

Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day1	TUN1-1	Tunnels and Underground Spaces I	196	Squeezing potential and mitigation measures for a site-specific tunnel located in Lesser Himalayan region	Mahendra Singh, Arun Gangwar, R. D. Dwivedi
Day1	TUN1-2	Tunnels and Underground Spaces I	206	Development of a New Method for Detecting Slickensides on Tunnel Faces	Hayato Tobe, Yasuyuki Miyajima, Kazuhiko Masumoto
Day1	TUN1-3	Tunnels and Underground Spaces I	380	Case study of measures for slope failure at tunnel portal on Upper Cisokan Pumped Storage Power Plant Project in Indonesia	Yoshinori Higuchi, Mitsuhiro Tokusu, Shouji Tsutsui, Eka Permana, Alfian Faza
Day1	TUN1-4	Tunnels and Underground Spaces I	385	Experimental study of deformation characteristics of rocks during tunnel excavation related to underground powerhouse cavern excavation analysis.	Takahiro Fujii, Mitsuhiro Tokusu, Shouji Tsutsui, Hiroshi Morimoto, Eka Permana, Alfian Faza
Day1	TUN1-5	Tunnels and Underground Spaces I	190	Evaluation of tunnel behavior under seismic loading: a case study of Kathmandu University Research Tunnel	Umesh Jung Thapa, Sudip Bajgain, Shyam Sundar Khadka
Day1	TUN1-6	Tunnels and Underground Spaces I	114	A Study on Conditioning Discrete Fracture Network Models Using Tunnel Excavation Face Images for Fracture Geometry Characterization	Po-Kai Chen, Hsuan-Ju I, Chia-Hong Chiu, Tai-Tien Wang
Day1	TUN1-7	Tunnels and Underground Spaces I	394	Seismic response of water-sealed underground rock cavern tanks	Takuji Oomukai, Keiji Watanabe, Mitsugu Yamashita, Keisuke Oono, Nobuya Yamamoto, Hidenori Shimemoto, Yasushi Nishikawa, Tomohiro Arai, Nobuyuki Takahara, Shunichi
Day1	TUN1-8	Tunnels and Underground Spaces I	27	Correlating physical, mechanical and mineralogical properties of sandstones with damage characteristics	Vivek Raj, Ravi Mishr, Ketan Arora
Day1	AI-1	AI Utilization	100	High-Fidelity Polycrystalline Rock Grain-Based Model Based on Computer- Aided Techniques	Louis Ngai Yuen Wong, Zihan Liu
Day1	AI-2	AI Utilization	216	Foundational Modules of a Multi-Modal AI Framework for Granite Strength Estimation: Lithological Identification and Weathering Reduction Factors	Nirmana Fiqra Qaidahiyani, Seokwon Jeon
Day1	AI-3	AI Utilization	222	Influence of Formation Heterogeneity on Thermal Energy Storage Processes and Storage Efficiency in Shallow Aquifer Thermal Energy Storage Systems	Xingchuan Liao, Xianda Shen
Day1	AI-4	AI Utilization	325	Windowed Separable Physics-Informed Neural Networks with Fixed-Stress Splitting for Coupled Thermo-Hydro-Mechanical Benchmarks in geomechanics	Sejin Kim, Ki-Bok Min
Day1	AI-5	AI Utilization	461	Innovative Framework for Ground Source Heat Utilization Potential Assessment utilizing Generative AI in Data-Scarce Regions	Kotaro Matsuo, Natsuo Okada, Yoko Ohtomo, Fumiaki Inagaki, Youhei Kawamura
Day1	AI-6	AI Utilization	83	On-site application of AI-based blasting pattern design system	Tomohiro Nishimura, Atsushi Kuge, Atsushi Watanabe, Hirohumi Miyahara, Toshinori Mizuno
Day1	AI-7	AI Utilization	355	A data-driven machine-learning framework for zone-specific tunnel blast design from face mapping data	T. Y. Ko, M. S. Jeong, H. S. Lee
Day1	AI-8	AI Utilization	410	Automatic Extraction of Rock Mass Discontinuities in Tunnel Face Images Using a Hybrid Deep Learning Model	Hwihun Park, Kwangyeom Kim
Day1	RISK1-1	Risk and Geohazards Management I	135	Machine Learning for Predicting Fault Reactivation Risks in CO ₂ Geological Storage	Dilnaz Zhumakanova
Day1	RISK1-2	Risk and Geohazards Management I	448	3D Seismic Hazard Mapping for Mitigation of Earthquake Building Damage in West Sulawesi, Indonesia	Djamaluddin Ibrahim, Indrayani Poppy, Amry Dasar, Mitani Yasuhiro
Day1	RISK1-3	Risk and Geohazards Management I	299	Three-dimensional DDA-based Analysis of the Instability Process of an Unstable Rock Mass	Jingyu Kang, Xiaodong Fu, Daisuke Fukuda, Yiyang Chen
Day1	RISK1-4	Risk and Geohazards Management I	26	Development of "T-Invert Monitor", a multi-point displacement meter for tunnel inverts	Kazuo Sakai, Takashi Ichiki, Satoru Hasegawa, Takayuki Watanabe
Day1	RISK1-5	Risk and Geohazards Management I	126	Reinforcement Design of Tunnel Floor Heave and In-Situ Monitoring During Construction	Yohei Jozaki, Yuzo Okui, Feyzullah Gulsen
Day1	RISK1-6	Risk and Geohazards Management I	128	A complete assessment framework for time-dependent deformation in mountain tunnels: Development and validation of a stress threshold based Modified Burger-Mohr Model	Cheng-Han Tsai, Hung-Hui Li, Tai-Tien Wang
Day1	RISK1-7	Risk and Geohazards Management I	197	Preventive removal of a rock tower above an expressway tunnel portal	Tetsuo Shimomura, Takuma Oga, Nao Fukaya, Hiroharu Tatabe, Kodai Ishikawa, Toi Ito, Masashi Muramoto
Day1	RISK1-8	Risk and Geohazards Management I	283	Data assimilation for deformation prediction of tunnel in homogeneous ground	Yasuhisa Aono, Shinya Yamamoto, Tetsuo Okuno, Ryota Kikuchi, Ikko Tachibana, Mamoru Kikumoto
