

International Conference on Applied Science and Engineering in a Changing World (ICASECW-24)

Hotel Pokhara Grande, Pokhara, Nepal

June 11-13, 2024

Program Overview

Day 1 (June 11)	
08:30-09:30	Registration
	<i>Opening Ceremony:</i>
09:30-10:30	<i>Guest of Honor and Keynote Speaker (Dr. Sanduk Ruit)</i>
10:30-11:00	Keynote Speaker (Dr. Amod Mani Dixit)
11:00-11:30	Keynote Speaker (Dr. Kyung Chun Kim)
11:30-12:00	Break/Photo
12:00-13:15	Technical Parallel Session (1, 2 & 3); Special Session#2
13:15-14:15	Lunch
14:15-14:45	Poster Session
14:45-16:00	Technical Parallel Session (4, 5 & 6); Special Session # 4
16:00-16:15	Break
16:15-17:30	Technical Parallel Session (7, 8 & 9)
18:30-21:00	Dinner (Limited Access)
Day 2 (June 12)	
8:30- 9:30	Registration
9:30-10:00	Keynote Speaker (Dr. Yoshimitsu Nakajima)
10:00-10:30	Keynote Speaker (Dr. Tek Raj Gyawali)
10:30-10:45	Break
10:45-12:15	Technical Parallel Session (10, 11 & 12), Special Session # 1
12:15-13:15	Lunch
13:15-13:45	Poster Session
13:45-15:00	Technical Parallel Session (13,14 & 15); Special Session # 3

15:00-15:15	Break
15:15-16:30	Technical Parallel Session (16, 17 & 18)
16:30-17:15	Closing Ceremony
Day 3 (June 13)	
Tea/Coffee/ Meetings/Field Visit	

List of Conference Sessions

Session 1: Construction Management (June 11, 12:00-13:15)

Chair: Dr. Arjun Baniya

1. Strengthening Disaster Preparedness Program in Nepal: Assessing Community Preparedness Using the Disaster Ready Community Checklist- *Anup K.C.*
2. Analysis of Construction Waste and Its Management Practices from Buildings in Pokhara Metropolitan City - *Sundar Giri, Rajib Pokhrel*
3. Effects on Contractor's Performance Due to Yearly Budget Allocation in Multi-Year Construction Projects of Kaski District - *Anup Thapa, Som Gurung*
4. Evaluation of Rural Road Consistency based on Performance Index Modelling in Kaski - *Prakash Baral*
5. Streaming Towards the Future: Nepal's Remarkable Journey in Hydropower Development - *Wellson Giri, Govinda Prasad Lamichhane*
6. An Assessment of Energy Efficiency for Vernacular Building Construction Practices: A Case of Different Community House Typologies in Chitwan District - *Deepjoti Shrestha, Keshab D. Awasthi, Aakash Thapa Magar, Arjun Baniya, Niraj Bohora*

Session 2: Artificial Intelligence and Machine Learning

(June 11, 12:00-13:15)

Chair: Dr. Shailesh Bahadur Pandey

1. Deep Learning Methods for Text Summarization - *Rajesh Kamar, Saroj Giri, Shiva Ram Dam*
2. State Machine for Efficient Hyphenation in Devanagari Words - *Sumitra Gyawali, Krishnanand Badu*
3. Malware Detection Using Machine Learning Algorithm - *Tripti Mahaseth*
4. Phishing Website Classification: A Feature Engineering Approach Based on URLs - *Sarita Bista, Rajita Basnet, Rubi Shakya*
5. The Influence of Artificial Intelligence on Human Behavior and Well-Being: An Empirical Study - *Ashok Kumar Khati*
6. Devanagari License Plate Recognition System- *Rohan Raj Poudel, Gaurav Pokhrel, Seemana Dhakal, Swastika Kharel , Smita Adhikari*
7. The Crucial Role of AI in ICT Leadership Development for Enhanced E-Governance: A Global Perspective-*Shailendra Giri, Chiranjibi Shah*

Session 3: Environmental Science and Sustainability

(June 11, 12:00-13:15)

Chair: Dr. Geetha Mohan

1. Strengthening Smallholder Mixed-Farming System for Sustainable Food Self-sufficiency in Nepal - *Durga D. Poudel*
2. Effectiveness of Broken Waste Glass and Wooden Coal for the Treatment of Wastewater as Filter Media - *Manoj Paudel, Rajib Pokhrel*

