



ICEWSE 2026

2ND INTERNATIONAL CONFERENCE ON
ENERGY AND WATER FOR SUSTAINABLE ENVIRONMENT

ADVANCING THE ENERGY-WATER NEXUS FOR A
SUSTAINABLE AND RESILIENT FUTURE

PROGRAMME SCHEDULE

A COLLABORATIVE EVENT OF

UMCSAWM - UMSGET - MSF/ SAF



05 – 06 October 2026



University of Moratuwa | Sri Lanka

ICEWSE 2026 – The 2nd International Conference on Energy and Water for Sustainable Environment

5–6 October 2026 | Main Auditorium, Department of Civil Engineering, University of Moratuwa, Sri Lanka

SUMMARY SCHEDULE

Time	Main Auditorium	Transport PG Room	Structural PG Room
Day 1 – Monday, 5 October 2026			
08:00–10:40	Registration, Opening Ceremony and Tea		
10:40–11:10	Keynote Speech – Water Sector: Dr. Mareledi Gina Maswabi , Commonwealth National Climate Finance Adviser – Sri Lanka		
11:10–11:30	Invited Lecture – Water Sector: Dr. R.M.M. Pradeep , Director, Center for Disaster Management Research, KDU Senior Lecturer (G I), Faculty of Computing, General Sir John Kotelawala Defence University, Sri Lanka		
11:30–12:30	Groundwater and Catchment Hydrology <i>Day 01 · Session 1 · In person</i> Chairs: Dr. Nimal Wijayaratna, Dr. Nilupul Gunasekara WAT-82, WAT-123, WAT-40, WAT-85, WAT-83	Water Quality Assessment and Improvement <i>Day 01 · Session 1 · In person</i> Chairs: Dr. Sachithra Imbulana, Dr. Kasun De Silva WAT-94, WAT-126, WAT-109, WAT-97, WAT-26	Climate and Hazard Risk Assessment <i>Day 01 · Session 1 · Online</i> Chairs: Dr. Luminda Gunawardhana, Dr. Chatura Dissanayake WAT-63, WAT-06, WAT-92, WAT-120, WAT-29, WAT-103
12:30–13:30	Lunch Break and Poster Display (Posters: WAT-15, WAT-131, WAT-16, WAT-18, WAT-132, WAT-67, EN-34, WAT-133, EN-38, WAT-134, EN-49, WAT-135, WAT-136)		
13:30–14:00	Keynote Speech – Energy Sector: Prof. R. Arun Prasath , UNESCO Chair RCESD, Pondicherry University, India		
14:00–15:00	Invited Lectures: 14:00–14:20 Energy Sector – Prof. B.M. Jaffar Ali , DEAN, MSGET, Department of Green Energy Technology, Pondicherry University, India 14:20–14:40 Energy Sector – Prof. D.S. Sharada , Department of Green Energy Technology, Pondicherry University, India 14:40–15:00 Water Sector – Dr. Chamal Perera , Department of Civil Engineering, University of Moratuwa, Sri Lanka		
15:00–16:10	Renewable Energy Technologies <i>Day 01 · Session 2 · In person</i> Chairs: Prof. R. Arun Prasath, Dr. Shakila Pathirana EN-01, EN-53, EN-21, EN-37, EN-51	Sustainable Materials for Water Treatment <i>Day 01 · Session 2 · In person</i> Chairs: Dr. Sachithra Imbulana, Dr. Chamal Perera WAT-127, WAT-110, WAT-115, WAT-128	Planning for Water Security <i>Day 01 · Session 2 · Online</i> Chairs: Dr. Luminda Gunawardhana, Dr. Chatura Dissanayake WAT-54, WAT-13, WAT-87, WAT-130, WAT-100
16:10–16:20	Guest Speech – Dr. Harith Wickrema , Founder, Planet Green Force		
16:20–16:40	Tea Break and Poster Display		
16:40–17:45	Hydrological Assessment for Water Resources Planning <i>Day 01 · Session 3 · In person</i> Chairs: Prof. Lalith Rajapakse, Dr. Chamal Perera WAT-10, WAT-50, WAT-32, WAT-129, WAT-45	Water Quality Monitoring and Assessment <i>Day 01 · Session 3 · Online</i> Chairs: Dr. Luminda Gunawardhana, Ms. Sudhara Gallage WAT-90, WAT-44, WAT-101, WAT-88, WAT-73,	Sustainable Energy Solutions <i>Day 01 · Session 3 · Online</i> Chairs: Dr. S. Sivasankari, Dr. Krishna Kumar Jaiswal EN-04, EN-47, EN-19, EN-52
19:00 onwards	Gala Dinner – Ramadia Ranmal Holiday Resort (19:00 onwards)		

ICEWSE 2026 – The 2nd International Conference on Energy and Water for Sustainable Environment

5–6 October 2026 | Main Auditorium, Department of Civil Engineering, University of Moratuwa, Sri Lanka

