

SLRMES CONFERENCE 2023



PROGRAMME

Day 1: 3rd December 2023

TIME	EVENT
06:30 – 09:00 PM	Room: Ivory and Ebony Welcome Reception and Conference Registration

Day 2: 4th December 2023

TIME	EVENT	
	Room: Frangipani and Anthurium	
07:00 – 08:00 AM	Conference Registration	
08:00 – 08:30 AM	Inaugural Session	
	Sri Lankan traditional dance and oil lamp lighting Welcome speech by Prof. Seokwon Jeon, ISRM President Speech by Prof. Pinnaduwa H.S.W. Kulatilake, Conference Chair and SLRMES President	
Keynote Session 1 Room: Frangipani and Anthurium Session Co-Chairs: Prof. Conrad Boley and Prof. Debasis Deb		
08:30 – 09:15 AM	New Developments in Dimensioning of Rock Anchors with Focuses on the Bond Strength and Arching effect in the Rock Mass	Prof. Charlie Chunlin Li Norway
09:15 – 10:00 AM	Macro-Level Geologic Structural Analysis with In-Mine Measurements for Improved Ground Control and Productivity in Coal Mines	Prof. Yoginder Paul Chugh USA
10:00 – 10:30 AM	Tea/Coffee Break	

TIME	PARALLEL SESSIONS	
	SESSION 1 [Room: Frangipani] Co-Chairs: Dr. Antonio Samaniego and Dr. Sandi Kumar Reddy	SESSION 2 [Room: Anthurium] Co-Chairs: Prof. Sergio Fontoura and Dr. Paul Naveen
10:30 - 11:00 AM	<p>Session Lead Lecture: Three-dimensional Numerical Modeling Case Study of Tunnel Stability in a Complex Underground Mine in the USA</p> <p>Dr. Yan Xing China</p>	<p>Session Lead Lecture: Geomechanical Constraints in CO₂ Storage in Depleted Oil Reservoirs</p> <p>Dr. Vikram Vishal India</p>
11:00 - 11:20 AM	<p>Study the Impact of Dynamic Loading and Porosity through Numerical Simulation in an Abandoned Underground Coal Mine in Central India</p> <p>Miss. Nikita Dwivedi India</p>	<p>Micromechanical Characterization of Sedimentary Rock Present in the Shivalik Region</p> <p>Dr. G. Sivakumar India</p>
11:20 - 11:40 AM	<p>Stress Determinations onto Barricades within Underground Backfilled Mine stopes using 3-D Finite Difference Modelling</p> <p>Dr. Sankha Widisinghe Sri Lanka</p>	<p>The Influence of Particle Size on Permeability and Compaction in an Overburden Dump Material</p> <p>Dr. Rakesh Kumar India</p>
11:40 - 12:00 AM	<p>Dynamic Stress Concentration on Barrier Pillars Due to Final Excavation by Blasting Gallery Mining</p> <p>Dr. Sandi Kumar Reddy India</p>	<p>Determination of Brittleness and its Correlation with Physical Properties of a Coal- measure Sandstone</p> <p>Dr. Nikhil Sirdesai India</p>
12:00 - 01:00 PM	Lunch Break	



TIME	PARALLEL SESSIONS	
	SESSION 3 [Room: Frangipani] Co-Chairs: Prof. Luis Ribeiro Sousa and Dr. Ratan Das	SESSION 4 [Room: Anthurium] Co-Chairs: Dr. Chulantha Jayawardena and Dr. Ritesh Lokhande
13:00 - 13:30 PM	<p>Session Lead Lecture: Probabilistic rock slope stability analysis based on block theory and its application</p> <p>Dr. Jun Zheng China</p>	<p>Session Lead Lecture: Shear Strength Behavior of Soil-Rock Mixture: Applicability of Some Rock Mechanics Principles</p> <p>Prof. Mahendra Singh India</p>
13:30 - 13:50 PM	<p>Numerical Analysis of a Jointed Rock Slope in the Himalayan Region of India - a Comparative Study Between Continuum and Discontinuum Approaches</p> <p>Dr. Kripamoy Sarkar India</p>	<p>Unlocking the Hidden Potential: Investigating and Interpreting Intermediate Geo-Materials (IGM) for Enhanced Geotechnical Design in India</p> <p>Mr. Deepan Palanisamy and Dr. Doraswamy Raju India</p>
13:50 - 14:10 PM	<p>FEM-based Slope Stability Analysis and Suggestive Remedial Measures for Select Himalayan Slopes in India</p> <p>Dr. Sarada Prasad Pradhan India</p>	<p>Assessment of Uniaxial Compressive Strength of Rock using Impact Test</p> <p>Mr. Lal Hruaikima India</p>
14:10 - 14:30 PM	<p>Assessment of Waste Dump Slope Stability in Open pit Iron Ore Mine</p> <p>Dr. Sandeep Panchal India</p>	<p>A Rapid Determination of Geological Strength Index Using Laser Scanning and Machine Learning Methods</p> <p>Dr. Yunfeng Ge China</p>
14:30 - 15:00 PM	Tea/Coffee Break	



