Name: Dr. Vinita Khandegar

Designation: Assistant Professor

Education: Ph.D. (IIT-Delhi), M.Tech. & B.E. (UEC) in Chemical Engineering

Research Interest: and Expertise: Chemical & Environmental Technology

Future research plan: Electrochemical and Microbial Fuel Cell Technology

Contact: Room No. 007, B-Block, USCT, GGSIPU

Email ID: vinita@ipu.ac.in

Contact no.: 011-25302472 (O)

Teaching courses:

- CT-206: Heat transfer
- BCT-308: Environmental Biotechnology
- CT-201: Chemical Process calculation
- CT-513: Environmental engineering & waste management
- CT-613: Pollution control
- CT-308: Chemical Process Industries
- CT-401 Process Equipment Design

Career profile:

Position	Organization	Duration
Assistant Professor	University School of Chemical Technology, Guru Gobind Singh Indraprastha University, New Delhi.	2014-Present
Assistant Professor	IES-IPS Academy, Indore	2007-2009

M.Tech. M. Tech. and Ph.D. supervision

B.Tech. 10

M.Tech. 2

Reviewer in scientific journals:

- Journal of Environmental Management (Elsevier)
- Environmental Processes (Elsevier)
- Process Safety and Environmental Protection (Elsevier)

Research Publications

[1]. Yadav, A., **Khandegar, V.,** 2019, Data in Brief Dataset on assessment of River Yamuna , Delhi , India using indexing approach. Data Br. 22, 1–10. https://doi.org/10.1016/j.dib.2018.11.130.

[2]. Yadav, A., **Khandegar, V.,** 2019, Dataset on statistical reduction of highly water- soluble Cr (VI) into Cr (III) using RSM, Data in Brief, https://doi.org/10.1016/j. dib.2018.12.054i

[3]. Acharya, S., Sharma, S.K., **Khandegar, V.**, 2018. Assessment of groundwater quality by water quality indices for irrigation and drinking in South West Delhi, India. Data in Brief 18, 2019–2028. https://doi.org/10.1016/j.dib.2018.04.120

[4]. Acharya, S., Sharma, S.K., **Khandegar, V.**, 2018. Hydrogeochemical assessment of ground water quality in vicinity of Dwarka, Delhi. Pollut. Res, 37, 212–217.

[5]. Acharya, S., Sharma, S.K., **Khandegar, V.**, 2018. Assessment and hydro-geochemical characterization for evaluation of corrosion and scaling potential of groundwater in South West Delhi, India. Data in Brief 18, 928–938. https://doi.org/10.1016/j.dib.2018.03.120

[6]. **Khandegar, V.**, Acharya, S., Jain, A.K., 2018. Data in Brief Data on treatment of sewage wastewater by electrocoagulation using punched aluminum electrode and characterization of generated sludge. Data in Brief 18, 1229–1238. https://doi.org/10.1016/j.dib.2018.04.020

[7]. Tyagi, U., **Khandegar, V.**, 2018. Bio-Sorption Potential of V . zizanioides Grass and Roots for the Removal of Cr (VI). J. Sur. Sci. Technol. 34, 19–29. https://doi.org/10.18311/jsst/2018/18036

[8]. Tyagi, U., **Khandegar, V.**, 2018. Biosorption potential of Vetiveria zizanioides for the Removal of chromium(VI) from synthetic wastewater. J. Hazard. Toxic Radioact. Waste 22, 1–11. https://doi.org/10.1061/(ASCE)HZ.2153-5515.0000403

[9]. Kumar, A., **Khandegar, V.**, Acharya, S., 2017. Study on removal of phenol using adsorption process. Asian J. Sci. Technol. 8, 6165–6172.

[10]. **Khandegar, V.**, Saroha, A.K., 2016. Effect of electrode geometry on the performance of electrocoagulation. Int. J. Res. Sci. Eng. 5, 376–379.

