

Dr. Sheeja Jagadevan

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EDUCATION

Ph.D. (Engineering Science), University of Oxford, UK- 2011

M.Tech. (Environmental Sc. and Engg.), Indian Institute of Technology, Bombay- 2002

M.Sc. (Environmental Science), Andhra University, Visakhapatnam- 1998

PROFESSIONAL EXPERIENCE

- **Assistant Professor** (2014 - Present): Environmental Science and Engineering, IIT(ISM) Dhanbad
- **Post-doctoral Research Fellow** (2012 - 2013): Civil and Environmental Engineering, University of Michigan, Ann Arbor, USA.
- **University Lecturer** (2004 - 2006): School of Biotechnology and Chemical Engineering, Vellore Institute of Technology, India
- **Research Fellow** (2002 - 2004): National Institute for Interdisciplinary Science and Technology (CSIR), Trivandrum, India.

RESEARCH INTERESTS

- Treatment of industrial wastewater using a combination of physico-chemical and biological processes.
- Advanced oxidation processes for the removal of recalcitrant compounds from industrial wastewater.
- Biological wastewater treatment.
- Remediation of heavy metals.
- Role of methanobactin made by different methanotrophs in controlling the bioavailability of heavy metals in polluted sites.

AWARDS/DISTINCTIONS

- Awarded IIT Bombay Research Paper Award 2011
- Received Faculty for the Future Fellowship - 2010 and 2011
- Awarded Rajit Bhagwati Memorial Gold Medal, IIT, Bombay- 2002.
- Qualified Graduate Aptitude Test in Engineering (GATE-99) in Life Sciences (Score of 98.67, All India Rank-19).
- Qualified NET (for Lecturership / Assistant Professorship) conducted by ASRB (ICAR) - 2001.
- Andhra University topper, M Sc. (Environmental Sciences), 1998.

AFFILIATIONS

Member, Society for Environmental Toxicology and Chemistry (SETAC)

Associate member, The Institution of Chemical Engineers (IChemE)

Life Member, The Indian Science Congress Association.

Life-member, Biotech Research Society of India.

TEACHING EXPERIENCE

Earth System Science (B. Tech 1st yr), Environmental Chemistry (3rd Sem. B. Tech.), Water Resource Planning and Management (5th Sem. B. Tech), Environmental Aspects of Industries (6th Sem. B.Tech.), Environmental Engineering Design I (5th Sem. B. Tech Honours), Environmental Engineering Design II (8th Sem. B. Tech Honours), Environmental Biotechnology (8th Sem. B. Tech), Environmental Engineering I (4th Sem. B. Tech Civil Engineering), Environmental Engineering II (5th Sem. B. Tech Civil Engineering), Instrumental Techniques in Environmental Analysis (1st Sem. M. Tech), Advanced Wastewater Engineering (2nd Sem. M. Tech).

SPONSORED R&D PROJECTS

1. “Development of a low cost technology based on biochar supported green zerovalent iron for arsenic and fluoride removal from water”, (PI), Rs. 32.5 Lakhs, DST, 2020-2023.
2. “Microbial Remediation of Arsenic with Zerovalent Iron”, (PI), FRS, IIT(ISM) Dhanbad, March 2015- February 2018, Rs. 13.22 Lakhs.
3. “Development of Research Laboratory for Advanced Environmental Microbiology and Biotechnology”, DST-FIST, November 2015-Ongoing, Rs. 144 lakhs. (Co-coordinator).
4. Minor Research Project titled “Low-cost defluoridation from groundwater using biochar”, November 2016-April 2017, (PI), Rs. 2 Lakhs.

INSTITUTE LEVEL ROLES

- Member, Senate IIT(ISM) (June 2018- October 2020).
- Member, Dean's Advisory Council (Information Systems)
- Member, Institute Academic Review Committee.
- Member, Institute Monitoring and Review Cell.
- Member, Institute Library Advisory Committee.
- Member, Internal Complaints Committee.
- Member, Environmental Advisory Committee.
- Member, Pharmaceutical Chemistry Coordination Committee.
- Faculty advisor: Quiz Club, Literary Club, Mic Drop Toastmasters Club.
- Warden, Ruby and Rosaline Hostel (March 2015 – May 2018).
- Nominated as nodal faculty to coordinate the Female intake of IIT JEE Advanced.
- Appointed as a Reporting Center User to carry out activities of IIT JEE Advanced Reporting Center 2017, 2018, 2019.
- Member, Innovation Group, IIT(ISM) 2017.
- Represented IIT(ISM) in the JAB sub-committee meeting at IIT-Mandi in July 2017.

DEPARTMENTAL ADMINISTRATIVE ROLE

- Faculty In charge, FIST Lab, ESE.
- Member of moderation board for M. Tech.
- Faculty Coordinator (MIS) PhD students.
- Member, Departmental Postgraduate Committee.
- Member, Departmental Faculty Selection Committee.

Last modified date: 19-02-2021