

5th International Conference on Advances in Water treatment and Management (ICAWTM-26)
Pandit Deendayal Energy University; Gujarat, INDIA, 7-8 March, 2026

Track 1 - Advanced Technologies for Sustainable Wastewater Treatment

Day - 1 (7/03/2026)
Session Time: 14:00 to 17:00
Venue - F-002

Track ID	Author Name	organization	Paper Title
Water-001	Shivam Singh Tomar	IIT Kanpur, Uttar Pradesh	Sustainable Wastewater Treatment Using a Visible-Light-Driven Coiled Flow Inverter Photoreactor
Water-002	Anita Kokate	PDEU, Gujarat	Planetary Boundary LCA of Molasses-Based Bioethanol Production Incorporating Zero Liquid Discharge Wastewater Treatment via
Water-003	Rahul Deharkar	PDEU, Gujarat	Data-Driven Thermo-Economic Assessment of Multi-Effect Distillation Systems Using Ensemble Machine Learning Models
Water-004	Hitesh M Rakhade	Ganpat University	Iron Oxide Nanoparticles Coated with Biodegradable Poly(Glycerol–Citric Acid) based hyper-branched Dendritic structure for Water Desalination
Water-005	Manish Kumar/ MH Ansari	PDEU, Gujarat	Smart Wastewater Treatment Plant: Energy-Efficient using Machine Learning Techniques for Economical and Sustainable Design
Water-039	Dr. Gunjan Thakur	PDEU, Gujarat	Enhancing Urban Water Treatment Governance Using IoT-Driven Monitoring Systems
Water-027	Megha Parmar	PDEU, Gujarat	Waste-to-Resource: Enhanced Performance and Cost-Efficiency of Coal Fly Ash-Derived Zeolite for Water Remediation

Track 2 - AI -ML in Predictive Maintenance of Water Treatment Facilities
Session Time: 14:00 to 17:00

Day - 1 (7/03/2026)
Venue - F-003

Track ID	Author Name	organization	Paper Title
Water-007	Diya Rokadia	PDEU, Gujarat	Machine Learning–Based Prediction of Water Treatment Plant Efficiency
Water-008	Dr. Pali Sahu	Oriental College of Technology, Madhya Pradesh	Employing Sensitivity Analysis Methods to Assess Neural Network Models in Water Quality Prediction
Water-009	Jigna K. Pandya	Dharmsinh Desai University	Hydraulic Simulation of Benchmark Water Distribution Systems Using EPANET 2.2
Water-010	Gunjan Pathak	PDEU, Gujarat	Machine Learning-Based Correlation of Structural and Analytical Parameters with TiO ₂ Photocatalytic Activity towards Dye Degradation
Water-011	Pooja Raval	V.V.P Engineering college, Gujarat	Experimental Investigation of Energy-Efficient Thermo-Hydraulic Performance of Circular Tubes Using Notched Circular Ring Wire Mesh Inserts
Water-012	Garima	IIT Kanpur, Uttar Pradesh	Effect of Ni loading on γ -Al ₂ O ₃ supported catalysts for CO ₂ Methanation
Water-013	Pampana Prasanthia	Sasi Institute of Technology & Engineering, Andhra Pradesh	Integrating Ensemble Learning and Fuzzy Intelligence for Water Quality Index Prediction in the Sutlej River
Water-014	Preksha Patwa	PDEU, Gujarat	Hybrid Statistical–Machine Learning Bias Correction of Historical CMIP6 Wind Speed for Climate Change Impact Assessment

Track 3 - Adsorbents and Bio-Sorption Technologies for Industrial Wastewater Treatment
Session Time: 14:00 to 17:00

Day - 1 (7/03/2026)
Venue - F-004

Track ID	Author Name	organization	Paper Title
Water-015	Rashi Jain	IIT Kanpur, Uttar Pradesh	Phosphorus-doped Graphitic Carbon Nitride-Supported Bimetal Sulphides: A Powerful S-Scheme Redox Photocatalyst
Water-016	Abrar hussain Virani	PDEU, Gujarat	Kinetic Insights into the Adsorption Behavior of Fly Ash–Derived Zeolite for the Removal of Nickel Contaminants Common in Groundwater and Produced Water
Water-017	Nandana R.P. Kumar	PDEU, Gujarat	Coconut Husk as a Sustainable, Low-Cost Bio-Adsorbent for Textile Dye Effluent Treatment
Water-018	Leena Bhangale	Dr. Vishwanath Karad MIT World Peace University, Pune, Maharashtra	Sustainable approach for simulation of heavy metal–bearing suspended solids in oilfield produced water
Water-019	Shivani Narang	PDEU, Gujarat	Synthesis, Characterizations, and applications of BiOBr for photocatalytic degradation of dyes
Water-020	Komal Sharma	Manipal University, Jaipur, Rajasthan	Structural and Surface Engineering of Functionalized Biochar Pellets for Ciprofloxacin Adsorption: A Systematic Study on Mass Transport and Binder Interactions
Water-022	Krupa Majethia	PDEU, Gujarat	A Metal-Free g-C3N4 Fluorescent ON/OFF Sensor for Paraquat Detection in Wastewater via Fe ²⁺ /Ascorbic Acid Modulation
Water-040	Sania Shah/ Nanji J Hadia	PDEU, Gujarat	Hydrogen Production from Seawater and Wastewater: Advancements and Challenges