SUMMARY SCHEDULE

Time	Main Auditorium	Transport PG Room	Structural PG Room
Day 2 – Tuesday, 6 October 2026			
08:15–08:30	Welcome – Day 2		
08:30–09:00	Keynote Speech – Energy Sector: Prof. Asanka Rodrigo, Department of Electrical Engineering, University of Moratuwa, Sri Lanka		
09:00–09:40	Invited Lectures: 09:00–09:20 Energy Sector – Mr. Pradeep Raj Pandey, UMCDSRC, National College, Kathmandu University, Nepal 09:20–09:40 Water Sector – Ms. Utsaha Pahadi, SAF-Nepal; National College, Kathmandu University, Nepal		
09:40–10:10	Tea Break and Poster Presentations		
10:10–11:20	Climate Extremes and Disaster Risk <i>Day 02 · Session 1 · In person</i> Chairs: Prof. Lalith Rajapakse, Dr. Chamal Perera WAT-84, WAT-125, WAT-28, WAT-31, WAT-99	Flood and Runoff Analysis <i>Day 02 · Session 1 · In person</i> Chairs: Dr. Kasun De Silva, Mr. Nalintha Wijayaweera WAT-61, WAT-24, WAT-124, WAT-09	Water Resources Assessment and Management <i>Day 02 · Session 1 · Online</i> Chairs: Dr. Luminda Gunawardhana, Dr. Chatura Dissanayake WAT-76, WAT-25, WAT-86, WAT-42, WAT-48
11:20–11:50	Keynote Speech – Water Sector: Prof. K. Srinivasamoorthy, Department of Earth Sciences, Pondicherry University, India		
11:50–12:30	Invited Lectures: 11:50–12:10 Water Sector – Dr. Kasun De Silva, Department of Civil Engineering, University of Moratuwa, Sri Lanka 12:10–12:30 Energy Sector – Dr. S. Sivasankari, Department of Green Energy Technology, Pondicherry University, India		
12:30–13:30	Lunch Break and Poster Evaluation Session		
13:30–13:50	Invited Lecture – Energy Sector: Dr. Krishna Kumar Jaiswal, Department of Green Energy Technology, Pondicherry University, India		
13:50–15:20	Sustainable Energy and the Water–Energy Nexus <i>Day 02 · Session 2 · In person</i> Chairs: Prof. B.M. Jaffar Ali, Prof. D.S. Sharada EN-20, EN-43, EN-06, EN-56, EN-55, WAT-57	Sustainable Energy for Buildings and Infrastructure <i>Day 02 · Session 2 · Online</i> Chairs: Dr. S. Sivasankari, Dr. Krishna Kumar Jaiswal EN-31, EN-12, EN-33, EN-46, EN-14, EN-50	Water Security and Climate Resilience <i>Day 02 · Session 2 · In person</i> Chairs: Dr. Luminda Gunawardhana, Dr. Chamal Perera WAT-105, WAT-41, WAT-93, WAT-91, WAT-118, WAT-111
15:20–15:40	Tea Break		
15:40–16:00	Invited Lecture – Water Sector: Dr. E. Yuvaraj, Department of Coastal Disaster Management, Pondicherry University, India		
16:00–17:10	Hydrological Modelling and Water Resources <i>Day 02 · Session 3 · In person</i> Chairs: Dr. Kasun De Silva, Dr. Luminda Gunawardhana WAT-68, WAT-98, WAT-55, WAT-46, WAT-78	Sustainable Energy and Resource Transitions <i>Day 02 · Session 3 · Online</i> Chairs: Dr. S. Sivasankari, Dr. Krishna Kumar Jaiswal EN-17, EN-40, EN-35, EN-15, EN-10	Agricultural Water Management <i>Day 02 · Session 3 · In person</i> Chairs: Dr. Chamal Perera, Dr. Chatura Dissanayake WAT-80, WAT-95, WAT-70, WAT-38, WAT-72
17:10–18:00	Cultural Programme, Valedictory Session and Certificate Distribution		

ICEWSE 2026

The 2nd International Conference on Energy and Water for Sustainable Environment

Advancing the Energy–Water Nexus for a Sustainable and Resilient Future

5–6 October 2026 | Main Auditorium, Department of Civil Engineering, University of Moratuwa, Sri Lanka

Organized by UMCSAWM – University of Moratuwa, in collaboration with UMSGET – Pondicherry University, the South Asia Foundation (SAF) and the UNESCO Chairs

CONFERENCE PROGRAMME

Parallel oral sessions are held in the Main Auditorium, the Transport PG Room and the Structural PG Room. 10 min per presentation + 10 min common discussion.

1. Inauguration Ceremony – Day 1

Time	Programme – Main Auditorium
Day 1 – Monday, 5 October 2026	
08:00–08:30	Registration
08:30–08:40	Ceremonial Welcome Procession for Guests and Invitees
08:40–08:50	Lighting of the Oil Lamp
08:50–08:55	National Anthem
08:55–09:10	Welcome Address by Prof. Lalith Rajapakse and Prof. R. Arun Prasath, Chairman of UMCSAWM / Chairman of RCESD
09:10–09:15	Pooja Dance
09:15–09:25	Address by Prof. U.P. Nawagamuwa, Head, Department of Civil Engineering, University of Moratuwa
09:25–09:35	Address by Prof. Jagath Manatunge, Dean, Faculty of Engineering, University of Moratuwa
09:35–09:45	Address by Prof. K.T.M.U. Hemapala, Vice-Chancellor, University of Moratuwa
09:45–09:55	Address by H.E. Madam Chandrika Bandaranaike Kumaratunga, Inaugural SAF Chairperson, SAF-SL Former Executive President, Sri Lanka
09:55–10:05	Dance Performance
10:05–10:15	Address by Madam France Marquet, Principal Trustee, Madanjeet Singh Foundation / SAF
10:15–10:20	Message from UNESCO by Dr. Benno Böer, Chief, Natural Sciences Unit, UNESCO New Delhi
10:20–10:40	Tea Break and Poster Presentations

2. Keynote Speeches

Day	Time	Sector	Speaker	Title
Day 1, 5 October	10:40–11:10	Water	Dr. Mareledi Gina Maswabi Commonwealth National Climate Finance Adviser – Sri Lanka	<i>Water, Climate and Future of Resilience: Rethinking Sustainable Development in South Asia</i>
Day 1, 5 October	13:30–14:00	Energy	Prof. R. Arun Prasath UNESCO Chair RCESD, Pondicherry University, India	<i>Materials for Renewable Energy Harvesting and Storage: Fostering Renewable Energy at HEIs for a Sustainable Environment</i>
Day 2, 6 October	08:30–09:00	Energy	Prof. Asanka Rodrigo Professor, Department of Electrical Engineering, University of Moratuwa, Sri Lanka	<i>Energy Transitions for Environmental Resilience: Integrating Smart Grids for a Net-Zero Future</i>
Day 2, 6 October	11:20–11:50	Water	Prof. K. Srinivasamoorthy Professor, Department of Earth Sciences, Pondicherry University, India	<i>Integrated Multi-Proxy Techniques for Assessing Submarine Groundwater Discharge and Saline Intrusion Along the Coastal Tracts of South-Eastern India: Implications for Sustainable Water Resources</i>