[11]. **Khandegar, V.**, Saroha, A.K., 2016. Effect of electrode shape and current source on performance of electrocoagulation. J. Hazard. Toxic Radioact. Waste 20, 1–4.

https://doi.org/10.1061/(ASCE)HZ.2153-5515.0000278

[12]. **Khandegar, V.**, Saroha, A.K., 2014. Treatment of Distillery Spentwash by Electrocoagulation. J. Clean Energy Technol. 2, 244–247. https://doi.org/10.7763/JOCET.2014.V2.133

[13]. **Khandegar, V.**, Saroha, A.K., 2014. Electrochemical treatment of textile effluent containing acid red 131 dye. J. Hazard. Toxic Radioact. Waste 18, 38–44. https://doi.org/10.1061/(ASCE)HZ.2153-5515.0000194

[14]. **Khandegar, V.**, Saroha, A.K., 2013. Electrocoagulation for the treatment of textile industry effluent: A-review. J. Environ. Manage. 128, 949–963. https://doi.org/10.1016/j.jenvman.2013.06.043

[15]. **Khandegar, V.**, Saroha, A.K., 2013. Electrochemical treatment of effluent from small-scale dyeing unit. Ind. Chem. Engineer 5, 37–41. https://doi.org/10.1080/00194506.2013.798889

[16]. **Khandegar, V.**, Saroha, A.K., 2013. Electrocoagulation of distillery spentwash for complete organic reduction. Int. J. ChemTech. Res. 5, 712–718.

[17]. Mahajan, R., **Khandegar, V.**, Saroha, A.K., 2013. Treatment of hospital operation theatre effluent by electrocoagulation. Int. J. Chem. Environ. Eng. 4, 1–4.

[18]. Verma, S.K., **Khandegar, V.**, Saroha, S.K., 2013. Removal of chromium from electroplating industry effluent using electrocoagulation. J. Hazard. Toxic Radioact. Waste 17, 146–152. https://doi.org/10.1061/(ASCE)HZ.2153-5515.0000170

[19]. **Khandegar, V.**, Saroha, A.K., 2012. Electrochemical treatment of distillery spent wash using aluminum and iron electrodes. Chinese J. Chem. Eng. 20, 439–443. https://doi.org/10.1016/S1004-9541(11)60204-8

National and International Conferences

[1]. **Khandegar, V.** and Saroha, A.K. Effect of Electrode Shape and Current Source on Performance of Electrocoagulation, International conference on Recent Innovation in sciences, Engineering and Management (ICRESEM-2016), March 2016, Indian International Centre, New Delhi.

[2]. **Khandegar, V.** and Saroha, A.K. Treatment and cost analysis of distillery effluent by electrochemical technique, National Conference on Innovation and Development in Chemical Technology (IDCT 2014), Feb-28-March 1, GGSIU, New Delhi.

[3]. **Khandegar, V.** and Saroha, A.K. Treatment of distillery spentwash by electrocoagulation, 4th International Conference on Environmental Engineering and Applications (ICEEA - 2013), Aug. 24-25, Singapore.

[4]. **Khandegar, V.** and Saroha, A.K. Electrocoagulation of distillery spentwash for complete

organic reduction. International Conference on Global Scenario in Environment and Energy (ICGSEE-2013), March 14-16, MANIT Bhopal.

[5]. Mahajan, R., **Khandegar, V.** and Saroha, A.K. Treatment of hospital operation theatre effluent by electrocoagulation, 3rd International Chemical and Environmental Engineering Conference (ICEEC-2012), Dec. 21-23 Kuala Lumpur, Malaysia.

[6]. **Khandegar, V.** and Saroha, A.K. Electrocoagulation of distillery spent wash using aluminum and iron electrodes, (CHEMCON-2012), Dec. 27-30, NIT Jalandhar.

[7]. **Khandegar, V.** and Saroha, A.K. Electrocoagulation and coagulation of distillery spent wash effluent, 27th Indian Engineering Congress 2012, Dec. 13-16, New Delhi.

[8]. **Khandegar, V.** and Saroha, A.K. Effluent treatment of small scale dyeing unit by electrochemical process, 4th National Seminar on Recent Approaches in Environmental Sciences (RAES-2012), April 22, Gwalior.

[9]. **Khandegar, V.** Bhardwaj, A. and Saroha A.K. Treatment of textile industry effluent using electrocoagulation, Green Process Engineering (GPE-2011), Dec. 6-8, Kuala Lumpur, Malaysia.

[10]. **Khandegar, V.** and Saroha, A.K. Removal of Acid red 131 dye by electrocoagulation using Al electrodes (CHEMCON 2011), Dec. 27-29, Bangalore.

Sponsored Projects

1. Removal of heavy metals from aqueous environment by batch electrocoagulation process. (FRGS 2016-17, Completed).
2. Application of Electrocoagulation and Adsorption Processes for Treatment of Sewage Wastewater: Mechanistic Aspects, Isotherms, Kinetics and Thermodynamics.
   (FRGS 2017-18, Completed).
3. Characterization and electrocoagulation treatment of River Yamuna: A statistical approach (FRGS 2018-19, ongoing).