3. Assessment of Groundwater Potential Zones by Integrating Geographic Information Systems (GIS) and Analytical Hierarchical Process Techniques in Parsa District - *Jangbahadur Prasad Yadav, Mahesh Bhattarai, Krishna Pratap, Binod Aryal*
4. Assessing Municipal Solid Waste Composition and Generation with Emphasis on Recyclable Waste in Pokhara Metropolitan City - *Anu Dhakal*
5. Revolutionizing Agricultural Trade: A Comprehensive Analysis of an Innovative Agriculture Marketing Application - *Sneha Jha, Khusbu Kumari Chaudhary, Hemant Joshi*
6. Air pollutants and Covid-19 pandemic: Impact of Covid-19 pandemic on air quality in major cities of Nepal- *Himal Basnet and Rajib Pokhrel*

Session 4: Seismic Reinforced Concrete Structures

(June 11, 14:45-16:00)

Chair: Prof. Dr. Govind Prasad Lamichhane

1. Comparison of Transient Response for an Underground Structure Subjected to Blast Load, with and without Shockwave Barrier - *Prabhakar Gundlapalli*
2. Comparative Study on Seismic Behavior of Regular and Irregular Buildings on Sloping Ground - *Badri Adhikari, Prakash Poudel*
3. Assessment of Behavior of Reinforced Concrete Beam-Column Joints: A Comparison of NBC 105:2020 and International Standards - *Dipesh Jaisi Poudel, Hemchandra Chaulagain*
4. Seismic Responses of Reinforced Concrete School Buildings Considering Soil Structure Interaction (SSI) - *Gangalal Yadav, Rajendra Aryal*

5. Immediate Impact of Jajarkot Earthquake on Load Bearing Structures in Affected Areas - *Hemanta Raj Poudel, Hemchandra Chaulagain*

Session 5: Structural Engineering (June 11, 14:45-16:00)

Chair: Dr. Yoshimitsu Nakajima

1. Strain Limit for Numerical Simulation Based on Experiments with Notches Under Tension - *Abhishek Ghimire, Kirill Golubiatnikov, František Wald*
2. Effect of Smaller Aircraft Crash on Tall Residential Towers - Bhavani Chowdary T, *Prabhakar Gundlapalli*
3. Analytical Study of Spider Web Inspired Cable Net Structures under Dynamic Loads - *Projwol Acharya*
4. Beyond Conventional Slabs: Enhancing Structural Efficiency in Asymmetric Buildings through the Integration of Grid Slabs - *Samrat Poudel, Tek Raj Gyawali*
5. Evaluation of Response Reduction Factor of RC Buildings Considering Soil Structure Interaction - *Ramji Tripathi, Hemchandra Chaulagain*

Session 6: Smart Technologies, AI and IoT

(June 11, 14:45-16:00)

Chair: Prof. Dr. Subarna Shakya

1. AI-Powered Personal Finance Assistant: Budgeting, Expense Tracking, and Recommendations - *Sushant Paudel, Prashant Thapa*
2. Leveraging Mobile Technology for Rural Development in Nepal: A Systematic Review - *Subash K. C.*
3. Bloodlink: Revolutionizing Emergency Blood Donation

through Mobile Application - *Adarsh Das, Nikesh Gamal, Ashim Khadka*

4. ELABX - An Extended Online Laboratory Management System - *Abhilekh Gautam, Bishal Poudel, Riya Pant, Aishu Gyawali*
5. Leveraging Blockchain and Big Data Analytics to Safeguard Lending Practices in Nepal's Financial Sector - *Hari Prasad Aryal, Gajendra Sharma*
6. Securing Future: How AI Shapes Cyber Security in Telecommunications- *Shailendra Giri, Resham Giri, Subarna Shakya*

Session 7: Emerging Trends in Mechanical & Electrical Engineering (June 11, 16:15-17:30)