3. Invited Lectures

Day	Time	Sector	Speaker	Title
Day 1, 5 October	11:10–11:30	Water	Dr. R.M.M. Pradeep Senior Lecturer, Department of Information Technology, General Sir John Kotelawala Defence University, Sri Lanka	<i>The SOHAN Nexus: An Equipartition Ruler for Coupled Socio-Technical Systems</i>
Day 1, 5 October	14:00–14:20	Energy	Prof. B.M. Jaffar Ali Professor, DEAN, MSGET, Department of Green Energy Technology, Pondicherry University, India	<i>Towards Sustainability and Circular Economy in Biofuel Production</i>
Day 1, 5 October	14:20–14:40	Energy	Prof. D.S. Sharada Professor, Department of Green Energy Technology, Pondicherry University, India	<i>Molecular Engineering of Carbon-Based and Organic Functional Materials for Sustainable Energy Applications</i>
Day 1, 5 October	14:40–15:00	Water	Dr. Chamal Perera Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka	<i>Cyclone Ditwah as a System Stress Test: Lessons for Flood Risk Management in Sri Lanka</i>
Day 2, 6 October	09:00–09:20	Energy	Mr. Pradeep Raj Pandey UMCDSRC, National College, Kathmandu University, Nepal	<i>Bhote Koshi–Rasuwa Disaster, August 2026: Relevance and Lessons for Countries from the Himalayas to the Sea</i>
Day 2, 6 October	09:20–09:40	Water	Ms. Utsaha Pahadi SAF-Nepal; National College, Kathmandu University, Nepal	<i>When Water Becomes a Disaster: Nepal's Floods, Climate Injustice, and the Energy–Water Nexus</i>
Day 2, 6 October	11:50–12:10	Water	Dr. Kasun De Silva Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka	<i>Sand Mining and Bridge Pier Scour in the Kelani River of Sri Lanka: A 2D Modelling Study</i>
Day 2, 6 October	12:10–12:30	Energy	Dr. S. Sivasankari Assistant Professor, Department of Green Energy Technology, Pondicherry University, India	<i>Valorisation of Mass-Cultured Marine Macroalgae Chaetomorpha sp. for Biodiesel Production and Value-Added Products</i>
Day 2, 6 October	13:30–13:50	Energy	Dr. Krishna Kumar Jaiswal Assistant Professor, Department of Green Energy Technology, Pondicherry University, India	<i>Transition to the World of Microalgae for the Water–Biomolecule–Biofuel Nexus: Illuminating the Path to Foster a Greener Ecosystem and the SDGs</i>
Day 2, 6 October	15:40–16:00	Water	Dr. E. Yuvaraj Assistant Professor, Department of Coastal Disaster Management, Pondicherry University, India	<i>GIS and Multi-Criteria Decision Analysis for Sustainable Development of Coastal Water Bodies Created by 2004 Tsunami and Tectonic Subsidence in Andaman and Nicobar Islands, India</i>

4. Technical Sessions – Oral Presentations

Presenting authors are underlined. Each oral presentation is 10 minutes, followed by a 10-minute common discussion.

Day 01 · Session 1 · Monday, 5 October 2026

Main Auditorium – Groundwater and Catchment Hydrology Day 01 · Session 1 · In person				
Session Chairs: <u>Dr. Nimal Wijayaratna</u> (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka); <u>Dr. Nilupul Gunasekara</u> (Senior Lecturer, General Sir John Kotelawala Defence University, Sri Lanka)				
No.	Abstract ID	Title	Authors	Affiliation
1	WAT-82	Integrated Hydrogeochemical and Modeling Approaches for Seawater Intrusion Studies in Coastal Aquifers of Pondicherry and Tamil Nadu, India	<u>K. Ramesh</u> , D. Supriya Varshini, K. Srinivasamoorthy, A. Rajesh Kanna, V. Gopalakrishnan	Pondicherry University, India
2	WAT-123	Seasonal Evaluation of Groundwater Quality and Health Risks Associated with Chromium in the Ranipet Industrial Region of Tamil Nadu, India, Employing the Water Quality Index and Age-Specific Risk Assessment	<u>Vignesh Rajkumar Lakshmanan</u> , Loganathan Krishnamoorthy	Vellore Institute of Technology, India
3	WAT-40	Evaluating SMAP L4 Root-Zone Soil Moisture Against Hydrologically Simulated Soil-Water States in the Upper Kelani River Basin, Sri Lanka	<u>Y.A.D.K.H. Wijayarathna</u> , H.G.L.N. Gunawardhana, G.M.C.A. Perera, R.L.H.L. Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka
4	WAT-85	Identifying Soil Erosion and Sediment Delivery Hotspots for Restoration Planning in the Upper Mahaweli Watershed, Sri Lanka	<u>S. Dissanayaka</u> , N. Eriyagama, L. Muthuwatta, T. Gurusinha, R. Jirasinha	International Water Management Institute (IWMI), Sri Lanka
5	WAT-83	From Anthropogenic Hazard to Groundwater Risk: Hydrostratigraphic and Recharge Controls in a Multi-Aquifer Coastal System	<u>D. Supriya Varshini</u> , K. Ramesh, K. Srinivasamoorthy	Pondicherry University, India

Transport PG Room – Water Quality Assessment and Improvement Day 01 · Session 1 · In person				
Session Chairs: <u>Dr. Sachithra Imbulana</u> (Senior Lecturer, University of Moratuwa, Sri Lanka); <u>Dr. Kasun De Silva</u> (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)				
No.	Abstract ID	Title	Authors	Affiliation
1	WAT-94	Post-Flood Plankton Assemblage Structure as a Bio Indicator Tool for Reservoir Health Assessment: A Case Study From Mahawilachchiya Tank, Dry Zone, Sri Lanka After Ditwah	<u>S.K.K.A. Perera</u> , S.A.M.A.I.K. Senanayake	University of Sri Jayewardenepura, Sri Lanka
2	WAT-126	Green Synthesis of Copper Oxide Nanoparticles Using Cyanthillium cinereum as a Sustainable Photocatalyst for Wastewater Treatment	<u>A.M.M.C.H. Jayawardene</u> , M. Kandiah, O. Perera, B. Gunaratne, D. Perera	BMS Campus, Sri Lanka
3	WAT-109	Spatial and Temporal Variability of Ocean Acidification Indicators in Negombo Lagoon and Adjacent Coastal Waters, Sri Lanka	<u>P. Ashanka</u> , R.S. Diyabalanage, R.R.M.K.P. Ranatunga	University of Sri Jayewardenepura, Sri Lanka
4	WAT-97	Assessing Treated Municipal Wastewater for Irrigation Suitability and Nutrient Reuse Potential Using Biochar- and Ceramic-Based Constructed Wetlands in Dhaka, Bangladesh	<u>S.T. Zaman</u> , S. Akther, Hassan Md. R, Mikko Kuusisto	University of Asia Pacific, Bangladesh
5	WAT-26	Comparative Evaluation of Bunchosia armeniaca Plant-Derived Silver Nanoparticles for Catalytic and Photocatalytic Environmental Remediation	<u>A. Desmond Dilan</u> , B. Gunaratne, O. Perera, M. Kandiah	BMS Campus, Sri Lanka