Day1	MINE1-1	Mining Engineering I	13	Numerical Analysis and Application for Safe and Economical Slope Undercutting in Open-pit Mines	Cheowchan Leelasukseree, Thirapong Pipatpongsa
Day1	MINE1-2	Mining Engineering I	53	Rock Engineering Evaluation of Grout Packs and Pillar Cutting for Safe Pillar Extraction in a Shallow Platinum Mine	Ohveshlan Pillay, Alvin A. Cloete, Mpoyi J. Kanda, Mosebudi Matlou, Thovhedzo Gcuda
Day1	MINE1-3	Mining Engineering I	69	Experimental Investigation of Coal Rank Effects on Fracturing and Gas Generation in Underground Coal Gasification Using Acoustic Emission Monitoring	Akihiro Hamanaka, Yusuke Takenouchi, Rika Iriguchi, Ken-ichi Itakura, Fa-qiang Su, Takashi Sasaoka, Hideki Shimada, Jun-ichi Kodama, Gota Deguchi
Day1	MINE1-4	Mining Engineering I	84	Underground Coal Gasification to Utilize Potential Coal Resources as Blue Hydrogen Production: Field Trial at Open-Cut Coal Mine	Rika Iriguchi, Akihiro Hamanaka, Ken-ichi Itakura, Gota Deguchi, Kazuhiro Takahashi, Jun-ichi Kodama, Takashi Sasaoka, Hideki Shimada
Day1	MINE1-5	Mining Engineering I	108	Simulation Analysis of Creep Evolution Process of Soft-Hard Composite Coal Layers with Different Punching Parameters	S.R. Wang, Y.B. Chen, S. Zhang, W.B. Guo
Day1	MINE1-6	Mining Engineering I	124	Mechanism and Data Driven Assessment of Gripper TBM Adaptability in Coal Mine Roadway Construction	Kai Zhang, Bosong Yu
Day1	MINE1-7	Mining Engineering I	160	Observation and Simulation of Thermo-Mechanical Crack Initiation in Coal under UCG Heating Conditions	Ji Zhang, Junichi Kodama, Umali M. Yasidua, Akihiro Hamanaka, Gota Deguchi, Ken-ichi Itakura

Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day1	MINE1-8	Mining Engineering I	221	Modeling Approach to Compressed Air Energy Storage in Soft-Rock Underground Caverns of Decommissioned Coal Mines	Lihua Hu, Kai Zhang, Xin Liang
Day1	CIV1-1	New Technologies in Civil Engineering I	17	Development of geological prediction method using combined drilling logging and seismic velocity logging in tunneling	Yoshihiro Miyake, Koichi Okuzawa, Atsushi Watanabe, Akihiro Miyakoshi, Eisuke Sato, Taiyou Sotani
Day1	CIV1-2	New Technologies in Civil Engineering I	44	High-Precision Monitoring of Rock Displacement Using Distributed Optical Fiber Sensing in Large Underground Cavern Excavations	Saki Mizuno, Yasuyuki Miyajima, Michio Imai, Junichi Kawabata, Yoichi Asaoka, Hidekazu Tanaka
Day1	CIV1-3	New Technologies in Civil Engineering I	46	Demonstration of Continuous Shield TBM Advancement Through Hydraulic Thrust Control in a Scaled Model	Hong-Seok Lee, Jung-Woo Cho, Joo-Young Oh, Hyun-Joon Park
Day1	CIV1-4	New Technologies in Civil Engineering I	52	Development of two-direction preceding displacement gauge using rotary encoder and monitoring excavation impact on adjacent structures	Daisuke Fujioka, Atsushi Watanabe, Hideo Kinashi, Kouji Tsujimura
Day1	CIV1-5	New Technologies in Civil Engineering I	68	Intelligent design method for initial support scheme of Drill-and-Blast highway tunnels based on two stage prediction	Xinyu Kou, Xiaojun Li, Yi Rui, Xin Jin
Day1	CIV1-6	New Technologies in Civil Engineering I	210	Development of an Estimation Method for Swelling Clay Mineral Content on Mountain Tunnel Faces Using Infrared Reflectance Spectral Data	Koichi Okuzawa, Taiki Kubo, Katsuaki Koike, Daisuke Tsukamoto, Akira Itagaki
Day1	CIV1-7	New Technologies in Civil Engineering I	213	3D Reconstruction of Tunnel Face Integrating Deep Learning-Based Machinery Masking and 3D Gaussian Splatting	Yuta Kagaya, Koichi Aoki, Shigetaka Ishihama, Masahiro Katayama
Day1	CIV1-8	New Technologies in Civil Engineering I	217	A Case Study on Discontinuity Prediction Using Tunnel Seismic Exploration and Non-Core Drilling	Yusuke Suhara, Shu Hotani, Masashi Nakaya
Day1	MH1-1	Rock Properties: Mechanical / Hydraulic Aspects I	61	Measuring Class II Behaviour of a Brittle Rock Using Two Different Loading Methods	Abbas Taheri, Jonathan Cabrejos-Hurtado
Day1	MH1-2	Rock Properties: Mechanical / Hydraulic Aspects I	454	Effect of Pile Rigidity on Penetration and Damage during Dynamic Pile Driving in Weak Rock	Xiaoping Ye, Behzad Fatahi, Hadi Khabbaz
Day1	MH1-3	Rock Properties: Mechanical / Hydraulic Aspects I	334	Towards a Rock-type Specific Brittle Hoek-Brown failure constant "s" Matrix Based on Standard Uniaxial Compression Tests	Zhaudir Dauitbay, Fidelis T Suorineni
Day1	MH1-4	Rock Properties: Mechanical / Hydraulic Aspects I	391	Analysis of Thermal Treatment Effects on Uniaxial Compressive Strength (UCS) and Rock Mechanical Properties After Saturated Conditions	Raisa Priscilia, Nuhindro Priagung Widodo, Ganda Marihot Simangunsong, Anindya Nada Arinal Haque
Day1	MH1-5	Rock Properties: Mechanical / Hydraulic Aspects I	428	Evaluation of Optimum Dry Density Variation with Depth in Naturally Compacted Mine Disposal Materials	Hidayatullah Sidiq, Budi Sulistianto, Tri Karian, Supandi