Chair: Dr. Durga Bastakoti

1. Identification of Safety Risks in Drilling Equipment Maintenance Operation in the Oil and Gas Industries: A Sequential Explanatory Research - *Muhammad Mujtaba Asad, Fahad Sherwani, Amjad Rind and Razali Bin Hassan*
2. Comparative Analysis of Control Techniques to Enhance Performance of Antilock Braking Systems in Vehicles - *Rishav Khanal, Shacheendra Kishor Labh and Chiranjivi Dahal*
3. Study of Thermal Performance of Ventilation Systems with Flow Dynamics - *Binaya Kumar Lamichhane, Ashesh Ghimire, Apurba Dahal and Shrijana Dhakal*
4. Dynamic Modelling of 4kW Induction Motor Using MATLAB / Simulink - *Purna Bahadur Pun*
5. Exploring Smart Grid Applications in Nepal: An Overview of Status, Challenges, and Opportunities for Sustainable Energy Transformation- *Yam Krishna Poudel*

6. Microstructural Evaluation of TMT and MS Bars Under Various Heat Treatment Conditions - *Abhinab Pratap Baniya, Hiramani Lamichhane, Manish Devkota, Pranjal Paudel, Sanyog K.C. and Durga Bastakoti*

Session 8: Urban Planning and Transportation

(June 11, 16:15-17:30)

Chair: Dr. Harshit Sosan Lakra

1. Interactive Architecture: Designing Spaces that Respond to Human Behavior - *Snigdha Mishra*
2. Overall Performance Evaluation of An Urban Water Supply System: A Case Study of Dharan Sub-Metropolitan - *Jangbahadur Prasad Yadav, Krishna Pratap, Adarsha Kafle and Binod Aryal*
3. Evaluation of Perception and Satisfaction on Quality of SMART Two-wheeler Ride Sharing Services: A Case Study of Kathmandu Valley of Nepal - *Bhatt Nabraj, Devkota P. Netra, Gautam Niroj, Shahi C. Thusitha*
4. Highway Alignment Planning Using Analytical Hierarchy Process (AHP) and GIS Modelling: A Case Study for Road Network in Kaski - *Milan Shrestha, Shuva Raj Neupane, Binaya Kumar Mishra*
5. Optimizing the Use of Parking Spaces at Supermarkets with Dynamic and Time-Based Pricing - *Anshika Bhatt, Prashant Chaudhary, Salina KC, Surakshak Giri*
6. Mode Choice Modelling: A Case Study of Manipal Teaching Hospital - *Sandip Duwadi, Ujjwal Koirala, Udaya Jimba, Saroj Poudel, Samir Lamichhane, Sanju Sapkota, Laxman Bhatta*

Session 9: Disaster Management & Seismology

(June 11, 16:15-17:30)

Chair: Dr. Piyush Srivastava

- 1 Urban flood modelling: preliminary insights using PCSWMM in Pokhara- *Kishor Kumar Shrestha and Vishnu Prasad Pandey*
- 2 Disaster Preparedness Using Modern Technologies - *Prathyusha Dokku, Vrushali Kamalakar*
- 3 Uncertainties in Estimation of Rocking Springs Based on Codal Provisions: A Comprehensive Review - *Prabhakar Gundlapalli, Susritha Lokireddy*
- 4 Unraveling Global Protest Behavior: Insights from ICEWS Dataset Analysis - *Krishnanand Badu, Sumitra Gyawali*
- 5 Evaluation of the Influence of Angle Variations on Irregular RC Building Performance - *Nolaraj Poudel, Hemchandra Chaulagain*
- 6 Seismic Behaviour of Reinforced Concrete and Steel Concrete Composite Buildings with Irregular Plans - *Ranjit Mahato, Rajendra Aryal*

Session 10: Social Sciences and Human Behavior

(June 12, 10:45-12:15)

Chair: Dr. Shamik Chakraborty

1. Rethinking Engineering Education in Nepal; Adapting to Industry Needs and Technological Advancement - *Niraj Khadka*
2. Towards a Sustainable Future: The Role of Nepalese Higher Education Institutions in Achieving the Sustainable Development Goals- *Krishna Bikram Shah, Bibhuti Ojha, Durgaprasad Bhandari, Ruth Herrero-Martin*

3. The Perception of Perceptive Civil Engineering Students on the Application of Mathematics for Engineering in Pokhara Valley - *Thakur Prasad Pokharel*
4. Integrating BIM into the B. Architecture curriculum of Pokhara University - *Pradip Pokharel, Gaurab Luitel*
5. Advancing Augmentative and Alternative Communication: Insights from a Pilot Study and Iterative Refinement Process - *Dikshya Aryal, Dibya Aryal, Diyamond Bohara, Khusbu Chaudhary*
6. Social Media and Loneliness: An Empirical Study of the Relationship Among Nepali Undergraduate Students - *Sushma Acharya, Amrita Bhandari, Sabina Kumari Saru, Ganga Shrestha*
7. Exploring Mathematics Anxiety among Bachelors' level Engineering Students- *Krishna Chandra Paudel*