Structural PG Room – Climate and Hazard Risk Assessment Day 01 · Session 1 · Online

Session Chairs: Dr. Luminda Gunawardhana (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka); Dr. Chatura Dissanayake (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-63	Spatial Quantification, Prioritization, and Comparison of Soil Erosion Risk Across Agro-Ecological Zones in Werie Watershed, Northern Ethiopia: A RUSLE Model, GIS, and Remote Sensing Approach	<u>Guesh Endrias Haile</u>	Mekelle University, Ethiopia
2	WAT-06	Sea Level Rise and Household Vulnerability: Evidence From Coastal Bangladesh	<u>R. Biswas</u>	Hajee Mohammad Danesh Science and Technology University, Bangladesh
3	WAT-92	Remote Sensing and GIS-Based Environmental Sensitivity Index Mapping for Coastal Vulnerability Assessment Along the Western Shoreline, Sri Lanka	<u>J. De Silva</u> , H. Wijethunge, R. Galappaththi	UMCSAWM, University of Moratuwa, Sri Lanka
4	WAT-120	Spatial Dipole in Bangladesh Meteorological Drought Trends (1971–2024) and Precipitation-Source Sensitivity of Reanalysis-Based SPEI	<u>S.R.S. Chowdhury</u> , N. Ibnat, M.J. Bhuiyan, F. Kabir	Bangladesh University of Engineering and Technology (BUET), Bangladesh
5	WAT-29	Land Cover Controls on Thermal-Hydrological Stress: A Differential Evolution-Weighted Ecosystem Index Approach	<u>J.B.A. Srimali</u> , H.G.L.N. Gunawardhana, T.M.N. Wijayaratna, R.L.H.L. Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka
6	WAT-103	When Safe Relocation Becomes Long-Term Vulnerability: A 20-Year Assessment Of Post-Tsunami Housing Resilience In Seruthur, Nagapattinam, Tamil Nadu	<u>Aravinth A*</u> , Pratheek Sudhakaran, Drishya Jayakrishnan	Amrita Vishwa Vidyapeetham, Coimbatore, India

Day 01 · Session 2 · Monday, 5 October 2026

Main Auditorium – Renewable Energy Technologies Day 01 · Session 2 · In person

Session Chairs: Prof. R. Arun Prasath (UNESCO Chair RCESD, Pondicherry University, India); Dr. Shakila Pathirana (Senior Lecturer, Department of Applied Computing, University of Kelaniya, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	EN-01	Sustainable Integration of Rooftop Solar Photovoltaic Systems in Sri Lanka: Growth Drivers, Constraints, and Regulatory Priorities	<u>S.A.C. Rajapaksa</u> , H.P.R.C. Kumara	Public Utilities Commission of Sri Lanka, Sri Lanka
2	EN-53	Single-Mg-Doped, Organic Molecule Engineered g-C ₃ N ₄ for Photoelectrocatalytic Coupled Phenol Degradation With Water Splitting	<u>M. Premkumar</u> , E. Pramila, D.S. Sharada	Pondicherry University, India
3	EN-21	Design and Optimization of a Thermoelectric Generator for Waste Heat Recovery and Enhanced Green Energy Harvesting	Md. Mosheur Rahman, Pratayjit Saha, Famiha Akther Farha, Prasanth Ravindran, <u>Md. Sultan Mahmud</u> , C.G. Jothi Prakash	University of Asia Pacific, Bangladesh
4	EN-37	Assessment of Suitable Locations for Ocean Thermal Energy Conversion Development in Sri Lankan Waters	<u>D.S.N.K. Sathsarani</u> , W.A.A.P. Wijesundara, S.U.P. Jinadasa	Ocean University of Sri Lanka, Sri Lanka
5	EN-51	Powering the Sustainable AI Future: Frugal Intelligence, Sustainable Energy and Lifecycle Accounting at the Energy–Water Nexus	Arun Prasath Ramasamy, <u>Ravisankar Sivasubramaniam</u>	Independent Researcher, India

Transport PG Room – Sustainable Materials for Water Treatment Day 01 · Session 2 · In person

Session Chairs: Dr. Sachithra Imbulana (Senior Lecturer, University of Moratuwa, Sri Lanka); Dr. Chamal Perera (Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-127	Eco-Friendly Synthesis of Copper Oxide Nanoparticles From Oryza sativa Rice Husk Extracts for Water Pollutant Treatment	<u>S.K. Nadeem</u> , M. Kandiah, O. Perera, B. Gunaratne, D. Perera	BMS Campus, Sri Lanka
2	WAT-110	Sewage Sludge Biochar as a Functional Catalyst for Microbial Nitrogen and Sulphate Removal in Vertical Flow Constructed Wetlands	<u>Ashita Pawaiya</u> , Surindra Suthar	Doon University, India
3	WAT-115	Assessment of Bacterial and Biochar Functionalization of Alginate-Coated Zinc Anodes for Bioelectrochemical Energy Generation in Wastewater	<u>R. Nithya</u> , V. Pavithra, P. Gowdham Suriya, S. Sivasankari	Pondicherry University, India
4	WAT-128	In vitro Green Synthesis of Artocarpus altis Copper Oxide Nanoparticles: A Nano-Catalytic Approach in Wastewater Treatment	<u>M.I. Ismail</u> , M. Kandiah, O. Perera, B. Gunaratne, D. Perera	BMS Campus, Sri Lanka

Structural PG Room – Planning for Water Security Day 01 · Session 2 · Online

Session Chairs: Dr. Luminda Gunawardhana (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka); Dr. Chatura Dissanayake (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-54	Separating Recharge Receptivity From Flood-Water Availability for Managed Aquifer Recharge in Wadi Qanunah, Saudi Arabia: A Physically Informed Framework Corroborated by an Operational Well Network	<u>Islam M. Gaber</u> , Abdulaziz Alghazi, Ahmed M. El Kenawy	Advanced Telecommunications Solutions & Services (ATSS), Saudi Arabia
2	WAT-13	Assessment and Characterization of Groundwater Resources for the Sustainable Water Supply of Animals at the Mawana Game Reserve (MGR, KwaZulu-Natal, South Africa)	<u>W.S. Datchoua Djomatchoua</u>	University of Neuchâtel, Switzerland
3	WAT-87	Biosorbents for Simultaneous Removal of Fluoride and Hardness in Drinking Water: Comparative Evaluation of Musa spp. (Embul and Seeni) Pseudostem Fibers	<u>D.D. Dissanayake</u> , J.K. Sandali Rashmika, Jayani De Silva, Kamil Akalanka Perera, Asitha Cooray, S.A.M.A.I.K. Senanayake	University of Sri Jayewardenepura, Sri Lanka
4	WAT-130	Integrating Digital Technologies and Nature-Based Solutions for Climate-Resilient Urban Water Infrastructure Planning in African Cities: A Conceptual Framework	<u>G. Laolang</u> , N.X. Mashwama	Walter Sisulu University, South Africa
5	WAT-100	Copula-Based Agricultural Drought Risk Zonation in Sri Lanka Using ERA5 Re-Analysis Data for Climate-Resilient Farming in Sri Lanka	<u>T.M.N. Peiris</u> , H.M.R.C. Herath, R.M.P. Fernando, A.R. Warnasuriya, Sameera Viswakula, Devanmini Halwatura	Department of Meteorology, Sri Lanka