Day1	MH1-6	Rock Properties: Mechanical / Hydraulic Aspects I	469	Slaking Dynamics in Weak Rocks: Progression and Depth Governed by Water Retention Characteristics	Risa Komuro, Mamoru Kikumoto, Kiyoshi Kishida
Day1	MH1-7	Rock Properties: Mechanical / Hydraulic Aspects I	390	Mechanical and Microstructural Characteristics of Materials Under Saturated Hot Rock Conditions based on Triaxial Testing	Anindya Nada Arinal Haque, Nuhindro Priagung Widodo, Yudhidya Wicaksana, Raisa Priscilia, Ridho Kresna Wattimena, Simon Heru Prasetyo, Bagaraja Sirait
Day1	MH1-8	Rock Properties: Mechanical / Hydraulic Aspects I	148	Prediction of rock mass's modulus deformation using lab measurement of rock velocity with artificial joints and 4D seismic tomography in underground mine	Sari Melati, Ridho Kresna Wattimena, David Prambudi Sahara, Ganda Marihot Simangunsong, Wahyu Hidayat, Shindy Rosalia, Mochamad Nukman
Day1	TUN2-1	Tunnels and Underground Spaces II	32	Development of optimum drill-pattern design system for tunnel blasting and its application for tunnel site	Keita Iwano, Takashi Mega, Yoshihiro Nambu, Ryo Nakano
Day1	TUN2-2	Tunnels and Underground Spaces II	39	Preliminary modeling of TBM penetration in metamorphic rocks using integrated rock and machine parameters	G. Smirnov, T.D. Olaiya, S. Yagiz, L. Ozdemir
Day1	TUN2-3	Tunnels and Underground Spaces II	49	Roadheader performance assessment via rock properties and machine specifications	S. Yagiz, T.D. Olaiya, H. Copur, M.K. Ozfirat, R. Comakli, O. Su, N. Bilgin
Day1	TUN2-4	Tunnels and Underground Spaces II	60	Verification of Countermeasures to Prevent Spalling of Shaft Walls during Deep Shaft Excavation: A Case Study at the Horonobe Underground Research Center	Makito NAGO, Kimikazu TSUSAKA, Kazuhei AOYAGI, Kentaro SUGAWARA, Jun-ichi KODAMA
Day1	TUN2-5	Tunnels and Underground Spaces II	77	Study on structural characteristics analysis of deep buried box culverts	Kaho Fujii, Hideki Shimada, Takashi Sasaoka, Akihiro Hamanaka, Fumihiko Matsumoto, Tomo Morita
Day1	TUN2-6	Tunnels and Underground Spaces II	78	Numerical simulation for tunnel loading test using yielding elements under isotropic stress conditions	Shuhei Shibayama, Kazuo Sakai, Kenji Oishi, Takumi Umetsu, Yota Togashi, Manuel Entfeller
Day1	RAD-1	Radioactive Waste Disposal	322	Mechanical stability of bentonite-based backfill materials for deep disposal system	Jun Sang Yu, Tae-Woo Kim, Tae-Min Oh, Yohan Cha, Jin-Seop Kim
Day1	RAD-2	Radioactive Waste Disposal	35	Application test of new grouting technology based on "concretion-forming" technology	Masayuki Ishibashi, Kei Yamashita, Kazuhiko Masumoto, Hidekazu Yoshida, Koshi Yamamoto, Shinji Takeuchi, Koji Matsumoto
Day1	RAD-3	Radioactive Waste Disposal	79	A preliminary stability analysis simulating the excavation of vertical disposal pit: a case study at the Horonobe Underground Research Laboratory	Kazuhei Aoyagi, Akira Hayano, Yusuke Ozaki, Hiroaki Murakami, Tomonori Tamura, Shun Kimura
Day1	RAD-4	Radioactive Waste Disposal	66	Analysis of the Effects of Convection and EDZ on the Peak Temperature of the Bentonite Buffer in the Improved Korean Reference Disposal System	Jeewon Lee, Sangki Kwon
Day1	RAD-5	Radioactive Waste Disposal	357	Topology-driven flow channelling in genetic discrete fracture networks	Jineon Kim, Jiwon Choi, Junsu Leem, Jae-Joon Song
Day1	RAD-6	Radioactive Waste Disposal	214	Development of a 3D coupled simulator for replicating coupled hydro- mechanical processes induced by formation of Excavation Damaged Zone during mudstone excavation	Yuki Okunomiya, Sho Ogata, Kazuhei Aoyagi, Yusuke Ozaki, Hideaki Yasuhara, Kazumasa Ito, Masayoshi Kuji, Takafumi Iwatani, Kiyoshi Kishida
Day1	RISK2-1	Risk and Geohazards Management II	332	Study on the Mechanical Behavior and Design Optimization of Tunnel Lining under Active Fault Dislocation	Jianqiang Deng, Wei Cui, Jinghui Liu, Yinbang Zhu, Haibo Liu
Day1	RISK2-2	Risk and Geohazards Management II	374	Mechanical Behavior of Tunnels and Rational Support Selection in Fragile Ground Subjected to Heterogeneous Hydrothermal Alteration	Yudai Shigemoto, Ryohei Hase, Dohda Awaji, Kenichi Adachi, Ryoichi Asaumi, Tomofumi Mori, Yoshihiro Ohtsubo

Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day1	RISK2-3	Risk and Geohazards Management II	383	Optimization of LiDAR resolution and noise compression settings for rock joint roughness evaluation	Junsu Leem, Seungwon Lee, Juhyi Yim, Young Jin Shin, Jae-Joon Song
Day1	RISK2-4	Risk and Geohazards Management II	471	Overcoming low-strength ground affected by hydrothermal alteration using circular double steel supports	Yuichi Okazaki, Yoshitaka Takahashi, Kosuke Kashiwara
Day1	RISK2-5	Risk and Geohazards Management II	476	A practical approach to rehabilitation of invert heave in swelling mudstone through ground pressure validation by phased construction and monitoring	Shingo Hisaoka, Kazuo Nakamura, Naoto Oya, Atsushi Tamura, Yosuke Kinoshita
