

NEWS LETTER – 2021

Vision of the Department:

To produce knowledgeable, skilled and committed Environmental Engineers with adequate input from humanities, science, engineering and technology to effectively tackle the challenging Environmental problems of the contemporary world and to be the **Centre of Excellence** in Environmental Engineering Education, Research and Consultancy.

Mission of the Department:

- To provide quality education through dynamic and up-dated curriculum, and conducive teaching - learning environment for students to excel in their career
- To impart both soft and hard skills through state of the art infrastructural facilities
- To create a pool of competent members of the faculty with commitment to involve in teaching, applied and inter disciplinary research, and consultancy
- To establish a fair and transparent mechanism of assessment and evaluation to develop confidence amongst the stake holders
- To build industry - institute symbiosis and to establish good rapport with alumni

Programme Educational Objectives (PEOs) of the Department:

PEO 1: To produce well informed, efficient and globally acceptable Environmental Engineers with a societal commitment, passion to achieve leadership in their professional career and contribute their services for creating an environmentally sustainable society

PEO 2: To use the advanced laboratory facilities to impart practical exposure, inculcate research and innovative culture amongst the young Engineers and prepare them to effectively solve pollution related issues through economically viable and technically feasible ecofriendly approaches

PEO 3: To establish a healthy and continued relationship with the Alumni, industry and premier organizations for the overall progressive development of the department in particular, and the Institution in general.

Programme Specific Outcomes (PSOs):

PSO1: Graduates gain the knowledge of understanding and applying principles of environmental science and engineering to address contemporary environmental issues.

PSO2: Graduates conceptualize, analyze, plan, design, and prepare drawing and estimates of pollution control and treatment processes/systems, apply statistical tools for data analysis, develop, calibrate and validate pollutants' prediction models.

PSO3: Graduates effectively contribute the knowledge of research, technical, practical and managerial skills with professional ethics to achieve sustainable environment for the societal benefit.

Programme outcomes (POs):

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: The engineer and society: Apply reasoning, informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

PO12: Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Rank Holders...

Batch of 2016 - 2020

B. E.

: Ms. Nithyashree - I rank

: Ms. Shyli S Jain - II rank

: Ms. Bhoomika S - III rank

: Ms. Srivatsa N - IV rank

M. Tech - Env. Engg. -

: Ms. Darshini D. - I rank

M. Tech - Health Science & Water Engg.

: Ms. Aasima Thayyaba - I rank

Feather in the cap...

- Mrs. Vishishtta Nagaraj was awarded Ph.D. on 8th February 2020 at Visvesvaraya Technological University, Belagavi.
- Mr. Srikantha H was awarded Ph.D degree from VTU, Belagavi for his thesis entitled "Treatment of Agri-based Industrial Wastewaters using Electro-chemical Coagulation and nano-sorbents" under the guidance of Dr. S Mahesh, Professor, Department of Environmental Engineering.

In Pursuit of Ph. D...

- Smt. Sahana M

Assistant Professor - registered for Ph.D. under the supervision of Dr. B M Krishna Associate Professor, Department of Environmental Engineering, SJCE under JSS S&T University.

Journals/books Publications

- 1) Bharath M., Krishna B M., and B Manoj Kumar., (2020), Degradation and Biodegradability improvement of the Landfill Leachate using Electrocoagulation with Iron and Aluminum Electrodes – A comparative study”, *Water Practice and Technology*, 15/2, 540-549
- 2) Hanumanthappa Srikantha, Mahesh Shivaswamy and Sahana Mahesh. Batch electrochemical coagulation of real textile wastewater using Cu-SS and SS-Cu electrode combinations and its settleability aspects, *Journal of Water Science and Technology*, 82, 1467 - 1483
- 3) Bharath M., Krishna B M., and B Manoj Kumar., (2020), Degradation and Biodegradability improvement of the Landfill Leachate using Electrocoagulation with Iron and Aluminum Electrodes – A comparative study”, *Water Practice and Technology*, 15/2, 540-549
- 4) Bharath M., Krishna B M., and B P Shivakumar., (2020), “Electrocoagulation Treatment for Removal of Color and Chemical Oxygen Demand in Landfill Leachate using Aluminum Electrode”, *International Journal of Recent Technology and Engineering*, 8, 89-92
- 5) Namratha K. S., Chandrashekar B. (2020), Production of Biodiesel from Waste Cooking oil and Utilization of its By-Product. *International Research Journal of Engineering and Technology (IRJET)*, Volume: 07 Issue: 09, Sep 2020., 1268-1276

Awards and honors received

- 1) Dr. B Manoj Kumar has published a chapter in a book titled *Sustainable Waste Management: Policies and Case Studies*, 2020; Editor: Sadhan Kumar Ghosh; Publisher: Springer Nature Singapore PTE Ltd, Singapore, 2020.
Chapter Title: Waste Management Challenges Due to Tourism un-hilly Areas in India: A Case Study of Chamundi Hills, Mysore
Page: 309 to 320
Authors: Biswajit Debnath, Ananya Ghosh, Madhu Kumar, Azhar Shariff, B. Manoj Kumar and Sadhan Kumar Ghosh
eBook ISBN: 978-981-13-7071-7; Hardcover ISBN:978-981-13-7070-0; DOI: 10.1007/978-981-13-7071-7 Copyright 2020.
- 2) Dr. Sadashiva Murthy B M was Awarded CMI Level 5 Certificate in Management and Leadership by Chartered Institute of Management, London, UK as part of attending AICTE-UKIERI Leadership Development Programme.