Day 01 · Session 3 · Monday, 5 October 2026

Main Auditorium – Hydrological Assessment for Water Resources Planning Day 01 · Session 3 · In person

Session Chairs: Prof. Lalith Rajapakse (Professor and Chairman of UMCSAWM, University of Moratuwa, Sri Lanka); Dr. Chamal Perera (Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-10	Hydrogeological Feasibility of Sponge-Zone Implementation for Urban Flood Resilience and Groundwater Recharge in Bengaluru, India	<u>Raksha Aswathanarayana</u> , Rajesh Gopinath	BMS Institute of Technology and Management, India
2	WAT-50	Data Quality as Part of the Model Performance: Benchmarking Missing-Value Imputation for Tropical Streamflow Prediction	<u>A.H. Zafar Aqthaf</u> , R.L.H. Lalith Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka
3	WAT-32	Climate Change–Hydropower Reliability Framework: Linking Climate, River Flow and Energy Security in the Punatsangchu and Wangchu River Basins, Bhutan	<u>Choki Zam</u>	Gyalsung Infra, Bhutan
4	WAT-129	Assessing Sustainability of the Lunugamwehera Reservoir in Sri Lanka	M.H.N. Nethmini, <u>N.K. Gunasekara</u>	General Sir John Kotelawala Defence University, Sri Lanka
5	WAT-45	Development of a Harmonized Long-Term Global River Discharge Database for Basin Water Resources Management	<u>Avintha Senavirathne</u> , Mansoor Leh, Karthikeyan Matheswaran, Paranamana Thilina Prabhath, Naga Manohar Velpuri, Abdulkarim Seid	International Water Management Institute (IWMI), Sri Lanka

Transport PG Room – Water Quality Monitoring and Assessment Day 01 · Session 3 · Online

Session Chairs: Ms. Sudhara Gallage (Research Assistant, Department of Civil Engineering, University of Moratuwa); Dr. Luminda Gunawardhana (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-90	Field-Deployable Smartphone Optical Metrology for Climate-Resilient Water Quality Surveillance: EcoExposure as a Decentralized WASH Monitoring Platform	<u>M.B. Chu</u>	Ecotera Asia Pte Ltd, Singapore
2	WAT-44	Assessment of Trace Metal Distribution and Drinking Water Suitability of Dug Wells Across Urban, Suburban and Rural Areas in Batticaloa District, Sri Lanka	<u>T.A. Farween</u> , A.J.M. Harris	Eastern University, Sri Lanka
3	WAT-101	Assessment of Contaminants That Inhibit Aquatic Plant Growth in Lanka Pond	<u>N. Wijesekera</u> , S.A. Witharana, S. Samaradiwakara, R. Weerasooriya	National Institute of Fundamental Studies, Sri Lanka
4	WAT-88	Pollution Load and Assimilative Capacity of an Urban Tropical Lake: A Case Study of Boralesgamuwa Lake, Sri Lanka	<u>H.U. Isuranga</u> , J.K. Sandali Rashmika, Dulcini Dewwandi Dissanayake, Kamil Akalanka Perera, N. Wickramasena, S.A.M.A.I.K. Senanayake	University of Sri Jayewardenepura, Sri Lanka
5	WAT-73	Performance Evaluation of Global Ensemble Forecast System (GEFS) Based Reservoir Inflow Forecasting for Almati Reservoir, India	<u>Subbarayan Saravanan</u> , Arivoli E., Saksham Joshi, Chandrasekar K.	National Institute of Technology Tiruchirappalli, India

Structural PG Room – Sustainable Energy Solutions Day 01 · Session 3 · Online

Session Chairs: **Dr. S. Sivasankari** (Assistant Professor, Department of Green Energy Technology, Pondicherry University, India); **Dr. Krishna Kumar Jaiswal** (Assistant Professor, Department of Green Energy Technology, Pondicherry University, India)

No.	Abstract ID	Title	Authors	Affiliation
1	EN-04	Solar-Integrated Hybrid Mechanical Ventilation for Energy-Resilient Office Buildings in Tropical Climates: A Simulation-Based Case Study in Jaffna, Sri Lanka	<u>U. Thanapalasingam</u>	Tech Onshore MEP Prefabricators, Singapore
2	EN-47	Integrating Energy Efficiency and Thermal Comfort in Educational Buildings: Evaluating Passive and Hybrid Strategies for Improved Performance in the Climatic Context of Coimbatore, India	<u>Nivethitha Venkatramakrishnan</u> , Pratheek Sudhakaran	Amrita Vishwa Vidyapeetham, India
3	EN-19	Techno-Economic Feasibility of a Solar PV–Battery–Diesel Hybrid System for an Isolated Island Grid in Vanuatu	Dwipen Boruah, <u>Priya Kumari</u>	Global Sustainable Energy Solutions India Pvt. Ltd., India
4	EN-52	Hierarchical Design of Heterojunction Photocatalysts for Efficient Solar Hydrogen Production	<u>Sudhanshu Pandey</u> , M.D. Dhileepan, Sandeep Kumar Lakhera, Bernaudshaw Neppolian, Ramaswamy Arun Prasath	Pondicherry University, India

Day 02 · Session 1 · Tuesday, 6 October 2026

Main Auditorium – Climate Extremes and Disaster Risk Day 02 · Session 1 · In person

