

# Dr. SAVITHA U. ULAVI

Environmental Engineer with specialization in air quality modeling and climate change

## CONTACT

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## EDUCATION

Ph.D

Indian Institute of Technology  
Madras

Master of Technology

Visvesvaraya Technological  
University

Bachelor's degree

Visvesvaraya Technological  
University

## TECHNICAL SKILLS

AERMOD, HYSPLIT

BASICS OF PYTHON, SPSS

MACHINE LEARNING BASICS

ORIGIN LAB-

LEAN MANUFACTURING

TOOLS

## ACHIEVEMENTS

### Best Paper Award

Indian Institute of Madras-2022  
University of Bangalore -2018

### Best Poster Award

Indian Institute of Delhi- 2017

Presented a research paper at  
University of Aveiro, Portugal

## SUMMARY

Environmental Engineer with diverse experience in academics, research and Industry. Proven record of conducting emission monitoring, audits, and impact assessments for diverse industrial sectors. Strong background in research, data analysis, and policy interpretation, coupled with the ability to translate environmental standards into practical, cost-effective operational strategies. Passionate about advancing environmental performance, compliance, and sustainability in industrial settings.

## CONSULTANCY PROJECT EXPERIENCE

Expert in air quality assessment, environmental compliance, and sustainable industrial operations. Good at interpreting and implementing the Air (Prevention and Control of Pollution) Act, Water (Prevention and Control of Pollution) Act, and Hazardous Waste Management Rules to ensure regulatory adherence and environmental stewardship. Adept at integrating Lean Manufacturing principles to minimize waste generation and enhance resource efficiency.

- ✓ Performed Soil Due Diligence studies for Autoliv India Pvt. Ltd., Mysuru
- ✓ Environmental quality and odor dispersion studies for Chenguang Natural Extracts Pvt. Ltd Gundlepete
- ✓ Developed Haze prediction model using machine learning models DT, XGBOOST, ANN for Chennai city
- ✓ Design of STP and wastewater collection system for KIMS, Koppal
- ✓ 24x7 water supply scheme for Mysore city under JN-NURM Phase II (third party inspection)
- ✓ Design of tertiary treatment plant (20 MLD expandable) for STP in Nagasandra, Bengaluru
- ✓ Performed environmental audit for JSS Law College Mysuru

## WORK EXPERIENCE

Design Engineer, SECON Pvt. Ltd. Bengaluru – Feb – Sept 2011

Assistant Professor, JSSSTU – Sept 2011- Present

## RESEARCH PUBLICATIONS

Savitha Ulavi, Saragur Madanayak Shiva Nagendra (2024)  
'Characterizing Visibility in a Contrasting Climate of Indian Cities'  
Journal of Institution of Engineers, Series A, Springer Publisher  
<https://link.springer.com/article/10.1007/s40030-024-00786-5>

R. Shanmuga Priyan, Savitha Ulavi, Saragur Madanayak Shiva Nagendra (2023)  
'Source Apportionment of Ambient Fine Particle Size Distribution Using Positive Matrix Factorization and Conditional Bivariate Probability Function in a Coastal Urban Area'  
Journal of Institution of Engineers, Series A, Springer Publisher  
<https://link.springer.com/article/10.1007/s40030-023-00739-4>

Savitha Ulavi, Saragur Madanayak Shiva Nagendra (2019),  
Regression Modelling for Predicting Visibility in A Tropical Urban Environment, WIT Transactions on Ecology and the Environment, volume 236, pages 149-157, 10.2495/AIR190151

B Manoj Kumar, Savitha Ulavi, H S Ramesh, G S Asha & Pallavi R (2012)  
'Pre-treatment of coffee pulping wastewater by Fenton's reagent'  
Indian Journal of Chemical Technology, Volume 19, 213-217, NISCAIR periodicals.

## LEADERSHIP SKILLS

Have conceptualized and lead multiple projects and SPOC for National Institute of Disaster Management Delhi and JSSSTU. Lead Co-Ordinator for University Sustainability Cell, JSSSTU.

## GIAN COURSES ATTENDED

Urban Air Pollution, Human Exposure Assessment and Public Policy 7-17th October, 2019 – Peter Orris, University of Illinois Hospital and Health Science System, USA

Atmospheric Aerosol : Optical Properties, composition and climate July 23-28, 2018 held at National Institute of Technology Calicut and Secured A grade

'Fate and Transport of Contaminants in the Environment' 13th - 25th June, 2016

## RESEARCH PROJECT- Ongoing

Design and development of scalable prototype for treating microplastics released from laundry effluents

Funding Agency – JSSSTU Seed Fund

## E-CONTENT DEVELOPED

Video lecture on 'Lifecycle assessment, Circular Economy and climate change' for ESG Certification Course as part of MOU between Scheveran Clean Fix Academy and JSSSTU available on Ibhara Learn App

Video Lecture on 'Environmental Sustainability and Climate Change' offered for Y4G Fellowship by Grassroots Research and Advocacy Movement (GRAAM) on their LMS Platform