- 3) Dr. B. Manoj Kumar, Professor and Head of the department as a resource person gave a webinar on the occasion of 61st birthday of Waterman of India - Dr. Rajendra Singh on 17 August 2020 entitled “Advanced wastewater treatment systems” organized by Vidyavardaka College of Engineering, Mysuru.
- 4) Dr. B. Manoj Kumar, Professor and Head of the department as a resource person gave a lecture on the topic “Safety - Part of Environmental clearance in EIA” in the 1 week online FDP on Quality control and safety in polymer and allied industries conducted by Department of polymer science and technology, JSS S&TU, Mysuru in July 2020.
- 5) Dr. Pushpa Tuppad, Associate Professor as a resource person gave a webinar on Applications of Remote sensing and GIA in Water Resource Engineering and Sustainable Environment conducted by Department of Civil Engineering, BGMIT, Mudhol on 30.09.2020.

Webinars organized

- One Day Webinar on “**Environmental Legislation and Amendments in India**” Held On 22 July 2020 (11 Am To 12.30 Pm, 3 - 4.30 Pm); Speaker - Dr. B. M. Prakash, KSPCB.
- One Day Webinar On “**Multivariate Data Analysis Using SPSS**” Held On 01 August 2020 11.00 - 12.00 Am And 3.00 - 4.00 Pm; Speaker - Vijay More, Associate Manager, Data Analytics Team, Accenture Pvt. Ltd.
- One Day Webinar On “**Sources Emission Monitoring Techniques**” Held On 5th August, 2020.
- One Day Webinar on “**Implication of Law in Environmental Engineering**” Held on 19th August, 2020.
- One Day Webinar On “**Recovery of By-Products/ Untapped Resources and Issues & Challenges in Sludge Management of Sewage Treatment Plants**” Held On 15th September, 2020
- Webinar on 4th August, 2020, 11.00 AM -12.00 noon: speaker: Dr. Deepesh V, Scientist-C, CPCB Bengaluru, **Topic:** An Overview On Indian Environmental Regulatory Framework in Present Context.
- Webinar on 5th August, 2020, 11.00 AM -12.00 noon; speaker: Dr. B.S. Anupama, Scientist C, CPCB, Bengaluru; **Topic:** Water Quality Monitoring Preservation and Analytical Techniques
- Webinar on 5th August, 2020, 3.00PM -04.00 PM; **SPEAKER:** Sri. Karthikeyan S, Scientist C, CPCB, Bengaluru; **Topic:** Source Emission Monitoring Techniques

- Webinar On 6th August, 2020, 11.00 AM -12.00 NOON; **SPEAKER:** Anjana Kumari V Scientist D, CPCB, Bengaluru; Online Continuous Effluent and Emission Monitoring System: Regulatory Perspective
- Webinar ON 6th August, 2020, 3.00PM -04.00 PM; **SPEAKER:** Smt. Poornima B M, Scientist D, CPCB, Bengaluru; Topic: E-Waste (Management and Handling) Rules,2016
- Webinar On 24th August, 2020, 11.00 AM -12.30 noon; **SPEAKER: Dr. Sabita Madhvi Singh, Joint Director, National River Conservation Directorate, Department of Water Resources, RD & GR, Ministry of Jal Shakti, New Delhi;** Topic: River Rejuvenation: Importance And Issues In Context Of Present Scenario And Crisis
- Webinar On 25th August, 2020, 11.00 AM -12.30 NOON; **SPEAKER:** Dr. Ravi, KSPCB, Bengaluru; Topic: Environment V/S Economic Development

Workshops/ finishing schools organized

Sl. No.	Topic	Participating Industries/Organizations (Resource persons)	Date/Duration	No. of Participants
1	2-day workshop on “Hazardous material management and safety in industries”	12 eminent speakers from academia/organizations from India and USA	14th and 15th February, 2020	180
2	2-day workshop on “Integrated Solid Waste Management”	05 eminent speakers from industry/ academia/organizations from India	6th and 7th September, 2020	54

Department Gallery



Department of Environmental Engineering had celebrated “**World Environment Day**” - 2020 on June 5th, Friday in JSS S&TU campus, Mysuru. A webinar was conducted followed by planting of the saplings in the premises of Environmental Engineering department of the campus by the dignitaries.