Session Chairs: **Prof. Lalith Rajapakse** (Professor and Chairman of UMCSAWM, University of Moratuwa, Sri Lanka); **Dr. Chamal Perera** (Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-84	Implementation of a Pilot Climate Information Sharing and Early Warning Dissemination System in Matara District, Sri Lanka	<u>S. Dissanayaka</u> , N. Eriyagama, L. Muthuwatte, D. Sithara, H. Jayasekara, N. Alahakoon	International Water Management Institute (IWMI), Sri Lanka
2	WAT-125	Integration of Climate-Informed Flood Hazard Modelling and Community Perceptions for Adaptive Flood Risk Management in the Maha Oya River Basin, Sri Lanka	<u>J. Vithurshika</u> , G.M.C.A. Perera	UMCSAWM, University of Moratuwa, Sri Lanka
3	WAT-28	Subsurface Marine Heatwaves and Ocean Productivity Disruption in the Bay of Bengal, 2002–2020	<u>Akhil Devan</u> , Adharsh A.R., Gokul S., Yuvaraj E.	Pondicherry University, India
4	WAT-31	Geospatial Assessment of Urban Flash Flood Risk and Vulnerability in Kolonnawa, Sri Lanka	<u>W.R.S. Alwis</u> , M.S.M. Razik	University of Peradeniya, Sri Lanka
5	WAT-99	Evaluating Nature-Based Solutions for Flood Mitigation Under Single and Consecutive Extreme Storm Events in the Attanagalu Oya Basin, Sri Lanka	<u>H.D.O.N. Sandamini</u> , T.M.N. Wijayaratna, L.N. Gunawardhana, R.L.H.L. Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka

Transport PG Room – Flood and Runoff Analysis Day 02 · Session 1 · In person

Session Chairs: **Dr. Kasun De Silva** (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka); **Mr. Nalintha Wijayaweera** (Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-61	Machine Learning for Flash Flood Prediction in Ungauged Basins: A Review of Global Applications and Their Relevance to Sri Lanka	M.M.J.R. Malwattegedara , L.N. Gunawardhana, R.L.H.L. Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka
2	WAT-24	Enhancing Urban Stormwater Resilience Through Surface Low Impact Development (LID) Measures	M.E. Sutharsan , Muhammad Shafique	National Water Supply and Drainage Board, Sri Lanka
3	WAT-124	Satellite Based Assessment of Ditwah Cyclone Flood Impact and River Proximity Patterns Using Sentinel-1 and Rainfall Data	W.M.I.V. Wickramasinghe , Gayantha R.L. Kodikara	University of Ruhuna, Sri Lanka
4	WAT-09	Assessing Flood Attenuation Services and Hydrological Resilience of Wetland Environments in the Kelani River Basin, Sri Lanka	L.O.H. Perera , E.J. Warusavitharana	University of Moratuwa, Sri Lanka

Structural PG Room – Water Resources Assessment and Management Day 02 · Session 1 · Online

Session Chairs: **Dr. Luminda Gunawardhana** (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka); **Dr. Chatura Dissanayake** (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-76	Development of a National-Scale SMHI HYPE Model for Water Resources Assessment in Sri Lanka Under Data-Scarce Conditions	Kavini Gangabadage , Hideo Amaguchi, Yoshiyuki Imamura	Tokyo Metropolitan University, Japan
2	WAT-25	Delineation of Groundwater Potential Zones Along the Kelavarapalli–Krishnagiri Reach, Tamil Nadu, Using an Integrated Multi-Influencing Factor, AHP, and Bivariate Statistical Framework	P. Pamba Sreenivasan , S.T. Danish Ur Rahman, R. Gokul, S. Yuvraj, V. Narayanamurthi	Easwari Engineering College, India
3	WAT-86	Optimizing the Maha-Cultivation Calendar to Enhance Water-Use Efficiency and Support Third-Season Cropping in the Akkarayan Irrigation Scheme, Sri Lanka	K.M. Aafir , H.A.T.N. Perera, N. Saheedha, S. Narmathan, A.L. Manasar	University of Ruhuna, Sri Lanka
4	WAT-42	Translating Blue-Green Infrastructure Principles Into Urban Practice: Development of a Scoring-Based Implementation Toolkit	Reshmi Manikoth Kollarath , Jayprakash Chadchan	CHRIST (Deemed to be University), Bengaluru, India
5	WAT-48	Thermal Spring Governance in Arid Regions: Community Perspectives and Local Governance at Al Hammam, Oman	Ahlam Al Hanai , Khalifa Alzeidi, Rahma Al-Habsi	Sultan Qaboos University, Oman

Day 02 · Session 2 · Tuesday, 6 October 2026

Main Auditorium – Sustainable Energy and the Water–Energy Nexus Day 02 · Session 2 · In person

Session Chairs: Prof. B.M. Jaffar Ali (DEAN, MSGET, Department of Green Energy Technology, Pondicherry University, India); Prof. D.S. Sharada (Professor, Department of Green Energy Technology, Pondicherry University, India)

No.	Abstract ID	Title	Authors	Affiliation
1	EN-20	Advantages of Integrating Circular Economy Concepts in Promoting Sustainable Construction	<u>C.V. Rajasekara</u> , U.M.S. Samarathne, W.N. Kawmudi	General Sir John Kotelawala Defence University, Sri Lanka
2	EN-43	Sustainability and Resilience-Based Framework for Waste-Derived Microgrids	<u>Anurag Deepak</u> , Abhishek Kumar	Motilal Nehru National Institute of Technology Allahabad, India
3	EN-06	Development of an Energy Consumption Prediction Model for University Buildings	<u>V.C. Jayalath</u> , S.M. Pathirana, S.O. Dilshan	University of Kelaniya, Sri Lanka
4	EN-56	Development of LDH-MOF-5-Based Tunable Active Sites of Metal Nodes (Mo Mn Sn Ag) for the Efficient Transesterification of Picochlorum oklahomense Lipids for Biodiesel Production	<u>Mrinal</u> , Krishna Kumar Jaiswal	Pondicherry University, India
5	EN-55	Developing a Framework for Energy Efficiency and Climate Resilience in House Construction in Tropical Lowlands and Uplands	<u>D.W.T.S. Dissanayake</u> , H.G.L.N. Gunawardhana, C. Jayasinghe, R. Weerasinghe	University of Moratuwa, Sri Lanka
6	WAT-57	The Water-Energy Nexus as a Determinant of Resilience for Future Generations: A Comparative Legal Analysis of Southern Africa and South Asia	<u>P.P. Maweto</u>	University of Venda, South Africa

Transport PG Room – Sustainable Energy for Buildings and Infrastructure Day 02 · Session 2 · Online

