

**Report on**  
**National Workshop cum Training Programme**  
**on**  
**“Accelerating sustainable development through**  
**innovative water management strategies”.**

**March 22-23, 2024**

**Organized by**

**Amity University of Environmental Sciences (AIES), Amity University, Uttar Pradesh, Noida, UP-201313, India**

**On the occasion of 27<sup>th</sup> World Water Day (22<sup>nd</sup> March 2024)**

**(Theme: Leveraging water for peace)**

The "National Workshop cum Training Programme on Accelerating Sustainable Development Through Innovative Water Management Strategies" was held on March 21-22, 2024, at Amity University of Environmental Sciences (AIES), Amity University, Uttar Pradesh. This workshop was organized to mark the 27th World Water Day on March 22, 2024, with the theme "Leveraging Water for Peace." The event took place in the F1 Seminar Hall and brought together experts, researchers, and students to discuss and promote sustainable water management practices.

The primary objective of the two-day activity-based workshop was to provide an opportunity for academicians, researchers, practitioners, policy makers, and research scholars to share and discuss ideas and practices across a range of empirical, theoretical, practical, technical, and applied approaches to deal with the water crisis. Additionally, the workshop aimed to raise mass awareness and build capacity for the nation, developing an eco-youth brigade to create public awareness through various competitions such as poster making, debate competition. The major objective was to shed light on the present status of water conservation practices and propose practical sustainable solutions to secure clean freshwater, a critical goal of SDG2030.



The inaugural session began with the invocation and lighting of the lamp, symbolizing the commencement of the workshop. Dr. Richa Nagar, Assistant Professor-III, AIES, Amity University, introduced the workshop, highlighting its objectives and the critical need for innovative water management strategies to achieve sustainable development goals. She emphasized the workshop's aim to explore and discuss innovative strategies for water management that support sustainable development and promote peace. Dr. Nagar stressed the importance of interdisciplinary research and the role of academia in fostering new approaches to water management.

Dr. Renu Dhupper, Assistant Director, AIES, AUUP, delivered the welcome address, emphasizing the importance of water conservation and management in the context of environmental sustainability. She highlighted the workshop's objective to provide training on advanced water management techniques and to promote interdisciplinary research and collaboration. Dr. Dhupper also underscored the need to engage the community in discussions about water conservation and sustainable practices, aligning with the broader goals of SDG2030.



Following this, Prof. Tanu Jindal, Director AIETSM, AUUP, addressed the gathering, providing insights into the significance of the workshop. Prof. Jindal elaborated on the themes of the workshop, which included the water scarcity status of India, groundwater pollution and recharging, wastewater treatment, watershed management, bioremediation of water toxicants, sustainable management practices of water sources, environmental laws and governance, and the reuse of treated water.



Prof. D. K. Bandyopadhyay, Mentor, Amity Institute of Environmental Sciences, Amity University Uttar Pradesh, shared his thoughts on the mentorship and guidance provided by the institute,

stressing the importance of interdisciplinary research and collaboration in addressing water management challenges and the role of the Amity Institute of Environmental Sciences in fostering research and education in environmental sciences. He discussed the objective of engaging the community in discussions about water conservation and sustainable practices and highlighted the importance of fostering an eco-youth brigade to create public awareness through various competitions and activities.

Prof. (Dr.) Balvinder Shukla, Vice Chancellor, Amity University Uttar Pradesh (AUUP), spoke about the university's commitment to sustainable development and innovative research in water management. She highlighted the various initiatives undertaken by the university to promote environmental sustainability and the role of academic institutions in driving positive change. Dr. Shukla emphasized the importance of identifying opportunities and recent strategies for mitigating and managing water bodies to alleviate water crises.

The special address was delivered by Mr. Maneesh Jaiswal (IES), Director, Central Water Commission, Ministry of Jal Shakti, DoWR, RD&GR, New Delhi. He discussed the national water policies and initiatives aimed at improving water management and conservation in India. Mr. Jaiswal emphasized the importance of integrated water resource management and the need for coordinated efforts between different stakeholders. He also highlighted the importance of understanding sanitation and hygienic practices in the country and developing strategies to address these issues effectively.

The inaugural address was given by Dr. Brijesh Yadav, Professor & Head, Department of Hydrology, IIT Roorkee. He focused on the latest hydrology research and water resource management techniques. Dr. Yadav highlighted the critical challenges in water management, including groundwater depletion and pollution, and proposed innovative solutions to address these issues. He discussed the significance of identifying various water resources and the importance of surface/groundwater for human survival.