Day1	RISK2-6	Risk and Geohazards Management II	309	Poroelastic Stress Transients and Rate-and-State Nucleation During Injection Shut-In	Kenji SASAKI, Hiroaki IMAMURA, Asuka MORI, Tsukasa HIGUCHI
Day1	FIELD1-1	Field Tests and Measurements I	147	In-Situ Monitoring and Sinking Behavior of a 102 m Giant Caisson: A Case Study of the Shirokita Open Caisson	Feyzullah Gulsen, Makoto Tone
Day1	FIELD1-2	Field Tests and Measurements I	350	Ground Support System Capacity under Non-uniform Deformations: A Case Study	Batbayar Batkhuu, Johnson Ooi, Sanjaasuren Dondiv, Munkhtemuulen Erdene
Day1	FIELD1-3	Field Tests and Measurements I	435	Monitoring and Mitigation Framework for Boxcuts in Shallow Development Excavations – ERT and Geo Structural Profiling	Munyaradzi Musembwa, Jonathan Jakata, Michael Bvekerwa, Richard Masethe
Day1	FIELD1-4	Field Tests and Measurements I	244	In-situ stress change measurement using a compact conic-ended strain cell	G. F. Hofmann, H. Kato, H. Ogasawara
Day1	FIELD1-5	Field Tests and Measurements I	293	Development of Three-Dimensional Stress Measurement Method in Submerged Vertical Borehole for Sedimentary Soft Rock	Takashi Danjo, Koji Ogawa, Kiyotoshi Sakaguchi, Tatsuya Yokoyama, Daisuke Hayashi
Day1	FIELD1-6	Field Tests and Measurements I	480	Leveraging pre-disaster high-resolution LiDAR for landslide-dam assessment and emergency response: the 2025 Taroko Swallow Grotto case	Chi Chien-Yu, Lin Hsin-Hung, Chou Yung-Chuan, Liu Shou-Li, Li Min-Chun, Huang Hao-Hsuan, Liu Pin-Siang, Chen Rou-Fei
Day1	CIV2-1	New Technologies in Civil Engineering II	220	Zero-Shot Vision Language and Segment Anything Model for Rock Mass Classification and Rock Strength Estimation from Tunnel Face Images	Kursat Kilic, Kazuo Sakai
Day1	CIV2-2	New Technologies in Civil Engineering II	304	A Study on Forehead Probing for Cutting Face Assessment in Tunnels under Highly Varied Rock Mass Conditions	Satoshi HIRAKU
Day1	CIV2-3	New Technologies in Civil Engineering II	321	Effects of curing time and loading rate on the interfacial bond behaviour of cracks repaired with silicate-modified polyurethane/waterglass	Yingsen Wang, Richeng Liu, Qinghao Xu
Day1	CIV2-4	New Technologies in Civil Engineering II	349	Multi-point Initial Stress Measurement in Tunnels Using the Borehole Deformation Method	Nao Ikeda, Rui Kudo, Yusuke Nagae, Yasuhito Arai, Hideyuki Murayama, Gyeongjo Min, Daisuke Fukuda, Jun-ichi Kodama
Day1	CIV2-5	New Technologies in Civil Engineering II	358	Development and Validation of a Real-Time TBM Disc Cutter Wear Monitoring System	Min-Seok Ju, Min-Sung Park, Jung-Joo Kim, Hoyoung Jeong
Day1	CIV2-6	New Technologies in Civil Engineering II	359	Comparison of AI-based Pick Cutter Consumption Prediction Models using Operational Data for Roadheader Excavation	Sehun Kim, Seokwon Jeon
Day1	LAB1-1	Rock Properties: Laboratory Tests and Measurements I	312	Study on the characteristics of stone materials used as building materials	Ryosuke Nakamura, Koichi Kato, Daisuke Asahina, Takafumi Seiki
Day1	LAB1-2	Rock Properties: Laboratory Tests and Measurements I	65	Durability Test of Hydrothermally Treated Proppant Under Mechanical Loading	Kazuki Sawayama, Ragheed Alali, Sho Ogata, Ryota Nomura
Day1	LAB1-3	Rock Properties: Laboratory Tests and Measurements I	40	Improvement of Shielding Property of Rocks by Applying Enzyme-Induced Calcite Precipitation Method and the Observation of Precipitation Conditions by X-ray CT	Mana Hatano, Shunsuke Takaki, Atsushi Sainoki, Akira Sato
Day1	LAB1-4	Rock Properties: Laboratory Tests and Measurements I	93	Fractional Brownian Motion (fBm) and Joint Surface Profile	Jian Liu, Ruonan Ma, Dachuan Zhang, Jingjia Zhang, Xingguang Zhao, Ju Wang
Day1	LAB1-5	Rock Properties: Laboratory Tests and Measurements I	275	Nonlocal Digital Image Correlation for Measuring Discontinuous Displacement Fields Across Rock Joints	Tushar Bhandari, Debasis Deb
Day1	LAB1-6	Rock Properties: Laboratory Tests and Measurements I	266	Effects of Inclusions on Correlations between Ultrasonic Pulse Velocities and Mechanical-Rheological Properties of Rock Salt	Thanitha Thongrapha, Kittitep Fuenkajorn

Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day2	TUN3-1	Tunnels and Underground Spaces III	112	Deformation behavior of ductile support model under isotropic stress condition by laboratory tunnel support loading test	Kenji Oishi, Takumi Umetsu, Yota Togashi, Shuhei Shibayama, Kazuo Sakai, Manuel Entfellner
Day2	TUN3-2	Tunnels and Underground Spaces III	132	Impact of geological model uncertainty on tunnel inflow analysis using hydromechanically coupled numerical simulation	You-Jie Huang, Chia-Hong Chiu, Tai-Tien Wang
Day2	TUN3-3	Tunnels and Underground Spaces III	149	Numerical study on the mechanical behavior of vertical pre-reinforcement	Natsumi Tamura, Kosuke Kawata, Nobuharu Isago, Koki Kumagai