Session 11: Hydrology and Water Resources

(June 12, 10:45-12:15)

Chair: Prof. Dr. Narendra Man Shakya

1. Evaluation and Selection of the CMIP6 Climate Model: A Case of Budhigandaki River Basin (BRB), Nepal - *Shankar Lamichhane*
2. Rainfall-runoff simulation in Fusre river basin using HEC-HMS - *Indra Prasad Timilsina, Binaya Kumar Mishra and Suresh Baral*
3. Assessing Climate Change Impacts on Seti Gandaki River Basin Hydrology: Seti Khola Hydropower Project Case - *Shailendra Bahadur Kunwar*
4. Analysis of Climate Change Impacts on Streamflow Using

WEAP Model: A Case Study of Modi River Basin - *Sujita Paudel, Binaya Kumar Mishra*

5. Experimental Investigation of Sand/Silt Particles Size by Rainfall Runoff Simulation Model Applicable in Irrigation on Cultivable Land - *Saugat Tiwari, Indra Prasad Timilsina*
6. A study on Performance Assessment of Deep Tube Well Irrigation Projects at Kaski District, Nepal-Water Users' Association Management Model -*Jyanti Joshi, Arjun Gautam*

Session 12: Sustainable Energy (June 12, 10:45-12:15)

Chairs: Dr. Krishna Raj Adhikari, Dr. Suresh Baral

1. Catalyzing Clean Energy Integration: Three-Phase DC-AC Model with Synchronous Converter and LCL Filter - *Supriya Pandeya*
2. Graphene defect estimation using PSO-GSA - Sunam Kumar Sharma, Anil Kumar Khambampati and *Kyung Youn Kim*
3. Anaerobic Digestion of Brewery Spent Grain and Wastewater to Assess Bioenergy Generation - *Santosh Khanal, Bikash Adhikari, Anish Ghimire*
4. Rehabilitation, Upgradation, and Modernization of Panauti Hydropower Station: Addressing Operational Limitations for Sustainable Energy Production - *Sagun Paudyal, Sameep Shrestha, Kripa Paudel, Suman Kattel, Sagar Shrestha*
5. Comparative Study on Efficiency Analysis of Dual-Axis Solar Tracking Systems Due to Temperature Variation and PV Cell Material - *Ajay Oli, Saugat Sharma, Pratham Adhikari, Deepak Neupane, Santosh Khanal and Shacheendra Kishor Labh*
6. Design and Fabrication of Pedal-Powered Rope Pump - *Prashrit Sapkota, Sundar Adhikari and Rishav Khanal*

Session 13: Sustainable Concrete Practices

(June 12, 13:45-15:00)

Chair: Dr. Hemchandra Chaulagai

1. Experimental Study of Steel and Polypropylene Fiber Reinforced Concrete - *Shrutee Karna and Arjun Baniya*
2. Use of Artificial Neural Networks for Predicting the Compressive Strength of Concrete - *Abdul Samad, Madan Neupane and Kishor Pandey*
3. An Experimental Investigation on Use of Post-Consumer Waste Plastics in Structural and Non-Structural Concrete - *Dumre Ghanshyam, Gyawali Tek Raj*
4. Performance of Concrete Containing Plastic Waste as a Partial Replacement for Sand - *Roshan Poudel, Neha Kumara Karna and Aseem Dhital*
5. Plasticity Variation of High Plastic Silt Mixed with Sand, Stone Dust, and Combination of Both - *Raj Kushwaha, Ujjwal Niraula, Durga Devi Kandel, Preshna Yadav, Anjila Tiwari, David Chaudhary*
6. Performance Evaluation of Recycled Coarse Aggregate on Compressive Strength of Concrete- *Tek B. Malla, Arjun Baniya, Birat Ghimire, Niraj Bohara Keshab D. Awasthi, Mahendra B. Baniya, Arjun Gautam*

Session 14: Geotechnical Engineering & Soil Science

(June 12, 13:45-15:00)

