2010 | Carboxylation of Toluene using $CO_2$ | **Dr. Arvind Kumar Mungray** | Dr. Pradip Munshi<br>Dr. M. Chakraborty |
| 5 | Ms. Abhilasha P. Dixit | 2010 | Degradation of Phenolic compounds in wastewaters using advanced oxidation processes | Dr. M. Chakraborty | **Dr. Arvind Kumar Mungray** |
| 6 | Mr. Swarup Biswas | 2011 | Post treatment of UASB effluents by sand and activated carbon based filters | **Dr. Arvind Kumar Mungray** | _____ |
| 7 | Mr. Shrirang V. Kulkarni | 2011 | Removal of heavy metals by micellar enhanced ultrafiltration | Dr. Alka A. Mungray | **Dr. Arvind Kumar Mungray** |
| 8 | Ms. Ishani K. Shah | 2011 | Effect of aeration on UASB effluent for pathogen removal: A study | Dr. N. J. Mistry | **Dr. Arvind Kumar Mungray** |
| 9 | Ms. Shilpa Nandwani | 2011 | Experimentation and optimization of advanced oxidation processes | Dr. M. Chakraborty | **Dr. Arvind Kumar Mungray** |
| 10 | Mr. Jeet Trivadi | 2012 | Coupling of ultrasound as a pretreatment and post treatment to a UASB reactor for the removal of Bisphenol A | Dr. M. Chakraborty | **Dr. Arvind Kumar Mungray** |
| 11 | Mr. Satish S. Rikame | 2012 | Electricity generation from acidogenic food waste leachate using dual chamber mediator less microbial fuel cell | Dr. Alka A. Mungray | **Dr. Arvind Kumar Mungray** |
| 12 | Mr. K. P. Kannan | 2012 | The effect of ultrasound on the performance of anaerobic dynamic membrane bioreactor treating municipal wastewater | Dr. Alka A. Mungray | **Dr. Arvind Kumar Mungray** |
| 13 | Mr. Manoj J. Kanade | 2012 | Treatment of combined textile and domestic wastewater in an up-flow anaerobic sludge blanket reactor | **Dr. Arvind Kumar Mungray** | _____ |
| 14 | Mr. Pragneshkumar D. Chaudhary | 2012 | Anaerobic digestion of lignocellulosic wastes | **Dr. Arvind Kumar Mungray** | _____ |
| 15 | Priyakant Pushkar | 2013 | Bio-electricity generation and wastewater treatment of real textile wastewater and domestic wastewater by novel cross-link microbial fuel cell | **Dr. Arvind Kumar Mungray** | _____ |
| 16 | Nutan Paliwal | 2013 | Valorization of industrial and urban wastes with emphasis on chemical recycling of | **Dr. Arvind Kumar** | _____ |

| | | | | | |
|---|---|---|---|---|---|
| | | | poly(ethylene tetrephthalate | **Mungray** | |
| 17 | Vijay Thakre | 2014 | Performance enhancement of cross-linked microbial fuel cell for wastewater treatment and bioelectricity generation. | **Dr. Arvind Kumar Mungray** | ---------- |
| 18 | Sandeep Dharmadakhari | 2014 | Modification in proton exchange membranes for Microbial fuel cells (MFC). | **Dr. Arvind Kumar Mungray** | Dr. Alka A. Mungray |
| 19 | Pradeep Kumar | 2015 | Microbial Fuel Cell: Effects of Electrolyte pH and Electrode Modification on Power Generation | **Dr. Arvind Kumar Mungray** | ---------- |
| 20 | Rajnish Raj | 2016 | Peat Treatment of septic tank effluent | **Dr. Arvind Kumar Mungray** | ---------- |
| 21 | Needhi Meshram | 2017 | Low cost blended earthen membranes using montmorillonite and vermiculite to enhance performances of Microbial fuel cell | **Dr. Arvind Kumar Mungray** | Dr. Alka A. Mungray |
| 22 | Mohammad Imran Anees Ahmad | 2018 | Power enhancement in BMFC by electrode modification | **Dr. Arvind Kumar Mungray** | ------- |

**Expert lecture Delivered**

i. Expert lecture on Wastewater treatment by using UASB reactors at N. G. Patel Polytechnic, Bardoli- Navsari road, Surat.

ii. Expert lecture on Post treatment of UASB effluents in AICTE approved STTP **"Sustainable Water and Waste Management Techniques"** conducted by the Civil Engineering Department, SVNIT, Surat, One week during 27-31 July, 2009.

iii. Expert lecture on "Need of tertiary treatment for anaerobic wastewater treatment" in AICTE approved STTP **"Treatment and Disposal of Wastewaters"** conducted by Chemical and Civil Engineering Department, SVNIT, Surat.

iv. Expert lecture on "Anaerobic treatment of wastewaters" in AICTE approved STTP **"Anaerobic Digestion of Wastewaters"** conducted by Chemical Engineering Department, SVNIT, Surat.

v. Expert lecture on "**Sustainable solution for wastewater treatment**" at Kribkho.

