

SANIGDHA ACHARYA

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EDUCATIONAL QUALIFICATIONS

- Pursuing PhD from Guru Gobind Singh Indraprastha University, Dwarka, Delhi
- M.E. with distinction (Chemical Engineering) from Deptt. of Chemical Engineering & Technology, Panjab University, Chandigarh.
- B.Tech. honors, Silver medal, (Chemical & Bio Engineering) from Deptt. Of Chemical & Bio engineering, Regional Engineering College (Now NIT), Jalandhar.
- Scholarship for merit in all the four years of college.
- Class X & XII from A.P.J. School, Jalandhar

PhD Topic

Electrocoagulation treatment of groundwater

M.E. Thesis Topic

Determination of viscosity, Density, Ultrasonic Velocity and excess properties of
3-Pentanone – Ethylbenzene and 3-Pentanone – o-Xylene Systems at 293.15, 303.15, 313.15K

WORK EXPERIENCE

- Presently working as **Assistant Professor** in University School of Chemical Technology in **Guru Gobind Singh Indraprastha University, Delhi** since **August, 2003**
- Worked as lecturer in Chemical Engg. Dept of IITT College of Engineering, Nawahsher, Punjab from February 18, 2002 till July 2003.
- Worked as lecturer in Shaheed Bhagat Singh College of Engg & Technology, Ferozpur from August 13, 99 till May 5, 2000

TEACHING EXPERIENCE

Teaching subjects like Mass transfer, Fluid Mechanics, Chemical process industries, Petroleum Engineering to Undergraduate and postgraduate students.

B.TECH &M.TECH PROJECTS SUPERVISION

Several B.tech & M.Tech projects have been guided till date. Few are

1. Design of a continuous electrocoagulation reactor (Mohit Gupta, 2016-17)
2. Nitrates removal by electrocoagulation from groundwater (Darshan Shree, 2015-16)
3. Design and development of poly vinyl alcohol(PVA) membrane for pervaporation process (Harpreet kaur, 2008-09)

RESEARCH PROJECTS UNDERTAKEN

S.no	Title of the Project	Principal investigator	Year of start and completion	Project cost	Name of sponsoring organization
1	Comparative study of chemical coagulation and electrocoagulation for groundwater	Sanigdha Acharya	2016-17	2 lakh	GGSIPIU, Delhi
2	Electrocoagulation process for removal of nitrates from aqueous solutions	Sanigdha Acharya	2017-2018	1.8 lakh	GGSIPIU, Delhi
3	Effect of coexisting ions on denitrification by electrocoagulation of groundwater	Sanigdha Acharya	2018-ongoing	2 lakh	GGSIPIU, Delhi

PUBLICATIONS

1. Sanigdha Acharya, S.K. Sharma and Vinita Khandegar, Assessment of groundwater quality by water quality indices for irrigation and drinking in South West Delhi, India, Data in Brief , 18 (2018) 2019–2028
2. Sanigdha Acharya, S.K. Sharma and Vinita Khandegar, Assessment and Hydro-geochemical characterization for evaluation of corrosion and scaling potential of groundwater in South West Delhi, India, Data in Brief, 18 (2018) 928–938
3. Vinita Khandegar, Sanigdha Acharya, Arinjay K. Jain Data on treatment of sewage wastewater by electrocoagulation using punched aluminum electrode and characterization of generated sludge. Data in Brief, 18 (2018) 1229–1238
4. Rachna Sinha, Garima Chauhan Azad Singh, Arinjay Kumar, Sanigdha Acharya A novel eco-friendly hybrid approach for recovery and reuse of copper from electronic waste Journal of Environmental Chemical Engineering 6 (2018) 1053–1061

5. S. Acharya, S.K. Sharma, V. Khandegar, Hydro Geochemical Assessment of Groundwater Quality in Vicinity of Dwarka, Delhi. *Pollution Research*. 37 (1) (2018) 212-223
6. S. Acharya, S.K. Sharma, G. Chauhan, D. Shree Statistical Optimization of Electrocoagulation Process for Removal of Nitrates Using Surface Methodology. *Indian chemical Engineer*, (2017) DOI: 10.1080/00194506.2017.1365630
7. A. Kumar, V. Khandegar, S. Acharya Study on Removal of Phenol Using Adsorption Process. *Asian Journal of Science and Technology*, 08(10) (2017) 6165-6172.
8. S. Acharya, S.K. Sharma Ground Water Assessment and Its Electro Chemical Treatment, *International Journal of Advanced Technology in engineering and science*, 4 (3) (2016): 21-30. (ISSN: 2348-7550)
9. R. C. Katyal , Sukhmehar Singh , V. K. Rattan , Pawan Kanda , Sanigdha Acharya, 2003, Viscosities ,densities and ultrasonic velocities of 3-pentanone+ethylbenzene and 3-pentanone+o-xylene at 293.15 ,303.15, 313.15K, *J. Chem. Eng. Data*. 48 (5) 1262–1265