Day2	TUN3-4	Tunnels and Underground Spaces III	178	Digitalized RQD assessment for exposed rock masses	Tae Young Ko
Day2	TUN3-5	Tunnels and Underground Spaces III	187	Numerical investigation of fracture slip mechanisms in water-saturated volcanic rocks during supercritical CO ₂ injection under geothermal conditions	Takuma Kitamura, Sho Ogata, Mahiro Inada, Toru Inui, Kazumasa Sueyoshi, Kiyotoshi Sakaguchi, Noriaki Watanabe, Kazumi Osato, Takuya Teraoka
Day2	TUN3-6	Tunnels and Underground Spaces III	274	Construction Challenges and Countermeasures for a Mountain Tunnel Adjacent to Critical Structures in Unconsolidated Sandstone with Small Overburden	Ryo Hemmi, Naoki Kando, Tomofumi Yokoyama, Yuki Tsukamoto
Day2	JAPT1-1	Organized Session by JAPT I	399	Numerical analysis of near-wellbore crack initiation by shear-thickening fluid fracturing	Ryu Wada, Yusuke Mukuhira, Hiroyuki Shimizu, Shingo Ishihara, Noriaki Watanabe
Day2	JAPT1-2	Organized Session by JAPT I	29	Real-time hydraulic fracture monitoring from surface tiltmeter measurements	Anthony Peirce
Day2	JAPT1-3	Organized Session by JAPT I	48	Impact of Cyclic Gas Injection on Well Integrity in Underground Gas Energy Storage: An Experimental Study	Luwei Ding, Yiran Zhu, Tiancheng Zhang, Fengde Zhou, Italo Onederra, Zhongwei Chen
Day2	JAPT1-4	Organized Session by JAPT I	87	Hydro-Mechanical Voidage Management with Pressure-Relief Wells for Mitigating Injection-Induced Seismicity in Geological CO ₂ Storage	Hung Vo Thanh, Kenji Furui, Nobuo Morita
Day2	JAPT1-5	Organized Session by JAPT I	186	Geochemically Induced Mechanical Degradation and Stress Evolution in the Near-Wellbore Region During CO ₂ Injection	Miki Mura, Mukul M Sharma
Day2	JAPT1-6	Organized Session by JAPT I	205	Study on Fracture Propagation Mechanism in Acid Fracturing Tests of Hot Dry Dolomite in the Subei Basin	Liu Yupeng, Shi Xian, Guo Tiankui, Jiang Shu, Chang Xin, Hou Zhenkun, Liu Shubin
Day2	RISK3-1	Risk and Geohazards Management III	338	Field identified Rayleigh damping for recorded seismic assessment of Oya tuff quarry caverns	Rui Huang, Takumi Kosakada, Akinori Igarashi, Takafumi Seiki
Day2	RISK3-2	Risk and Geohazards Management III	407	Traces of Faulting and Damage to Stone Masonry Structures in Ancient Cities by Earthquakes in Denizli Region, Türkiye	Halil Kumsar, Ömer Aydan, Celal Şimşek
Day2	RISK3-3	Risk and Geohazards Management III	411	Evaluation of Damage to Antique Underground Tombs in Yenicekent (Denizli) by 2003 Buldan and 2026 Yenicekent Earthquakes	Halil Kumsar, Ömer Aydan, Bahadır Duman
Day2	RISK3-4	Risk and Geohazards Management III	468	Development of a dynamic true triaxial electromagnetic Hopkinson bar system and its experimental study	Jianbo Zhu, Heping Xie, Zhuo Cen, Weiyue Bao, Tao Zhou, Shiwei Zhang, Chengcheng Xie
Day2	RISK3-5	Risk and Geohazards Management III	511	Dynamic analysis of rock ejection velocity in rockburst associated with fault slip	Jia Liu, Yaohui Shi, Chengguo Zhang, Charlie C Li, Joung Oh, Peter Craig, Ismet Canbulat, Serkan Saydam
Day2	RISK3-6	Risk and Geohazards Management III	507	Lay Length as a Critical Discard Indicator for Underground Mining Wire Ropes: Evidence from a Service-Degraded 32 mm Specimen	Sanjay Kumar Mahato, Kumar Gaurav
Day2	MINE2-1	Mining Engineering II	230	Numerical Stability Analysis of Longwall Mining in Steep Coal Seams Considering Complex Geological Conditions	Koki Kawano, Ulaankhuu Batsaikhan, Takashi Sasaoka, Akihiro Hamanaka, Hideki Shimada
Day2	MINE2-2	Mining Engineering II	282	Role Of Determining Virgin Stresses Below Ground During Transformation Of Mining Activities From Surface To Underground - A Case Study	S Vikram, DS Subrahmanyam, G Shyam
Day2	MINE2-3	Mining Engineering II	354	Proposal of a 3D Numerical Simulation Method to Determine Electronic Detonator Delay Times for Rock Fragmentation Improvement in Bench Blasting	Gihwan Choi, Jiwon Seo, Junhyeong Kim, Geunsoo Jeon, Gyeongio Min, Daisuke Fukuda, Hyeongmin Kang, Sangho Cho
Day2	MINE2-4	Mining Engineering II	356	Validation of coupling 3D-hydromechanical and 1D soil consolidation for modelling surface subsidence prediction at an underground mine	T. Chung, S. Dehkhoda, M. Masoudian, A. Flatten
Day2	MINE2-5	Mining Engineering II	393	Post-Rockburst Tunnel Repair Methodology Ensuring Operational Continuity at El Teniente Mine, Codelco El Teniente	M. Ferrada, M. Farias, P. Flores, H. Godoy
Day2	MINE2-6	Mining Engineering II	443	Thermal infrared remote sensing of coal-fire-induced land surface warming and environmental stress in the Jharia coalfield, India	Nitish Kumar, Rajeev Verma, Dipak Gupta, Vasanta Govind Kumar Villuri, Khushboo Kaushal
Day2	EMIRE1-1	Organized Session by EMIRE I	242	Impact force measurement on a discontinuous rock slope model under large-scale shaking and assessment of a DEM-based analysis method	Taiki Yoshida, Tetsuji Okada