Chair: Dr. Srikrishnan Siva Subramanian

1. Slope Stability Analysis of Landslide in the Nepalese Himalaya: A Case Study of Kuyadaha Landslide, Gokuleshor, Baitadi - *Sanjay Baral and Ram Chandra Tiwari*
2. An Assessment of Soil Organic Carbon (SOC) and Soil Properties Variation in Banpale forest of Tribhuvan University,

Pokhara Campus - *Adhikari, R., Parajuli, M., Tiwari, K. R. Seitz, S. and Scholten, T.*

3. Evaluation of Response Reduction Factor of RC Buildings Considering Soil Structure Interaction - *Ramji Tripathi, Hemchandra Chaulagain*
4. Quantifying Soil-Structure Interaction Effects on the Response of Irregular RC Buildings and Soil Behavior - *Nolaraj Poudel and Hemchandra Chaulagain*

Session 15: Wastewater and Water Supply Management

(June 12, 13:45-15:00)

Chairs: Dr. Subir Sen

1. Anthracite as Filter Media in Filtration Process - *Aashish Poudel and I. M. Amatya*
2. A Multidimensional Analysis of Water Poverty at Local Scale: Application of Improved Water Poverty Index for Budhiganga Rural Municipality - *Jangbahadur Prasad Yadav, Krishna Pratap, Nishan Parajuli, Binod Aryal*
3. Economics of Sludge and Water Effluent Management of Wastewater Treatment Plants - *Basant Lekhak, Mukti Bahadur Khatri and Dinesh Prasad Bhatt*
4. Sustainability Assessment of Community-Based Water Supply Systems: A Case Study of the Deurali-Hupsekot Urban Water Supply and Sanitation (Sector) Project - *Bishal K.C., Arjun Baniya, Ramhari Poudyal, Keshab D. Awasthi, Mahendra B. Baniya, Arjun Gautam, Niraj Bohara and Kul C. Pandit*
5. Garbage Tracking System–Revolutionizing the Waste Management System - *Yubraj Adhikari, Amrit Jung Karki, Suman Sharma, Binay Rijal, Smreeta Shrestha*

Session 16: Progress in Mathematical Analysis

(June 12, 15:15-16:30)

Chairs: Prof. Rajesh Thagurathi; Dr. Harsh Vardhan Harsh

1. Evaluation of a New Class of Integrals Involving Generalized Hypergeometric Function - *Madhav Prasad Poudel*
2. Fixed Point Theorems in Dislocated Quasi b-Metric Space - *Durgesh Ojha*
3. Generalized Cesàro Sequence Space of Non-Absolute and Absolute type as Complete Paranormed Space - *Jagat Krishna Pokharel*
4. On Certain Summability Techniques in Divergent Series - *Resham Prasad Paudel and Narayan Prasad Pahari*
5. Review on Hypergeometric Functions, Properties, and Their Applications - *Ganesh Bahadur Basnet and Narayan Prasad Pahari*
6. Impact of Yoga Awareness on Transmission Dynamics of Communicable Diseases: SIR Model Analysis- *Raghu Bir Bhatta*

Session 17: Data Science and Analytics

(June 12, 15:15-16:30)

Chairs: Dr. Roshan Chitrakar

1. Comparative Analysis of Support Vector Machine and Multilayer Perceptron for Classifying Imbalanced Data Using Sampling Techniques - *Ajaya Shrestha*
2. Enhancing Real Estate Search Through the Application of Lexical and Phrase-Based Query Expansions - *Newton Shahi Thakuri*
3. An Effective Sentiment Analysis Pipeline for Romanized Nepali Text - *Amir Poudel, Aadarsha Wagle, Kamal Lamichhane and Dikshya Bhujel*

4. Examination of Two-Factor Authentication in a Student Enrollment Setting - *Amir Arshad Khan, Dipendra Raj Bhatt, Prabesh Shrestha and Prajwal Acharya*
5. Predicting Wins in the Premier League Using Logistic Regression - *Pranav Acharya, Samir Aryal, Sandesh Gwachha and Yunil Raj Poudel*
6. Decentralized KYC Verification System - *Pranav Acharya, Sarita Bista, Yunil Raj Poudel*

Session 18: Applied Sciences (June 12, 15:15-16:30)