vi. Expert Lecture at Center for Environment Research, Vidyabharti Institute of Technology and Research Centre on "**Wastewater treatment and reuse"**

vii. Expert Lecture on "Need of Nanotechnology in efficient wastewater treatment and energy generation" in TEQIP-2 sponsored workshop on **"**Nanotechnology applications in Engineering & Technology**"** conducted by Chemical Engineering Department, VNIT, Nagpur during 15th – 17th February, 2013.

viii. Expert Lecture on "Nanotechnology: Need and effects" in TEQIP-2 sponsored workshop on **"Nanotechnology Applications for Sustainable Development"** conducted by Chemical Engineering Department, SVNIT, Surat during 19th – 21st April, 2013.

ix. Expert Lecture on "Impact of Nanoparticles on biological wastewater treatment systems Nanotechnology: Need and effects" in TEQIP-2 sponsored workshop on **"Nanotechnology Applications for Sustainable Development"** conducted by Chemical Engineering Department, SVNIT, Surat during 19th – 21st April, 2013.

x. Expert Lecture on "Sustainable Solutions for Green Energy" in TEQIP-2 sponsored workshop on **"Advanced Materials, Characterization and applications in Materials Science and Engineering"** organized by Department of Applied Chemistry, SVNIT, Surat during 2nd – 6th September, 2013.

xi. Expert Lecture on "Treatment of wastewater by UASB and its post treatment" in TEQIP-2 sponsored workshop on **"Advances on Wastewater Treatment and Energy Generation"** conducted by Chemical Engineering Department, SVNIT, Surat during 30th Sept. – 04th Oct., 2013.

xii. Expert Lecture on "Microbial Fuel Cell technology for waste to energy application" in TEQIP-2 sponsored workshop on **"Advances on Wastewater Treatment and Energy Generation"** conducted by Chemical Engineering Department, SVNIT, Surat during 30th Sept. – 04th Oct., 2013.

xiii. Expert Lecture on "Water Pollution and control" at Pacific school of Engineering Surat on 24/01/2014.

xiv. Expert lecture on "Integrated planning of sustainable wastewater management" at Civil Engineering Department, IIT Roorkee on 23/07/15.

xv. Expert lecture on "Waste to Energy: A sustainable approach" at Chemical Engineering Department under a TEQIP sponsored STTP on Carbon Neutral Energy Sources from 9 – 13th May, 2016.

xvi. Expert lecture on "Sustainable approaches in wastewater treatment: Microbial fuel cell" at Civil Engineering Department under a TEQIP sponsored STTP on Recent Advances in Waste Management from 23 – 27th Jan., 2017.

xvii. Expert lecture on "Source separation: A sustainable for effective wastewater treatment" at Chemical Engineering Department under a TEQIP sponsored STTP on Advances in Separation Technology from 8th – 13th January, 2018 at Shri Guru Govind Singhji . Institute of Engineering & Technology, Nanded, MP.

xviii. Expert lecture on "Sustainability in wastewater water treatment: Microbial Fuel cell" at Civil Engineering Department under AICTER-ISTE approved STTP on "Smart and sustainable cities: A mission toward smart India" from 4 to 9 June

2018 at Sandip Institute of Engineering & Management Nashik.

**Administrative Responsibilities**

a. Professor In-Charge SVPB Guest House from 2017 to till date.
b. Chief Warden of Narmad Bhavan in S.V. National Institute of Technology, Surat (2015 to till date)
c. Hostel Warden of Hostel 2nd (Narmed Bhavan) in S.V. National Institute of Technology, Surat (2007-2008 & 2008-2009).
d. Hostel Warden of Hostel 10 (Raman Bhavan) in S.V. National Institute of Technology, Surat (2009-2011).
e. Chief Warden of Hostel 1 (Bhabha Bhavan of 800 capacity) in S.V. National Institute of Technology, Surat (2011-2012).
f. Departmental Post Graduate programme In-Charge (M.Tech. Research programme) (2007-2008 & 2008-2009).
g. Departmental Coordinator of Technical Education Quality Improvement Programme (TEQIP) (2007-2008 &2008-09).
h. Member of mess tender committee (2007-2008).
i. Member of Institute Software Development and Implementation. (2008 - 2009).
j. Member of Institute furniture procurement committee (2007-2008 & 2008 -2009).
    i. Member Secretary for the procurement of Class Room Boards & Display System for SVNIT, Surat.
    ii. Member Secretary for the procurement of Class Room Benches for SVNIT, Surat.
    iii. Member Secretary for the procurement of Gym Equipments for SVNIT, Surat.
    iv. Member for the procurement of Faculty Furniture for SVNIT, Surat.
k. Member of hostel admission committee (2007-2008).
l. First year Divisional Coordinator of Division A (2008-2009 & 2009-2010)
m. B. Tech. Final Year Faculty advisor (2008-2009 & 2009-2010)
n. In-charge Head of the Department (23-05-09 to 15-06-09)
o. Departmental Post Graduate Program In-Charge (M.Tech. program) (2010-2011).

**Official Address**

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247667.