Day2	EMIRE1-2	Organized Session by EMIRE I	278	Numerical simulation of hemispherical rigid projectile penetration into sandstone using the 3D combined finite-discrete element method	Daisuke Fukuda, Gyeongio Min
Day2	EMIRE1-3	Organized Session by EMIRE I	288	Centrifuge Shaking Test of Slope Model with Hexagonal Joints (PART 1); Shaking Table Test and Analytical Parameters	Tetsuji Okada, Tomohiro Naya
Day2	EMIRE1-4	Organized Session by EMIRE I	297	Centrifuge shaking test of slope model with hexagonal joints (PART 2) – Evaluation by limit equilibrium method and continuum analysis –	Katsumi Kamemura, Ömer Aydan, Ryoji Kiyota, Naoki Iwata, Toshiya Kawamura
Day2	EMIRE1-5	Organized Session by EMIRE I	316	An Experimental Study on Penetration Responses of Cylindrical Projectiles into Rocks under Impact Loads	Keisuke Watanabe, Ömer Aydan, Garyu Ichihashi, Riku Sakuma, Takumi Otsuki
Day2	EMIRE1-6	Organized Session by EMIRE I	294	Experimental and Numerical Study on the Penetration of a Hemispherical Rigid Projectile into Kimachi Sandstone	Yuji Nikaido, Toshiaki Kondo
Day2	MH2-1	Rock Properties: Mechanical / Hydraulic Aspects II	426	Effects of heating-seawater cooling on the Brazilian tensile strength of Gondwana sandstone	Deepak Amban Mishra, Rajeswar Das, Bikash Kumar Ram, Pratik sahu



Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day2	MH2-2	Rock Properties: Mechanical / Hydraulic Aspects II	97	Three-dimensional simulation of mechanical responses during rough rock fractures contact using hybrid FEM-DEM	Daisuke Tsujino, Sho Ogata, Hideaki Yasuhara, Naoki Kinoshita, Daisuke Fukuda, Toru Inui, Kiyoshi Kishida
Day2	MH2-3	Rock Properties: Mechanical / Hydraulic Aspects II	218	Evaluation of hydraulic and gas permeability of rock using laboratory and in-situ tests in an abandoned mine	Shogo Kawakita, Koichi Okuzawa, Kenichi Nakaoka, Takato Takemura, Kaname Iwatake, Keita Morikawa, Tadashi Yamashita
Day2	MH2-4	Rock Properties: Mechanical / Hydraulic Aspects II	328	Experimental Study on the Scale Effect and Anisotropy of Tuff using Direct Tension Tests	Kaito Kotaki, Tetsuji Okada, Hiromu Oikawa, Kenji Hiraga, Takeru Iwata, Tatsuki Tokuda, Shinsuke Arimasa, Shohei Seiki, Hironori Morozumi
Day2	MH2-5	Rock Properties: Mechanical / Hydraulic Aspects II	493	Influence of Interface Roughness on Shear Behaviour of Rock-Concrete Specimen under Dynamic Loading Conditions	Lakshya Kumar, Abhishek Mohapatra, Bipin Kumar Gautam, Sunita Mishra, Wensu Chen, Hong Hao
Day2	MH2-6	Rock Properties: Mechanical / Hydraulic Aspects II	384	Evaluation of permeability and anisotropy in unsaturated rocks using decompression recovery processes	Masahiko Osada, Rio Kobayashi, Yuta Ikeda, Yota Togashi
Day2	SLOP1-1	Slope Stability I	303	Advancing Dynamic Landslide Susceptibility Mapping in Tropical Regions through the Integration of PS-InSAR, CHIRPS, and Machine Learning	Ardy Arsyad, Ibrahim Djamaluddin, Irwan Ridwan Rahim, Andi Baso Firmansyah
Day2	SLOP1-2	Slope Stability I	368	Comparative Analysis of Landslide Hazard Assessment Methodologies in Australia and New Zealand	Yousef Adeeb Chamachaei, Roohollah Kalatehjari, Sara Bayandor
Day2	SLOP1-3	Slope Stability I	441	Evaluation of Stability of Fairy Chimneys and Cliffs in Cappadocia, Türkiye	Reşat Ulusay, Ömer Aydan
Day2	SLOP1-4	Slope Stability I	449	Incorporating Lithological Proportion into Slope Stability Curves for Interbedded Coal Measures: Evidence from the Barito Basin	Kharis Novianto Nugroho, Yudhida Wicaksana, Simon Heru Prasetyo, Ganda Marihot Simangunsong, Ridho Kresna Wattimena
Day2	SLOP1-5	Slope Stability I	404	Stability of Rock Slopes under Pore Water Pressure and Pseudo-Static Seismic Loading with Influence of a Weak Coal Seam	Nikita Dwivedi, Anupam Anant Kher, Shrabony Adhikary
Day2	SLOP1-6	Slope Stability I	215	Estimating Rock Mass Mechanical Properties of Weathered Slopes in Tropical Regions Using Machine Learning and UAV Image Analysis	Romziah Azit, Som Pong Pichan, Mohd Ashraf Ismail, Mazlina Razali
Day2	JAPT2-1	Organized Session by JAPT II	232	Thermo-Hydro-Mechanical Failure Evolution of Weakly-Consolidated Sandstones Under Real-Time Heating and True-Three-Axial Loading Paths	Aref Farahi, Hossein Salarirad, Ali Mortazavi, Hadi Atapour
Day2	JAPT2-2	Organized Session by JAPT II	254	True triaxial experiments of rock fracturing with shear thickening fluid	Yusuke Mukuhira, Kota Tokutake, Kazumasa Sueyoshi, Ryu Wada, Noriaki Watanabe
Day2	JAPT2-3	Organized Session by JAPT II	273	Investigating the In-Situ Stress State of the Longmaxi Shale Reservoir by Anelastic Strain Recovery Method in the Southern Sichuan Basin, China	Yifan Chen, Zixuan Gao, Chongyuan Zhang, Qian Li, Zijuan Hu, Dongsheng Sun
Day2	JAPT2-4	Organized Session by JAPT II	279	Acid fracture propagation in fracture-hole carbonate reservoir based on Phase- Field Method	Yifan Dai, Yuxuan Zhao, Juncheng Li, Shan Liu, Bing Hou, Yinjian Xiao