Session Chairs: Dr. S. Sivasankari (Assistant Professor, Department of Green Energy Technology, Pondicherry University, India); Dr. Krishna Kumar Jaiswal (Assistant Professor, Department of Green Energy Technology, Pondicherry University, India)

No.	Abstract ID	Title	Authors	Affiliation
1	EN-31	Greening the Built Environment: Energy Efficiency and Sustainable Urban Transitions in Emerging Economies	<u>Sovik Mukherjee</u>	St. Xavier's University, Kolkata, India
2	EN-12	Predictive AI and Reinforcement Learning for Autonomous Microgrid Energy Management in Rural Areas	<u>Aditya Sharma</u> , J. Petau, Ravikiran, R. Jayaramu, G. H. Klepp, S. Shamsundar	Technische Hochschule Ostwestfalen-Lippe (TH OWL), Germany
3	EN-33	Towards Equitable Residential Energy Systems: Exploring Justice in Residential Solar and Battery Storage Deployment	<u>N. Jayaraj</u> , S. Anandaraj	Regen Power Pty Ltd, Australia
4	EN-46	PV System Based Comparative Performance Assessment of Ground-Mounted and Rooftop Solar PV Systems in an Educational Institute	<u>Aravindh S.</u> , Kinley Om, Benedict Rock Rex R., R. Arun Prasath	Pondicherry University, India
5	EN-14	Techno-Economic Assessment of a Solar PV–Battery Energy Storage System for Peak Power and Demand Side Management in Indian Railways	<u>Dwipen Boruah</u>	Global Sustainable Energy Solutions India Pvt. Ltd., India
6	EN-50	Sustainable Cost Control for Green Buildings in Sri Lanka: Integrating Life-Cycle Value and Environmental Performance	I.G.W.R. Jayaweera, <u>K.A.P.B.K. Arachchi</u>	General Sir John Kotelawala Defence University, Sri Lanka

Structural PG Room – Water Security and Climate Resilience Day 02 · Session 2 · In person

Session Chairs: **Dr. Luminda Gunawardhana** (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka); **Dr. Chamal Perera** (Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-105	Planning of the Capacity Enhancement of Pahala Puliyankulama Tank: A Hydrological, Hydraulic and Environmental Assessment	D.M.T.P. Adikaram , L.N. Gunawardhana, Lalith Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka
2	WAT-41	Johads as Resilient Urban Water Bodies: Reimagining the Climate Discourse in India	Puneet Kumar	University of Delhi, India
3	WAT-93	Water Security, Citizenship and Urban Ecology of Bangalore	T.D. Jessly , Basarat Hassan	Jain University, India
4	WAT-91	Identification of Emerging Extreme Rainfall and Drought Events in Sri Lanka Using High-Resolution Downscaled Climate Projections and Precipitation Indices (1985–2100)	D.S.E. Gamage , H. Jayasekara, N. Eriyagama, S. Dissanayake, L. Muthuwatta, K. Bergaoui	International Water Management Institute (IWMI), Sri Lanka
5	WAT-118	Identification of Water Security Solutions Through Knowledge Exchange and Citizen Science	S. Parimala Renganayaki , Daggupati Sridhar, Thabrez M.	Vellore Institute of Technology, India
6	WAT-111	Reservoir Capacity Enhancement of a Minor Tank in Dry-Zone Sri Lanka: A Case Study of Pahala Kegama Wewa	D.A.I.B. Silva , L.N. Gunawardhana, R.L.H.L. Rajapakse, B.C. Dissanayake, Chamal Perera	UMCSAWM, University of Moratuwa, Sri Lanka

Day 02 · Session 3 · Tuesday, 6 October 2026

Main Auditorium – Hydrological Modelling and Water Resources Day 02 · Session 3 · In person

Session Chairs: **Dr. Kasun De Silva** (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka); **Dr. Luminda Gunawardhana** (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-68	An Event-Adaptive Coupling Architecture for Simulating Non-Stationary Baseflow–Recharge Partitioning in Groundwater–Surface Water Systems Under Hydroclimatic Whiplash	Nilesh Kumar Meshram	Sandip Institute of Technology and Research Centre, India
2	WAT-98	A Remote Sensing and Machine Learning Framework for Ungauged Reservoir Operation Under Climate Change	S.V. Subasinghe , G.M.C.A. Perera, R.M.J. Bamunawala, R.L.H.L. Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka
3	WAT-55	Satellite-Driven Aboveground Biomass Mapping and Its Hydrological Implications in Sri Lankan Tropical Catchments	K.H.T. Chamika , B.C. Dissanayake, Chamal Perera	UMCSAWM, University of Moratuwa, Sri Lanka
4	WAT-46	Spatio-Temporal Dynamics in Climatic Moisture Balance Across Sub-Saharan Africa Under the High-Emission SSP5-8.5 Scenario	G. Fernando , M. Leh	International Water Management Institute (IWMI), Sri Lanka
5	WAT-78	Development of a Modified SCS Curve Number Method to Estimate Runoff in Small Catchments in Sri Lanka	H.H.U. Manjitha , G.M.C.A. Perera, H.G.L.N. Gunawardhana	UMCSAWM, University of Moratuwa, Sri Lanka

Transport PG Room – Sustainable Energy and Resource Transitions Day 02 · Session 3 · Online

Session Chairs: **Dr. S. Sivasankari** (Assistant Professor, Department of Green Energy Technology, Pondicherry University, India); **Dr. Krishna Kumar Jaiswal** (Assistant Professor, Department of Green Energy Technology, Pondicherry University, India)

No.	Abstract ID	Title	Authors	Affiliation
1	EN-17	The Green Investment Paradox: Renewable Capacity, Institutional Quality, and the Limits of Productive Conversion in Morocco	<u>Khadija Brhaiberh</u> , Mustapha Ziky	Cadi Ayyad University, Morocco
2	EN-40	Material Footprint and Resource Decoupling in South Asian Economies: A Panel Data Approach	<u>H.M. Lakmali Abeyrathne</u>	University of Sri Jayewardenepura, Sri Lanka
3	EN-35	In Search of Clean Energy: India's Energy Diplomacy in the Global Disorder	<u>Ancy Davis V.</u>	St. Xavier's College, Vaikom, India
4	EN-15	Microstructural Changes During Regeneration of Plaster of Paris Using Discarded Moulds	<u>K.N.P. Thilakarathne</u> , B.P.T. Rukmal, T.A.M.P. Ariyartne, B.A. Karunaratne	Rajarata University of Sri Lanka, Sri Lanka
5	EN-10	Design and Sizing of a Bamboo-Pellet-Fired Travelling-Grate Water-Tube Boiler and Integrated Steam Sterilization Chamber for Mushroom Growing-Media Sterilization	<u>T.K.S. Pushpakumara</u> , S.A.M.A.N.S. Senanayake, P.N.R.J. Amunugoda	The Open University of Sri Lanka, Sri Lanka