Track – 4 Green Pathways in Wastewater Treatment and Resource Recovery
Session Time: 9:30 to 12:30

Day - 2 (8/03/2026)
Venue - F-002

Track ID	Author Name	organization	Paper Title
Water-021	Kaushal Kondea	MIT World Peace University, Maharashtra	Study of Biochar and Metal Organic Framework (MOF) composites for removal of Heavy Metals from Rural Household Sewage Streams
Water-023	Narasimha Reddy Ravuru	Institute of Technology, Nirma University, Gujarat	Experimental Analysis of Industrial Wastewater Treatment Using Natural Adsorbents
Water-024	Pushprajsingh Deora	PDEU, Gujarat	Biomass Torrefaction for Sustainable Low-Carbon Energy Systems
Water-025	Abhishek Maled	PDEU, Gujarat	Diffusion-Controlled Silver Metal Recovery from Acidic Aqueous Photovoltaic Recycling Effluents for Photonic Applications
Water-026	Neeta Maheshwari	PDEU, Gujarat	Synthesis and characterization of polyaniline for the remediation of chromium from aqueous solution
Water-006	Arjun Prajapati/ Vishwa joshi	PDEU, Gujarat	Advanced Engineering of Nanocomposite-Functionalized Biofiltration (Poster)

Track – 5 Technologies and Innovations for the Management of Water Resources**Session Time: 9:30 to 12:30****Day - 2 (8/03/2026)****Venue - F-003**

Track ID	Author Name	organization	Paper Title
Water-028	Abhishek Kumar	Patna University, Patna, Bihar	Geochemical Prospectivity and Hydrochemical Characterization of the Rajgir Geothermal System, Eastern India
Water-029	Dr. Milan kumar Bhatt	PDEU, Gujarat	Water Management Innovations In Swimming Pools: Health, Hygiene, And Performance Implications For Athletes
Water-030	Sajeesh A. K.	NIT MIZORAM, MIZORAM	Comparative Analysis of Water Quality and Seasonal Variability in Three Major Rivers of Malappuram District, India
Water-031	Somesh Saini	PDEU, Gujarat	Hydrogeochemical Controls on Uranium Occurrence in Groundwater: Implications for Safe Drinking Water Management
Water-032	Prof. Nigam Dave	PDEU, Gujarat	Indigenous Rainwater Harvesting and Groundwater Storage Practices in Ahmedabad Pols: Lessons for Sustainable Urban Water Management
Water-033	Jinal Nishant Shastri	The Maharaja Sayajirao University of Baroda, Gujarat	Multi-Metric Performance Evaluation of Gridded Soil Moisture Models for Sustainable Agricultural Water Management in a Semi-Arid Region of India
Water-034	Dr Nitesh Tripathi	PDEU, Gujarat	Weaving Water Conservation Messages: A Reception Analysis of Selected Indian advertisements
Water-035	Dr. A. L. Guruji	Polytechnic, The M.S.University of Baroda, Gujarat	Future Trends in Water Security Using Rainwater Harvesting Techniques

Track – 6 Challenges and Opportunities: Wastewater Treatment
Session Time: 9:30 to 12:30

Day-2 (08/03/2026)
Venue - F-003

Track ID	Author Name	organization	Paper Title
Water-036	Dr Shilpesh Rana/ S. D. Malakiya	M.S.U. of Baroda, Gujarat	Rx5day (mm) and PR \geq 1.0 mm Trend Analysis of Agroclimatic Zone – II of Gujarat State (online)
Water-037	Lekshmi S	Amrita Vishwa Vidyapeetham, Kerala	Marigold-Mediated Removal of Toxic Heavy Metals: Mechanisms and Environmental Implications (online)
Water-038	Kalpesh Chavan	SVKM Institute of Technology, Maharashtra	Hybrid AI–ML Framework for Water Quality Index Prediction in Indian Rivers (Online)
Water-041	Om Deshmukh	PDEU, Gujarat	Applied Machine Learning to Predict Water Safety
Water-042	Dr Shanal Kumar, Prayag Ashok Patel	PDEU, Gujarat	Pilot-Scale Study of Electrocoagulation for Recycling Metal Cleaning Effluent: Removal of Surfactants, Heavy Metals, suspended colloids and Turbidity
Water-043	Shlok Pandya	PDEU, Gujarat	Data-Driven Climate Forecasting for Water Resource Planning in Gujarat
Water-044	Manish Kumar	PDEU, Gujarat	Bayesian and Probabilistic Safety Analysis of Groundwater Contamination Risk in Uranium Open-Pit Mines
Water-45	Manish Kumar	PDEU, Gujarat	Bayesian artificial neural network for Probabilistic Safety Analysis of Pressurised water reactor