Day2	JAPT2-5	Organized Session by JAPT II	281	An Evaluation Model for the Fracability of Continental Shale Oil Reservoirs Based on Production Data and Game Theory-Based Combined Weighting: A Case Study of the Lucaogou Formation in the Jimsar Sag, Junggar Basin, China	Xiong Jian, Luo Jiang, Liu Xiangjun, Liang Lixi, Ding Yi
Day2	JAPT2-6	Organized Session by JAPT II	392	Effects of CO ₂ -foam-assisted chemical flooding on elastic properties and uniaxial compressive strength of Berea sandstone	Duvvada Vamsikrishna, Himangshu Kakati, Deepak Amban Mishra
Day2	RISK4-1	Risk and Geohazards Management IV	416	The Consequences of Neglecting Rockburst Precursors in Deep-Level Gold Mining: A Systems-Failure Perspective	Richard T. Masethe, Maxward N. Madubane
Day2	RISK4-2	Risk and Geohazards Management IV	330	Development and Preliminary Assessment of a Rockfall Bounce Testing System Using Inertial Measurement Unit and Image-Based Measurements	Fu-Hsuan Yeh, Kuan-Chen Lin, Lu-Wei Chen, An-Jui Li, Yun-Rong Li, Yu-Hsien Lee
Day2	RISK4-3	Risk and Geohazards Management IV	405	Multi-Scale Investigation of the Evolution of Deep-Seated Gravitational Slope Deformation and Associated Landslides in the Slate Region of Central Taiwan	Wan-Qian Luo, Che-Ming Yang, Wen-Jeng Huang
Day2	RISK4-4	Risk and Geohazards Management IV	422	Field-scale equivalent rock-bridge cohesion of an unlined tunnel back-calculated from post-seismic lidar point clouds and pseudo-static block analysis	Cheng-Yu Hsieh, Ya-Chu Chiu, Tai-Tien Wang
Day2	RISK4-5	Risk and Geohazards Management IV	438	Structural Controls on Rockfall Trajectories Through 3D Discrete Fracture Network Modelling: The Case Study of Maratea Rockfall (Southern Italy)	Luigi Massaro, Antonio Santo
Day2	RISK4-6	Risk and Geohazards Management IV	31	Vulnerability assessment of buildings to landslide	Erika Prina Howald, Laurianne Raffin
Day2	MINE3-1	Mining Engineering III	500	Study on Flight Behavior of Rock Fragments Induced by Blasting and Risk Assessment of Flyrock in Open-pit Mine	Koshun Oda, Yuki Misumi, Takashi Sasaoka, Akihiro Hamanaka, Hideki Shimada, Kimiaki Hatsuishi, Syouji Tamura, Norihiko Uda, Mitsuhiro Ooki
Day2	MINE3-2	Mining Engineering III	519	Mechanical Behavior of 3D Printed Scaled Mine Roadways	Zewei Li, Mengxue Wang, Xiaowei Feng
Day2	MINE3-3	Mining Engineering III	82	Effect of Waste Rock Size on the Structural Performance of Timber Mat Packs	Umali M. Yasidu, Ji Zhang, Yoshiaki Fujii, Junichi Kodama
Day2	MINE3-4	Mining Engineering III	370	A Reliability-Based Approach to Quantifying Rockburst Proneness in Underground Excavations	Rashid Afshar, Amoussou C. Adoko
Day2	MINE3-5	Mining Engineering III	463	Short-horizon deformation screening in tailings storage facilities using MT- DinSAR and a zone-specific baseline-referenced forecasting framework	Vanessa Sánchez, Natsuo Okada, Yoko Ohtomo, Rafael Quispe, Cristian Orozco, Sneyder Gallegos, Sebastián Morales, Youhei Kawamura
Day2	MINE3-6	Mining Engineering III	43	Impact of Geological Strength Index and Key Blasting Design Parameters on Fragmentation Efficiency in Surface Mining Operation	Kesalopa Gaopale, Takashi Sasaoka, Akihiro Hamanaka, Hideki Shimada
Day2	EMIRE2-1	Organized Session by EMIRE II	339	Effect of Asperity Configuration on Surface Rupture Generation in Dynamic Rupture Simulations	Naoki IWATA, Shotaro TANE, Kenichi TSUDA, Ömer AYDAN
Day2	EMIRE2-2	Organized Session by EMIRE II	351	Centrifuge Shaking Test of Slope Model with Hexagonal Joints (Part 3): Numerical Simulation Using Discontinuum-Based Methods	Ryota Hashimoto, Taiki Yoshida, Kaoru Kawaji, Guichen Ma

Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day2	EMIRE2-3	Organized Session by EMIRE II	373	A Dynamic Monitoring of Rock Cliffs	Ömer Aydan, Yuji Shuri, Naohiko Tokashiki
Day2	EMIRE2-4	Organized Session by EMIRE II	375	The Effect of Faulting on Rock Engineering Structures Caused by 2023 Great Kahramanmaraş Earthquakes	Ömer Aydan, Reşat Ulusay, Halil Kumsar
Day2	EMIRE2-5	Organized Session by EMIRE II	377	Evaluation of mechanical properties of rock masses in fault zones using combining in-situ testing methods	Daisuke Asahina, Koji Tsukamoto, Hiroaki Takamura, Seiji Ebisu
Day2	EMIRE2-6	Organized Session by EMIRE II	379	Evaluation of mechanical properties of rock masses in fault zones using combining in-situ testing methods	Daisuke Asahina, Koji Tsukamoto, Hiroaki Takamura, Seiji Ebisu
Day2	LAB2-1	Rock Properties: Laboratory Tests and Measurements II	300	Analysis of hydraulic gradient effects on triaxial permeability tests	Tzu-Shan Huang, Szu-Han Chen, Louis Ge
Day2	LAB2-2	Rock Properties: Laboratory Tests and Measurements II	276	Thermo-Mechanical Degradation of Chunar Sandstone: Fracture Toughness Implications for Heritage Structures	Rahul Rooplal Katre, Ankit Kharche, Sandeep Panchal, Suman Mohanto, Nikhil Ninad Sirdesai