Dr. Richa Nagar, Assistant Professor, AIES, Amity University, concluded the inaugural session with a vote of thanks, expressing gratitude to all the speakers and participants for their contributions and engagement.

After a lunch break, the plenary sessions began. Dr. Manish Gupta, Scientist E at the Central Soil and Materials Research Station (CSMRS), delivered an insightful presentation on innovative soil and water conservation techniques. Concurrently, a poster competition on "Water Scarcity and Pollution" and a debate competition on "Traditional vs Modern Water Conservation Techniques and Practices" were held, engaging participants in discussions and presentations on these critical topics.

Dr. Sridebi Basu, Founder of Save Earth Consultancy, presented on community-based water management strategies, emphasizing the role of local communities in water conservation and sustainable practices. Her session highlighted successful case studies and models that can be replicated in different regions. Dr. Basu also discussed threats to groundwater, such as overuse, salinity, and nonpoint source pollution from agricultural activities.

Dr. Sandeep Kumar Shukla, Scientist at the Central Water Commission, New Delhi, discussed policy frameworks for water resource management. He outlined the key challenges in implementing water policies and proposed strategies to overcome these obstacles, emphasizing the need for strong governance and community involvement. Dr. Shukla highlighted the importance of understanding groundwater/surface water modeling and the conflicts at the urban-rural interface.

The first day concluded with a vote of thanks by Dr. Richa Nagar, Assistant Professor, AIES, Amity University, who appreciated the active participation and valuable contributions of all attendees.

The second day of the workshop began with a plenary session featuring Dr. V.N. Singh, Scientist at Sri Ram Institute, Delhi. Dr. Singh discussed advanced research in water quality and purification, focusing on the latest technologies and methodologies for ensuring safe and clean water. He emphasized the importance of water and wastewater treatment and reuse to reduce impacts on ground and surface water.

Dr. Arohi Dixit, Assistant Professor at Galgotia College of Engineering and Technology, presented on technological innovations in water management. She highlighted the potential of new technologies to enhance water conservation and management practices, providing examples of successful implementations. Dr. Dixit also discussed entrepreneurship, gender, and governance in the groundwater crisis and water security.

Dr. Sameer Vyas from the Central Soil and Materials Research Station, New Delhi, shared insights on soil-water interaction and its implications for sustainable agriculture. He discussed the importance of understanding soil properties and water dynamics to optimize agricultural practices and improve water use efficiency.

Dr. Richa Nagar, Assistant Professor, AIES, Amity University, provided a vote of thanks, concluding the plenary sessions and expressing appreciation for the engaging discussions and knowledge shared by the speakers.

The valedictory session began with an invocation and the lighting of the lamp, followed by a welcome address by Dr. Renu Dhupper, Joint Coordinator, AIES, AUUP. Dr. Richa Nagar, Assistant

Professor-III, AIES AUUP, then presented the workshop report, summarizing the key discussions, outcomes, and recommendations from the two-day event.

Prof. D. K. Bandyopadhyay shared his thoughts on the workshop's impact and future directions for research and collaboration in water management. He emphasized the need for continued efforts and partnerships to achieve sustainable water management goals.

Prof. (Dr.) Balvinder Shukla, Vice Chancellor, AUUP, addressed the gathering, reiterating the importance of sustainable water management and the university's commitment to supporting research and innovation in this field.

The special address was delivered by Dr. Bhupinder Singh, Sr Scientist, IARI. He highlighted the government initiatives and support for water conservation, encouraging participants to actively engage in efforts to improve water management practices.



Certificates were then distributed to participants, recognizing their contributions and participation in the workshop. Dr. Anamika Shrivastava concluded the workshop with a vote of thanks, expressing gratitude to all speakers, participants, and organizers for making the event a success.



The workshop successfully brought together experts, researchers, and students to discuss innovative strategies for sustainable water management, aligning with the theme of leveraging water for peace. The event underscored the importance of collaboration, research, and policy

development in addressing global water challenges, and set the stage for future initiatives and partnerships in this critical area. Enhanced understanding of innovative water management strategies and increased awareness about the importance of water management were notable outcomes. The workshop also strengthened collaboration between academic institutions, government bodies, and the community, identifying key challenges and solutions in water management and promoting best practices through interactive sessions and competitions. The event provided actionable insights into water conservation strategies, contributing to building capacity for sustainable management.