Structural PG Room – Agricultural Water Management Day 02 · Session 3 · In person

Session Chairs: **Dr. Chamal Perera** (Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka); **Dr. Chatura Dissanayake** (Senior Lecturer, Department of Civil Engineering, University of Moratuwa, Sri Lanka)

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-80	Seasonal Irrigation Return Flow Coefficients in Dry-Zone Sri Lanka: An Integrated Water Balance and Hydrological Modelling Framework	<u>S.P.J. Thisurika</u> , P.K.C. De Silva, H.G.L.N. Gunawardhana, R.L.H.L. Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka
2	WAT-95	Projected Changes in Global Holdridge Life Zones Under Climate Change	<u>M.W.W.P. Senarathna</u> , G.M.C.A. Perera, T.A.J.G. Sirisena, R.L.H.L. Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka
3	WAT-70	A Remote Sensing-Based Geospatial Framework for Assessing Crop Water Dynamics	<u>B.H.I.A. Jayathissa</u> , M. Leh	International Water Management Institute (IWMI), Sri Lanka
4	WAT-38	Assessment of Crop Water Requirement of Capsicum chinense Grown in a Protected House: A Stable Water Isotope Based Method	<u>S.A.S. Tharundya</u> , R.R.U.R. Perera, E.A.N.V. Edirisinghe, N.S. Withanage, G. Abhiram, S. Priyadarshane, M. Kalpage, H.P.K. Liyanage	Sri Lanka Atomic Energy Board, Sri Lanka
5	WAT-72	School-Based Citizen Science for Groundwater Awareness and Protection in the Jaffna Peninsula, Sri Lanka	<u>D.S.E. Gamage</u> , L. Muthuwatta, N. Eriyagama, D. Malalgoda, M. Karthikeyan, S. Shanmuhananthan, P. Suvasthiga, T. Sounthararajah, M. Aheeyar, R. Jirasinghe	International Water Management Institute (IWMI), Sri Lanka

5. Poster Presentations

Posters are displayed on both days until the evening tea break. Poster evaluation: Day 2, 12:30–13:30. Presenting authors are underlined.

No.	Abstract ID	Title	Authors	Affiliation
1	WAT-15	Financial Performance and Sustainability of Municipal Water Supply Infrastructure in Kandy City	<u>H.D. Jayathilake</u>	University of Peradeniya, Sri Lanka
2	WAT-131	Climate-Informed Spillway Design under Climate Projection Uncertainty for Horuwila Wewa, Sri Lanka	<u>Md. Rakib Hassan</u> , Chamal Perera, Nalintha Wijayaweera	UMCSAWM, University of Moratuwa, Sri Lanka
3	WAT-16	Satellite-Based Assessment of Drought Resilience of Small Reservoirs in Dry Zone of Sri Lanka: A Case Study of the Mahakanumulla Village Tank Cascade System	<u>S.A.C.D. Suraweera</u> , R.S.R. Rubasinghe	University of Moratuwa, Sri Lanka
4	WAT-18	Mechanistic Evidence of Hidden Heterotrophic Metabolic Capacity and a Narrow Respiratory Safety Margin in Microbialised Paraviwella Reef, Sri Lanka	<u>V. Lageeshan</u> , Mohamed F.M. Fairoz	Ocean University of Sri Lanka, Sri Lanka
5	WAT-132	Incorporating Dynamic Time of Concentration into Spillway Design under Future Climates: Knuckles Basin, Sri Lanka	<u>S. T. Zaman</u> , R. L. H. L. Rajapakse, NK Gunasekara	UMCSAWM, University of Moratuwa, Sri Lanka
6	WAT-67	After the Dam: Satellite-Based Assessment of Downstream Open-Water and Riparian-Corridor Greenness Following Moragahakanda Reservoir Impoundment, Sri Lanka	<u>R.S.R. Rubasinghe</u> , S.A.C.D. Suraweera	University of Moratuwa, Sri Lanka
7	EN-34	Biomass-Derived Activated Carbons for CO ₂ Capture: Preparation, Surface Engineering, Characterization, Adsorption Mechanisms, and Industrial Applications	Vasanthmani Ilamurugan, <u>Baquir Mohammed Jaffar Ali</u>	Pondicherry University, India
8	WAT-133	Quantifying Spillway Upgrades and Storage Expansion for Kattiyawa Wewa Reservoir under Future Climate Projections	<u>S. Akhter</u> , R. L. H. L. Rajapakse, H Ratnasooriya	UMCSAWM, University of Moratuwa, Sri Lanka
9	EN-38	From Plastic Waste to Circular Value: Open Innovation Pathways for a Resilient and Sustainable Sri Lanka	<u>V. Sinnathamby</u>	University of Colombo, Sri Lanka
10	WAT-134	Uncertainty Analysis of Probability Distributions in Design Rainfall Estimation for Spillway Design	<u>A.R.L.S. Alahakoon</u> , T.M.N. Wijayaratna, L.N. Gunawardhana	UMCSAWM, University of Moratuwa, Sri Lanka
11	EN-49	Promoting Urban Sustainability in Sri Lanka: The Role of Green Building Practices in Enhancing Environmental Health and Biodiversity	<u>I.G.W.R. Jayaweera</u> , K.A.P.B.K. Arachchi	General Sir John Kotelawala Defence University, Sri Lanka
12	WAT-135	Climate-Driven Rise in Consecutive Extreme Rainfall and Its Implications for Spillway Capacity: A Case Study in Manankattiya Reservoir, Sri Lanka	<u>M. M. J. R. Malwattegedara</u> , L. N. Gunawardhana, R. L. H. L. Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka
13	WAT-136	Assessment of Design Flood Responses and Spillway Performances under Variations in Antecedent Soil Moisture Conditions, Rainfall Patterns and Hydrological Transformation Uncertainty in the Knuckles Basin	<u>R.L.M.L. Rajasekara</u> , P.K.C. De Silva, R.L.H.L. Rajapakse	UMCSAWM, University of Moratuwa, Sri Lanka