

Programme Schedule

SPEEDS-2026

27th & 28th June, 2026

SPEEDS-2026

Programme Schedule

Day-1; 27 June, 2026 (Saturday)

Venue : M.P. Hall

Inaugural Session

- 09:30 A.M. Registration
10:30 A.M. Tea
11:00 A.M. Lighting of the Ceremonial Lamp & Goddess Saraswati Vandana.
11:10 A.M. Welcome Address by Prof. (Dr.) Ashish Bhatnagar, Conference Chair & Director, SMS, Lucknow.
11:20 A.M. Welcome Address by Er. Vijaya Pratap Singh, FIE, Chairman, The Institution of Engineers (India) UP State Centre, Lucknow
11:30 A.M. About the Theme of Conference by Dr. P.K. Singh, Conference Co-coordinator.
11:35 A.M. Address by Guest of Honour Shri Sushil Kumar Aggarwal, Gobind Industries, Barabanki, Lucknow
11:50 A.M. Address by Guest of Honour Prof. Onkar Singh, HBTU, Kanpur
12:05 P.M. Address by Chief Guest Dr. Rajendra Singh, Waterman of India
12:25 P.M. Unveiling of Book Aravali, Souvenir & Presentation of Mementos
12:35 P.M. Vote of Thanks by Dr. Arunesh Kumar Srivastava, Manager SIEF, & Convener, SPEEDS-2026
12:39 P.M. National Anthem.

Plenary Session

(12:40 PM. - 1:40 PM)

1. Dr. P.K. Bharti, Head of Mechanical Department, Integral University, Lucknow
 2. Dr. Prashant Singh, Scientist (E), Central Pollution Control Board, Ministry of Environment, Forest & Climate Change Govt. of India
 3. Prof. Jyotsna Singh, Director, Research and Director of the Institute of New and Renewable Energy, University of Lucknow
- 01:40-02:30 P.M. - Lunch
02:30-04:30 P.M. - Technical Sessions

Day-2; 28 June, 2026 (Sunday)

Venue : M.P. Hall

- 10:30-1:30 P.M. Technical Sessions
01:30-2:30 P.M. Lunch

Valedictory Session

(June 28, 2026)

- 02:30 P.M. Welcome address by Prof. (Dr.) Ashish Bhatnagar, Conference Chair and Director, SMS Lucknow
02:40 P.M. Welcome Address by Er. Vijaya Pratap Singh, FIE, Chairman, The Institution of Engineers (India) UP State Centre, Lucknow
02:50 P.M. Address & Seminar Concluding Remarks by Prof. (Dr.) Bharat Raj Singh, Conference Co-Chair and DG (Tech.), SMS, Lucknow
03:00 P.M. Address by Guest of Honour Dr. Rana Pratap Singh, Director (Hon) Centre for Sustainable Agriculture and Environment (CSAE)
03:20 P.M. Address by Chief Guest Dr. Harikesh Bahadur Singh, Advisor, UP Pollution Control Board, Lucknow
03:40 P.M. Presentation of Mementos & Distribution of Certificates.
04:10 P.M. Vote of Thanks by Dr. Dharmendra Singh, Associate Director & Coordinator, SPEEDS-2026
04:15 P.M. National Anthem.
04:16 P.M. High Tea

KEYNOTE SPEAKERS/ SESSION CHAIR

(Date: 27th June, 2026)