Chair: Dr. Sushil Panta

1. Unveiling Trichoderma's Arsenal: A Multifaceted Approach to Environmental Biotechnology - *Deepa Srivastava*
2. Study of Impact of Mixed Infections of Phytoplasmas on Environment - *Smriti Mall*
3. Soil C:N in Krummholz forest at treeline ecotones of Central Nepal Himalaya - *Adhikari, R., Huber, J., Maharjan, A., Scholten, T., Oelmann, Y., Sitz, S., Schickhoff, U., Böhner, J., Chaudhari, R., Subedi, C.K.*
4. Identification of Natural Products in Actinomycetes - *Bijaya Bahadur Thapa, Rabin Budhathoki, Ram Prabodh Yadav, Bimal Kumar Raut, Khaga Raj Sharma, Niranjana Parajuli*
5. Thakal Fruit Peel Extract Incorporated Biodegradable Films for Active Food Packaging: Preparation, Characterization, and Antioxidant Activity - *Dikpal Kumar Shahi, Nirmal Karki, Elina Rai, Hari Achhami, Bishwa Bandhu Pachhai, Ganesh Prasad Awasthi, Deependra Das Mulmi, Sudan Koirala, Damodar Neupane, Dinesh Gautam, Lok Ranjan Bhatta, Bhanu Bhakta Neupane, Mahesh Kumar Joshi*

Poster Presentations:

June 11 (14:15-14:45) & June 12 (13:15-13:45)

Facilitator:

Dr. Rajib Pokhrel; Er. Bhesh Bahadur Thapa (SoE)

- 1 AI and IoT Driven Wildlife Attack Prevention: Safeguarding Human Lives Around Bardiya National Park - *Sudip Paudel, Ishan Raj Sapkota*
- 2 Assessing the Serviceability of the Dodhara Chandani Bridge: Traffic Volume, Structural Health, and Future Considerations - *Richa Bist, Anisha Khadayat, Bhaskar Pant, Shristi Dhanadi and Nirmala Lekhak*
- 3 Bearing Capacity Influenced by Footing Dimensions in Diverse Soil Types - *Upendra Shrestha, Shreya Shrestha, Ujjwal Niraula, Rohan Shrestha, Nisha Khatri, Subijal Gurung and Kaushikha Pandey*
- 4 Classification of Soil at Shallow Footing Depths at Sanepa Area Construction Sites - *Nabraj Bohora, Rudrananda Gupta, Shirish Shrestha, Rajanand Singh, Ujjwal Niraula, Ayush Jung Thapa, Reetesh K. Dutta*
- 5 Detection of Change in Built-up Area of Pokhara Valley Using Multiple Indices from 2013 to 2020 - *Shova Acharya and Shahnawaz Shahnawaz*
- 6 Effect of Nepal's Politics on Development of Civil Constructions - *Suchana Adhikari, Garima Pusph*
- 7 Evaluation of Flexible Pavement Friction Coefficients: A Case Study of East-West Highway near Mahendranagar City, Nepal - *Crimsan Singh Negi, Bhaskar Pant, Ganesh Pant, Puja Pali, Rabin Khadka and Khem Raj B.K.*

- 8 Flood Hazard Mapping Under Climate Change Scenarios in Hanumante Khola, Bhaktapur - *Sandesh Raj Malla, Suman Pandey, Raman Singh Kathayat, Arshad Ansari, Madan Pokhrel*
- 9 Flood Inundation Mapping of Mahakali River using Hydraulic Modelling in HEC-RAS - *Raman Bhatt, Bharat Chand, Janardan Joshi, Tirtha Raj Pandey, Jay Dev Bhatt, and Harish Chand*
- 10 Potential of Municipal Waste on Circular Economy: A Case Study Of Shuklagandaki Municipality - *Sanisha Rana*
- 11 Study of Compressive Strength of Concrete of Grade M-20 and M-25 by Different Percentages of Fly Ash Contents and Silica Fume - *Sushma Dhungel and Samiksha Chauhan*
- 12 Interface Design of Geo-Location-Based Real Estate Search - *Newton Shahi Thakuri, Sabin Kaphle, Urusha Shrestha and Sagar Adhikari*
- 13 Assessment of the Capacity of Roadside Drainage on Lamachaur Road- *Biswash Kaphle, Aayush Kafle, Madan Pokhrel*
- 14 Projection of climate variables based on the CMIP6 model in the Seti River Basin of Nepal - *Diwas Shrestha, Aditya Pandey, Deepak Bhusal, Binod Khanal, Dipendra Tiwari, Dharma Sharma, Madan Pokhrel*
- 15 Delay in Construction of Ghorai-Tulsipur 4 Line Road and Its Consequences- *Bibek Sunar, Raju Giri*