CONFERENCES

1. Presented paper “Effect of co-existing ions on denitrification by electrocoagulation of groundwater” at International Research Symposium on Engineering and Technology, 2018 (IRSET-2018) 28-30 August 2018 at Novotel Singapore, Clarke Quay, Singapore
2. Presented paper “Optimization of Electrolyte Concentration on Nitrates Removal from Simulated Groundwater using Electrocoagulation” at International Conference On Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering (EGRWSE-2018) 29-31 March, 2018 at NIT Jalandhar, Punjab
3. Presented paper “Parametric studies on removal of nitrates using electrocoagulation” at National Conference on Clean & Green Energy: The Chemical and Environmental Aspects (NCGE-2017) ” 16-17 feb, 2017 at Bhaskaracharya College of Applied Sciences, Dwarka, Delhi
4. Presented paper “Quality assessment of groundwater-Dwarka, Delhi” at 2nd International conference on Recent advances in bio-energy research, (ICRABR-2016), 25-27, 2016 at SSS National institute of Bio-Energy, Kapurthala , Punjab
5. Mandal U K, Sanigdha Acharya, Harpreet Kaur, Development of PVA membrane for Pervaporation Separation Process, presented in the Conference on Advancement in Chemical Engineering, Department of Chemical Engineering, Thapar University, Patiala, Punjab, 27-28th February, 2009.
6. Mandal U K, Munish Kumar Sharma and Sanigdha Acharya, Modeling and Simulation of PVA based Pervaporation Membrane Separation Process, presented in the National Conference on Chemical Engineering and Environment - Current Trends and Issues, IPS and IES, Department of Chemical Engineering, Indore, 3-4th November, 2006.
7. Mandal U K, Sanigdha Acharya, Aggarwal S, PVA membrane based Pervaporation Separation Process - A Review, presented in the National Conference on Chemical Engineering and Environment - Current Trends and Issues, IPS and IES, Department of Chemical Engineering, Indore, 3-4th November, 2006.

WORKSHOP/FDP/SEMINAR

1. Workshop on “Research methodology and data analysis” USMS, GGSIPU, Delhi 16– 29 December 2016 (Two weeks)
2. Workshop on “Intellectual property rights: culmination of research” Bhaskaracharya College of Applied Sciences, Dwarka, Delhi, 23-24 September, 2016 (Two days)
3. Faculty development programme on “Multidisciplinary approach to research, innovation and development” USLLS, GGSIPU, Delhi, 13 May- 7 June 2015 (Three week)
4. National seminar on “Sustainability of engineering education” NIT, Jalandhar, 26-27 March, 2015 (Two days)
5. Workshop on “Service matters–ccs conduct rules” GGSIPU, Delhi ,24-25, April 2014 (Two days)
6. Staff development program on “Disaster management and mitigation”,Thapar university,Patiala, 28 May-8 June,2012 (Two weeks)
7. Staff development program on “Design & analysis of algorithm” at Thapar University, Patiala, 25 May-6 June, 2008 (Two weeks)
8. National Workshop on “Global opportunities for Chemical Engineers in chemical and allied industries” at GGSIP University, Delhi, 18 April, 2007 (One day)
9. QIP Short term course on “Hydrocarbon engg and management”, REC Jalandhar, 22-26 November, 2007 (One week)
10. ISTE short term course on “Computational fluid flow and heat transfer”, Pune Institute of Engg and Tech, Pune, 3-15 January,2005 (Two weeks)

MEMBER OF VARIOUS SCHOOL LEVEL COMMITTEES

1. School Returning officer for student election (2016-17, 2017-2018, 2018-19)
2. Member of School Research Committee, USCT (2013-14).
3. Member committee(attendance record/lab updation/ website updation)2016-18
4. University representative for CET and end term exams
5. Convener of USCT for Alumni Association (2006-2018)
6. Convener syllabus modification committee (2017-18, 2018-19)

MEMBERSHIP OF SCIENTIFIC / ENGINEERING BODIES

Life member (LM 42051) Indian Society for Technical Education (ISTE)

Life member (LM 55550) Indian Institute of Chemical Engineers (IChE)

Future plans:

To extend the research in the field of Electrocoagulation treatment of groundwater