Time: 12:40 P.M. to 1:30 P.M	
Name	Paper Title
Dr. Prashant Singh Central Pollution Control Board, Regional, Directorate Lucknow	Rejuvenation of River Ganga (Preserving our life line and securing our future)
Prof. (Dr.) Jyotsna Singh Department of Physics, University of Lucknow, Lucknow, U.P., India	Energy Transition in the 21st Century: Renewable Energy, Climate Change, and Human Survival
Prof. (Dr.) Pramod Kumar Singh Department of Environment Science, School of Basic Sciences, Babu Banarasi Das University, Lucknow-226028	Application of Climate Resilience Technology In Agriculture System Enhance Soil Carbon Sequestration And Mitigate The Climate Changes
01:30-2:30 P.M. Lunch	
Time: 2:30 P.M. to 04:30 P.M.	
Dr. Upendra Kumar Department of Computer Science and Engineering, IET Lucknow, U.P., India	Role of Artificial Intelligence in Planet Energy, Environment and Disaster Science
Dr. Sarvesh Rai Central Pollution Control Board, Regional Directorate - Lucknow, U.P., India.	Ecological Risk of Pesticide Industry Waste Leachate: Insights from Earthworm Bioassays
Dr. Prem Shanker Yadav Department of computer science and engineering, FoET, University of Lucknow, U.P., India	Prototype-Guided Risk Ranking for Hill Ecosystem Monitoring and Human Survival under Environmental Domain Shift

SESSION CHAIR

(Date: 28th June, 2026)

Time: 10:30 A.M. to 01:00 P.M.	
Name	Paper Title
Dr. Pooja Srivastava Department of Applied Sciences, Amity University Lucknow	Computational Design of Advanced Materials for Sustainable Hydrogen storage
Dr. Shailendra Kumar Yadav Department of Environmental Science, School of Earth and Environmental Sciences, Babasaheb Bhimrao Ambedkar University, Lucknow	Hill ecosystem and Human survival

PRESENTATION SCHEDULE SPEEDS-2026**(Day 1:27/06/2026)****Technical Sessions****Multipurpose Hall, Conference Hall& LT – 1****(A) Technical Session - I (Multipurpose Hall)****Technical Session - II (Conference Hall, Ganga Block)****Technical Session-III (Lecture Theatre- 1)**

Time: 2:30 pm to 4:30 pm	Technical Session-I	Session Chair –	Technical Session-II	Session Chair –	Technical Session-III	Session Chair –
		Dr. Premshankar Yadav		Dr. Upendra		Dr. Pooja Srivastava
		Multipurpose Hall		Conference Hall, Ganga Block		Lecture Theatre - 1
1. Sustainable & Renewable Energy in Mountain Terrains: / 2. Hill Ecology, Biodiversity Conservation, and Water Security:	T 1.1	Capacity Building For Disaster Preparedness: Strengthening Communities, Institutions, And Systems For Resilient Futures Dr. Niharika Singh	T 1.2	Sustainable & Renewable Energy in Mountain Terrains of India Dr. Amarjeet Singh	T 1.3	Development of Pilgrim corridor and Slope instability in Kedarnath Himalaya: An exploratory analysis of 2013 disaster Dr. Pushpanjali Singh
	T 1.4	Machine Learning-Based Flood Forecasting And Community-Centric Early Warning Systems for Sustainable Mountain Regions Anshika Singh	T 1.5	Role of Local Communities in Biodiversity Conservation of Mountain Ecosystems Abdul Nadeem khan	T 1.6	Artificial Intelligence-Driven Sustainable and Renewable Energy Systems for Mountain Terrains: Enhancing Energy Accessibility, Efficiency, and Climate Resilience Prof. Gyanendra Kumar Gupta, Dr. Dinesh Kumar Pandey
	T 1.7	Stabilization of Expansive Soils in Hill Regions Using Industrial By-Products: A Sustainable Approach for Road Subgrade and Slope Protection Ashish Puri, Dr. Asha Kulshrestha, Shiva Prajapati	T 1.8	Biopolymer-Based Soil Stabilization for Erosion Control and Slope Protection in Hill Ecosystems: An Eco-Friendly Geotechnical Intervention Dr. Asha Kulshrestha, Ashish Puri, Shiva Prajapati	T 1.9	Sustainable Tourism in Hill Ecosystems: Strategies for Human Survival and Environmental Conservation Medha Singh
	T 1.10	Teleconnection Impacts on Temperature and Rainfall in Kashmir (1982–2024) Preeti	T 1.11	Harnessing Small-Scale Wind Energy in Hilly Terrains: A Sustainable Strategy for Disaster-Resilient Power and Ecosystem Conservation Vivek Mishra	T 1.12	Design of Extensions of Solar Plates for Maximum Utilization of Energy in hills area through means of Mechanical mechanism Mr. Himanshu Minotra
	T 1.13	Climate-Responsive Renewable Energy Strategies to Reduce Ecological Vulnerability in Mountain Terrains Varun Singh	T 1.14	Sustainable Solar Integration for Hilly Ecosystems: A Green Engineering Approach for Minimal Ecological Impact and Disaster Resilience Puskar Mishra, Vivek Mishra, Pappu Kushwaha	T 1.15	Sustainable Biomass Energy Conversion: A Strategy for Waste Management and Energy Security in Hilly Ecosystems Abhishek kumar,Puskar Mishra
	T 1.16	Urbanization in Hill Areas: Environmental Stress and Policy Solutions Harshvardhan Chauhan	T 1.17	Solar Photovoltaic Systems for Sustainable Energy Generation in Himalayan Hill Terrains: Challenges, Innovations, and Future Prospects Ankita Kulshrestha, Kuwar Mausam ,Rishabh Chaturvedi	T 1.18	Adverse Environmental Effects of Hill Mining: Stability Analysis, Parameter Estimation, and Numerical Simulation Dr. Ajai Singh Yadav