Special Sessions:

Special Session 1: Addressing Inclusive Climate Resilient WASH System: Lessons from Local Level in Nepal

Organizers: International Water Management Institute (IWMI), Nepal; SNV Country Office Nepal

Oral Presentation (30 Min.)	
Presentation title: <i>A bottom-up and top-down approach to make a WASH system inclusive and climate-resilient</i> (12 Min.) Dr. Anil Aryal (IWMI Nepal)	Moderator and Rapporteur Mr. Binaya Raj Shrestha (IWMI Nepal)
Presentation title: <i>Strengthening capacities of local governments in rural Nepal in climate-risk informed water supply services provision</i> (12 Min.) Mr. Ratan Bahadur Budhathoki (SNV Nepal)	
Q 7 A (6 Min.)	
Panel Discussion (60 Min.)	
Panel discussion on " Addressing inclusive climate resilient WASH services in Nepal: Challenges and Opportunities "	Moderator Dr. Santosh Nepal (IWMI Nepal)
Panelist 1: Ms. Manju Pandey Acting Chairperson Mahabu RM, Dailekh	Rapporteur Dr. Anil Aryal Mr. Ninaya Raj Sharma (IWMI Nepal)
Panelist 2: Er. Ganesh Raj Wasti Secretary, Water Resources and Energy, Gandaki Province	
Panelist 3: Er. Resham Jung Singh Executive Director, NEWAH	
Panelist 4: Er. Darshan Karki IWMI Nepal	
Q & A (15 Min.)	

Special Session 2: Climate Change in South Asian Region,
Challenges and Opportunities

Session Chairs: Dr. Besh Raj Thapa; Co-chair: Kriti Rajkarnikar

Presentation 1: Applicability of Japan Meteorological Agency (JMA) Soil-Water Index (SWI) based thresholds for a Territorial Landslide Early Warning System (Te-LEWS) in the Himalayas
Srikrishnan Siva Subramanian, Indian Institute of Technology Roorkee, India

Presentation 2: Forest Fires in the Himalayas: An interplay of Internal Variability, Climate Change and Western Disturbances
Piyush Srivastava, Indian Institute of Technology Roorkee, India

Presentation 3: Risk Informed and Participatory Planning Framework for Resilient Future Cities
Vibek Manandhar, National Society for Earthquake Technology-Nepal

Presentation 4: Retrofit Technology Adopted in Nepal
Suraj Pandey, Earthquake Safety Solutions (ESS), Nepal

Special Session 3: Promoting Regional Collaboration on DRM & CRM Research

Chair: Dr. Amod Mani Dixit

Presentation 1: Experience of Youth Engagement in CCA and DRR; Insight into Classroom integration and Community Trainers
Harshit Sosan Lakra, Indian Institute of Technology Roorkee, India

*Presentation 2: Cross-Cultural Learning and Gender oriented Adaptation: Enhancing Resilience in India, Nepal, and Sri Lanka
Malavika K., Indian Institute of Technology Roorkee, India,*

*Presentation 3: Learning from Uttarakhand: Gender oriented Adaptive Transformation cross-Learning for Climate Change and Disaster Risk Resilience among India, Nepal, Sri Lanka and Japan
Monu Kumari, Indian Institute of Technology Roorkee, India*

*Presentation 4: Achievements in Earthquake Risk Management in Nepal and the Region
Dipu Chapagain, Earthquake Safety Solutions (ESS), Nepal*

Special Session 4: Interlinkage of ecosystems and human wellbeing for climate-smart landscapes

Moderator: Dr. Pawan Bhattarai

*Presentation 1: Sustainable Water Resource Management in a Changing Environment: Lessons from Southeast Asia
Binaya Kumar Mishra, Pokhara University, Nepal*

*Presentation 2: Climate Smart Agriculture for South Asia: Can we Make one of the Biggest Production Landscapes Climate Resilient?
Geetha Mohan, University of Toyama, Japan*

*Presentation 3: Economic Cost of Natural Disasters due to Climate Change
Subir Sen, Indian Institute of Technology Roorkee, India*

*Presentation 4: Interlinkage of Ecosystem Values and Human Wellbeing in Proposing Climate-smart Landscapes and Seascapes: Lessons from Nepal and Bangladesh
Shamik Chakraborty, University of Toyama, Japan*