TIME	PARALLEL SESSIONS	
	SESSION 5 [Room: Frangipani] Co-Chairs: Prof. Charlie Chunlin Li and Dr. G. Sivakumar	SESSION 6 [Room: Anthurium] Co-Chairs: Prof. Mahendra Singh and Dr. Nikhil Sirdesai
15:00 - 15:30 PM	<p>Session Lead Lecture: Ground Improvement in Rock Engineering and Tunnelling - New Materials and Design Concepts</p> <p>Prof. Conrad Boley Germany</p>	<p>Session Lead Lecture: Opportunities and Applications of Digital Image Correlation (DIC) in Rock Engineering</p> <p>Prof. Debasis Deb India</p>
15:30 - 15:50 PM	<p>Weathered Rock Surface Classification with Unpiloted Aerial Vehicle Imagery and Machine Learning</p> <p>Ms. Gamsavi Kanagasundaram Sri Lanka</p>	<p>Application of Geophysics for Infrastructure Projects</p> <p>Dr. Sanjay Rana India</p>
15:50 - 16:10 PM	<p>Real-time Slope Monitoring System based on Cloud Computing for Opencast Coal Mines</p> <p>Dr. Ram Chandar Karra India</p>	<p>Enhancing Rock CT Image Resolution: Leveraging the Local Implicit Image Function (LIIF)</p> <p>Dr. Zhaoyang Ma Saudi Arabia</p>
16:10 - 16:30 PM	<p>Comparative Analysis of AIV, LAAV, and Water Adsorption for Selecting Optimal Aggregates in Road Pavement Construction</p> <p>Ms. Gamsavi Kanagasundaram Sri Lanka</p>	<p>Application of Image Processing Technology to Crack Behaviour Monitoring</p> <p>Ms. Afia S. Boney Japan</p>
16:30 - 17:00 PM	Photo shoot	
18:30 - 22:00 PM	Conference Banquet with live music provided by a four-piece band (Hindi, English, Tamil, and Sinhalese songs)	



Day 3: 5th December 2023

Keynote Session 2		
Room: Frangipani and Anthurium Session Co-Chairs: Dr. Vikram Vishal and Dr. Sreevalsa Kolathayar		
TIME	EVENT	
08:30 - 09:15 AM	Rock Fragmentation: Latest Technologies and Challenges	Prof. Seokwon Jeon South Korea
09:15 - 10:00 AM	Geomechanical Elements of Salt Cavern Design and Operation	Prof. Sergio Fontoura Brazil
10:00 - 10:30 AM	Tea/Coffee Break	



TIME	PARALLEL SESSIONS	
	SESSION 7 [Room: Frangipani] Co-Chairs: Dr. Vinoth Srinivasan and Dr. Doraswamy Raju	SESSION 8 [Room: Anthurium] Co-Chairs: Mr. Deepan Palanisamy and Dr. Rakesh Kumar
10:30 - 11:00 AM	<p>Session Lead Lecture: Numerical Simulation of a Jointed Rock Block Mechanical Behavior Adjacent to an Underground Excavation and Comparison with Physical Model Test Results</p> <p>Dr. Xu-xu Yang China</p>	<p>Session Lead Lecture: Oil Field Redevelopment through Numerical Modelling - Case Study of Western Offshore India</p> <p>Dr. Rakesh Kumar Vij India</p>
11:00 - 11:20 AM	<p>Effect of High Temperature and Static Loading on Soft Porous Artificial Rock Mass with Impersistent Joints</p> <p>Mr. Gaurav Kumar Mathur India</p>	<p>Methane Transit Modelling in Multifractal Shaly Coal Formations Integrating Monte Carlo Techniques</p> <p>Dr. Paul Naveen India</p>
11:20 - 11:40 AM	<p>Shear Behaviour and Dilation for Irregular Saw-Tooth Joint Samples Under Constant Normal Load</p> <p>Prof. Debasis Deb India</p>	<p>Carbon Dioxide Sorption Estimation in Bituminous Coals Leveraging Data-driven Models for CCUS Projects</p> <p>Dr. Paul Naveen India</p>
11:40 - 12:00 AM	<p>Application of Drone Imagery in Discontinuity Mapping and Slope Stability Assessment at an Open Pit Mine in Ghana</p> <p>Dr. Mawuko Luke Yaw Ankah Ghana</p>	<p>Prediction of Rockburst Proneness Based on the Residual Elastic Energy Index</p> <p>Dr. Phibe Khalkho India</p>
12:00 - 01:00 PM	Lunch Break	