	T 1.19	Impact of climate change on water security and renewable energy potential in hill ecosystems assessment	T 1.20	Integrating Sustainable and Renewable Energy Solutions for Enhancing Biodiversity Conservation in Mountain Terrains	T 1.21	Importance of the Aravalli Hills and their Environmental & Global Significance
		Atul Kumar		Pankaj Kumar Yadav		Guaravkumar Ojha
	T 1.22	The Role of Renewable Energy in Climate Change Mitigation	T 1.23	Rooftop Solar Power: A Lifeline for Himalayan Homes	T 1.24	Solar Paint: The Future of Ecofriendly and Economically Renewable energy
		Manmohan Singh Chauhan Ved Kumar Ranjeeta Bhati		Preeti Kulshrestha		VedKumar ,Bharat Raj Singh, Pramod Kumar Singh
	T 1.25	Renewable Energy – Powering a Safer and Prosperous Future	T 1.26	Circular Economy the Technology for Environmental Sustenance in Hills	T 1.27	Application Of Climate Resilience Technology in Agriculture System Enhance Soil Carbon Sequestration And Mitigate The Climate Changes
		Dr. Manoj Kumar Singh, Prof. Bharat Raj Singh		Ms. Sujata Sinha		Shalini G Pratap
	T 1.28	Impact of Hilly Terrain on Solar Energy Generation and Techno-Economic Optimization of Hybrid Renewable Energy Systems in Jhansi, India	T 1.29	Towards sustainable heal Ecosystem: renewable energy, environmental protection, & disaster Resilience	T 1.30	Performance optimization of Solar TV Systems through intelligent control and Monitor
		Garima Singh		Durgesh Kumar Tripathi		Abhishek Srivastava
	T 1.31	Decision support framework for Pine needle mycoremediation and Disaster mitigation in the himalayas	T 2.1	Sustainable Ecosystem Restoration Strategies in the Aravalli Hills- Hill Ecology, Biodiversity Conservation, and Water Security	T 2.2	Green Supply Chain Management in Hills Ecosystem: A Study of Sustainable Logistics and Environmental Development
		Utkarsh Katiyar, Dr, Manmohan Singh		Prof. Bharat Raj Singh, Dr. Asha Kulshreshtha		Utkarsh Singh
	T 2.3	Development and Mechanical Performance of Hemp–Water Hyacinth Reinforced Hybrid Composites for Hill Ecosystem Applications	T 2.4	Hill Ecosystem and Human Survival: Environmental Challenges, Disaster Risks, and Sustainable Development Approaches	T 2.5	Water Conservation and Security in Indian States: Challenges, Governance, and Pathways to 2047
		Mr Ravi Shukla, Amarpreet kaur, Harshit upadhyay, Diksha patel, Nitish yadav		Dr. Arunesh Kumar Srivastava		Dr. Roli Raghuvanshi
	T 2.6	Zero-Waste Natural Fibre Geotextile System: For Erosion Control, Slope Stability, Watershed Conservation, and Water Security in Himalayan Hill Slopes	T 2.7	Conserving Hill Ecology for Sustainable Biodiversity and Water Resource Management	T 2.8	Effect of Thermal Pollution on Hills
		Aman Singh		Akansa Srivastava		Anoop Kumar Singh, Dr. Arvind Singh
	T 2.9	Computing Resilience: Safeguarding Hill Ecosystems and Human Lives	T 2.10	Enhancing Human Resilience Through Sustainable Management of Hill Ecosystems	T 2.11	Mathematical Modeling of Socio-Environmental Collapse due to Hill Mining in Bundelkhand: A Quantitative Sustainability Analysis
		Ms. Ayushi Patel, Ms. Divya Mishra		Kuldeep Kumar Katiyar		Dr. Seema Singh, Dr. Sachin Upadhya

Day 2: (28/06/2026)**Technical Sessions****Multipurpose Hall, Conference Hall, LT – 1 & LT – 2****(B) Technical Session – IV(Multipurpose Hall)**

Technical Session - V(Conference Hall, Ganga Block)

Technical Session-VI(Lecture Theatre-1)

Technical Session - VII(Lecture Theatre-2)

Time: 10:30 am to 1:00 pm	Technical Session- IV	Session Chair –	Technical Session- V	Session Chair-	Technical Session- VI	Session Chair –	Technical Session- VII	Session Chair –
		Dr. Shailendra Kumar Yadav		Dr. Sarvesh Rai		Dr. P.K. Singh		Dr. Alok Kumar
		Multipurpose Hall		Conference Hall, Ganga Block		Lecture Theatre-1		Lecture Theatre-2
3. Climate Change Impacts, Landslides, Floods, and Earthquakes: / 4. Environmental Governance, Community Resilience, and Livelihoods: / 5. Science Policy Integration for Disaster Preparedness and Mitigation: / 6. Other Emerging Area of Science, Technology and Management (Connected with Theme)	T 3.1	Integrated Multi-Hazard Risk Assessment of Climate Change, Earthquakes, Landslides, and Flash Floods	T 3.2	Assessing the Environmental Consequences of Road Expansion in Mountainous Ecosystems	T 3.3	GIS-Based Landslide Susceptibility Mapping for Sustainable Infrastructure Development in Hill Regions	T 3.4	Big Data Analytics and Machine Learning for Climate Change Impact Assessment in Global Hills and Mountain Ecosystems
		Renu, Anamika Kumari		Harshit Shukla, Bhanu Pratap Gupta		Bhanu Pratap Gupta, Harshit Shukla		Anamika, Savita Gautam
	T 3.5	Review of Landslide Risk Reduction Strategies in the Himalayan Belt	T 3.6	Climate-Smart Development: Linking Carbon Neutrality with Resilience Building	T 3.7	Landslide Susceptibility and Risk Assessment in Hilly Regions under Changing Climatic and Land Use Conditions	T 3.8	Himalaya Hills Are Collapsing: Reasons, Impacts, and Mitigation Strategies
		Sanjeev Kumar Pandey		Dr. Anod Kumar Singh		Rahul Singh		Dr. Dharmendra Singh, Prof. Bharat Raj Singh
	T 3.9	Climate Change due to Rising Temperatures and its Causes and Effects	T 3.10	Himalayan Glacier Melting in a Changing Climate: Challenges for Human Systems and Sustainable Development	T 3.11	Foothill Residential Infrastructure for Climate-Resilient Himalayan Development: A Sustainable Framework for Disaster Risk Reduction in Uttarakhand	T 3.12	Artificial Intelligence-Based Flood Prediction in Mountain Regions: A Review of Opportunities and Challenges
		Swati Agrawal, Ved Kumar, Ajai Singh Yadav, Sudhaker Dixit		V.D Tripathi, Ved Kumar, Pramod Kumar Singh, Guarav Ojha		Dr. Pramod Kumar Singh, Prof. Bharat Raj Singh		Krishna Agrawal
	T 3.13	Morphological and Physiological Responses of UV-B Stress in Plants of Hill Ecosystems: Mechanisms, Adaptations, and Future Perspectives	T 3.14	Data Driven Decision Making for Climate & Disaster Resilience: Frameworks, Models, & Evidence	T 4.1	AI-Driven Environmental Risk Management and Sustainability Analytics Using Machine Learning, IoT, Blockchain, and Predictive Data Intelligence	T 4.2	Geo-Energy and Environmental Sustainability: Exploring Renewable Planetary Resources for Mitigating Natural Disasters and Climate Change
		Vineet Kumar Awasthi		Sanjay Kumar Singh		Shashank Gaur		Yogendra Kumar Verma, Rahul Chaturvedi, Pappu Kushwaha