TIME	PARALLEL SESSIONS	
	SESSION 9 [Room: Frangipani] Co-Chairs: Dr. Sankha Widisinghe and Dr. Sumant Mohanto	SESSION 10 [Room: Anthurium] Co-Chairs: Dr. Kripamoy Sarkar and Dr. Sarada Prasad Pradhan
13:00 - 13:30 PM	<p>Session Lead Lecture: Underground Mine Designs Based on Empirical Methods</p> <p>Dr. Antonio Samaniego Peru</p>	<p>Session Lead Lecture: Rock Slope Assessment and Risk Management of Accidents</p> <p>Prof. Luis Ribeiro Sousa Portugal</p>
13:30 - 13:50 PM	<p>Assessing Rib Pillar Stability in Underground Mines: A Fuzzy Rules-Based Approach for Evaluating Rock Engineering System (RES) Interactions</p> <p>Dr. Yugal Kishor Patanwar India</p>	<p>Bedding-controlled Landslide Hazard in Assam Arakan Fold belt: A Case Study from Aizawl, Mizoram, India</p> <p>Dr. Ratan Das India</p>
13:50 - 14:10 PM	<p>Empirical Method for Determination of RMR and Roof Support Design of a Drift: A Case Study on Roof Fall Hazards Mitigation Along a Drift in an Underground Coal Mine</p> <p>Mr. Syed Shah Ghalib Askari India</p>	<p>Effect of Particle Size on Shear Properties of Dump Material in Stability Assessment</p> <p>Mr. Subodh Kumar India</p>
14:10 - 14:30 PM	<p>Parametric Study on the Stability of Rib Pillars in an Underground Metalliferous Mine below an Open Pit Mine Considering Multi-variate Regression and K-cross Validation Technique</p> <p>Dr. Sumant Mohanto India</p>	<p>Experimental Study on Deformation and Failure of a Mine Slope Under the Action of Rainfall</p> <p>Prof. Wenbing Shi China</p>
14:30 - 15:00 PM	Tea/Coffee Break	

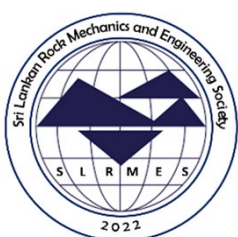


TIME	PARALLEL SESSIONS	
	SESSION 11 [Room: Frangipani] Co-Chairs: Dr. Ram Chandar Karra and Dr. Thushara Madanayake	SESSION 12 [Room: Anthurium] Co-Chairs: Dr. Sanjay Rana and Dr. Zhaoyang Ma
15:00 - 15:30 PM	<p>Session Lead Lecture: REV and its Properties on a Fracture System and Mechanical Parameters, and an Orthotropic Constitutive Model for a Jointed Rock Mass in a Dam Site in China</p> <p>Prof. Qiong Wu China</p>	<p>Session Lead Lecture: Mixed Mode I/II Fracture Parameters of Hard Rock Under Static and Dynamic Loadings</p> <p>Prof. Diyuan Li China</p>
15:30 - 15:50 PM	<p>Stability Assessment of a Jointed Rock Slope with Insights into Numerical Simulation - A Case Study from the Himachal Himalayas in India</p> <p>Mr. Avishek Dutta India</p>	<p>Experimental Study for Determination of Crack Threshold in the Multi Flawed Rock Mass Under True Triaxial Loading</p> <p>Mr. Prabhakar Kumar India</p>
15:50 - 16:10 PM	<p>Discontinuities' Orientation Detection Based on 3D Traces Network Analysis</p> <p>Prof. Seyedahmad Mehrishal South Korea</p>	<p>Physical, Mechanical and Fracturing Attributes of the Indian Closepet Granite after Cyclic Thermal Treatments</p> <p>Dr. Vinoth Srinivasan India</p>
16:10 - 16:30 PM	<p>Application of MMS and Back-mounted Laser Surveying Device for Rock Slope Management</p> <p>Mr. Katsuhiko Ibaraki Japan</p>	<p>Deterministic Seismic Hazard Analysis of the Global Vipassana Pagoda, Mumbai</p> <p>Dr. Sreevalsa Kolathayar India</p>
16:30 - 17:00 PM	AWARDS AND CLOSING REMARKS	
	Open for comments by Conference Delegates	
	Vote of Thanks - Dr. Chulantha Jayawardena	



Day 4: 6th December 2023

TECHNICAL TOURS	
TIME	EVENT
06:00 AM – 10:00 PM	Technical Tour 1 - Upper Elahera Canal Project



Day 5: 7th December 2023

TECHNICAL TOURS	
TIME	EVENT
07:00 AM - 08:00 PM	Technical Tour 2 - Bogala Graphite Mine