T 4.3	Environmental Justice and Ecocentrism: With Special Reference to The Hungry Tide	T 4.4	An Assessment of India's Sustainable Energy Policies for Promoting Green Infrastructure	T 4.5	Waste-to-Wealth Models in Hill Ecosystems: An Economic Evaluation for Environmental Sustainability and Human Survival	T 5.1	Harnessing Sustainable Planetary Energy Sources for Climate Resilience: An Integrated Framework for Environmental Conservation and Disaster Risk Reduction
	Dr. Shobhana Singh		Syed Shuja Askari		Dr. Ashok Sengupta		Rahul Chaturvedi, Yogendra Verma, Pappu Kushwaha
T 5.2	Leveraging Minitab and Regression Analysis for Environmental Sustainability and Disaster Resilience: A Statistical Modelling Framework	T 6.1	Flood Risk Prediction in Hill-Adjacent Communities Using Deep Neural Networks and Environmental Vulnerability Indicators	T 6.2	Landslide Risk Prediction Using Convolutional Neural Networks Integrated with Digital Elevation Model and Rainfall Data	T 6.3	Satellite Image Analysis for Monitoring Environmental Changes in Hill Regions
	Utkarsh Kumar Sharma		Sunit Kumar Mishra, Umesh Pratap Singh		Dr. Niyati Gaur, Sunit Kumar Mishra		Divya Mishra and Dr. Niyati Gaur
T 6.4	Artificial Intelligence for Environmental Monitoring and Disaster Prediction: Datasets, Models, and an Integrated Framework	T 6.5	Human Survival in Hill Ecosystems: A Deep Learning and Geospatial Analytics Framework for Climate-Induced Flood and Landslide Risk Assessment and Prediction	T 6.6	Electric Vehicle-Driven Planetary Energy Solutions: A Multidisciplinary Approach Combining Green Technologies and Environmental Monitoring	T 6.7	Towards Sustainable Generative AI: A Systematic Literature Review of Environmental Challenges, Green AI Techniques, and Future Directions
	Savita Gautam, Renu		Rahul Yadav		Pappu Kushwaha, Rahul Chaturvedi, Yogendra Kumar Verma, Dr. Kamlesh Singh		Alka
T 6.8	Human Survival Vulnerability Index for Hill Regions Using Explainable XGBoost: A Case Study of the Hindu Kush Himalayan Region	T 6.9	Terrain-Aware Wheeled-Legged Robot for Autonomous Robotics Operations in Hill and Mountain Terrains	T 6.10	AI-Enabled Energy-Efficient Cloud Data Centers: A Pathway to Sustainable Computing	T 6.11	Favourable transformation in the properties of Liquid Crystal by Gamma Radiation
	Umesh Pratap Singh		Dr. Kamlesh Singh		Dr. Hemant Kumar Singh, Dr. Saima Aleem		Sudhaker Dixit, Avneesh Kumar Singh, Ved Kumar