Day2	LAB2-3	Rock Properties: Laboratory Tests and Measurements II	229	Coda wave analysis of non-linear elastic response to stress memory-induced damage in Gujarat Granite	Anita Verma, Deepanshu Shirole, Prabhakaran Manogharan
Day2	LAB2-4	Rock Properties: Laboratory Tests and Measurements II	22	Experimental Study on Soil Erosion Leading to Sinkhole Formation	Haeju Do, Tae-Min Oh, Dong-Woo Ryu
Day2	LAB2-5	Rock Properties: Laboratory Tests and Measurements II	36	Non-isothermal gas-permeability testing of low-permeability geomaterials: a double-calibration approach	Hongyang Ni, Jiangfeng Liu, Zhipeng Wang
Day2	LAB2-6	Rock Properties: Laboratory Tests and Measurements II	57	Shotcrete with Reactive Ultramafic Aggregates	Xuanyu Zhu, Mehdi Serati, Harry Asche, Thierry Bore, Muhannad Al Kalbani
Day2	TUN4-1	Tunnels and Underground Spaces IV	285	A comprehensive approach of analytical solution and limitation for the geotechnical design of large TBM tunnel.	Mohanraj S, Doraswamy Raju
Day2	TUN4-2	Tunnels and Underground Spaces IV	352	Experimental study on the responses of underground tunnel during excavation and earthquake	Hiromu Oikawa, Makoto Ishimaru, Tetsuji Okada, Le Anhngoc, Tatsuya Ueda
Day2	TUN4-3	Tunnels and Underground Spaces IV	430	Estimation of Tunnel Support Pressure Using Rock Mass Classification Systems	L B Roy, Sufi Md Gulzar, Briz Mohan Kumar
Day2	TUN4-4	Tunnels and Underground Spaces IV	202	Fast modelling and intelligent monitoring of underground roadways: Enabling a spatio-temporal digital twin framework	Mucheng Jia, Ruiyu Liang, Shuai Xu, Chengguo Zhang, Chunyue Li
Day2	TUN4-5	Tunnels and Underground Spaces IV	10	Predicting Tunnel-Induced Surface Settlement in Non-Greenfield Condition using Machine Learning	Karthigeyan a/I AL. Ramanathan, Rini Asnida Abdullah, Amelia Ritahani Ismail, Xie Qiang, Ban Yuxin, Xiang Fu, Akm Badrul Alam
Day2	TUN4-6	Tunnels and Underground Spaces IV	478	Prediction of tunnel rock fall based on analysis of excavation data	Mitsuhiro Mizuuchi, Tetsuo Hatori, Toshinori Nishino
Day2	JAPT3-1	Organized Session by JAPT III	425	Potassium lactate as a sustainable base for well completion fluids: Formulation and Laboratory Evaluation	Davninder Singh, Nikhil Kumar Singh, Anand Deepak Sawant, Penta Sandeep, Ranjan Pramanik, Rajat Jain
Day2	JAPT3-2	Organized Session by JAPT III	432	Rock-Mechanics-Based Evaluation of Sequential Drilling and Completion Fluid Effects on Shale Reservoirs	Saurya Nayak, Deepak Amban Mishra, Rajat Jain, Davninder Singh
Day2	JAPT3-3	Organized Session by JAPT III	436	Geomechanical Controls on Safe CO ₂ Storage in Depleted Deformable Reservoirs	H. Nick, B. Hosseinzadeh, A.C. Cheriki, F. Amour, M.R. Hajiabadi, F. Bourgeois
Day2	JAPT3-4	Organized Session by JAPT III	456	3D Temperature Distribution Estimation in Underground Coal Gasification Using a Hybrid Approach of Machine Learning and RBF Interpolation	Yuta Takeuchi, Ken-ichi Itakura, Gota Deguchi, Akihiro Hamanaka, Jun-ichi Kodama, Natsuo Okada, Yoko Ohtomo, Youhei Kawamura
Day2	JAPT3-5	Organized Session by JAPT III	376	Coupled hydro-mechanical phasefield modelling of fracturing process in poroelastic media	Akshay Chandan Dey, Debasis Deb, Rakesh Kumar, Aditya Vyas
Day2	JAPT3-6	Organized Session by JAPT III	298	Investigation of the Effect of Interfacial Tension Reduction Using Pore Scale Modelling on the Capillary Pressure Curve of Berea Sandstone	Kentaro Masuoka
Day2	INJ-1	Fluid Injection-Induced Processes	419	Effects of Fault Dip Angle, Location, and Injection-Fault Distance on Fault Reactivation Risk	Tung-Wei Hu, Louis Ge, Meng-Chia Weng
Day2	INJ-2	Fluid Injection-Induced Processes	245	Field Injection Trial to Fix CO ₂ in Goaf of Abandoned Underground	Kyosuke Suzuki, Akihiro Hamanaka, Ken-ichi Itakura, Gota Deguchi, Kazuhiro Takahashi, Jun-ichi Kodama, Yukio Hama, Ji-Hyun Kim, Takehiro Esaki, Takashi Sasaoka, Hideki
Day2	INJ-3	Fluid Injection-Induced Processes	28	Laboratory experiments on ultrasonic monitoring of fluid-induced fault reactivation within shear rig	Yevhen Kovalyshen, Shane Kager, Leigh Kiewiet, Ludwig Monmusson
Day2	INJ-4	Fluid Injection-Induced Processes	64	Numerical modelling tools for Forecasting Injection-Induced Seismicity in West Texas	Emmanouil Parastatidis, Mark W. Hildyard, Guo-Chin Huang, Alexandros Savvaiddis
Day2	INJ-5	Fluid Injection-Induced Processes	164	3D Coupled thermal-hydraulic-mechanical simulation for predicting hydraulic fracturing process under geothermal environment based on hybrid CPU/GPU parallelization with a distributed-memory MPI	Yusei Tanaka, Yutaro Maeda, Sho Ogata, Daisuke Fukuda, Toru Inui
Day2	INJ-6	Fluid Injection-Induced Processes	400	Hydraulic Fracturing in High-Stress Environments Post Large- Magnitude Rockbursts, Codelco El Teniente	Matías Ferrada, Millaray Farias, Patricio Flores, Hans Godoy
Day2	MINE4-1	Mining Engineering IV	485	A three-dimensional cohesion weakening friction strengthening constitutive model for intact rock	Adam K. Schwartzkopff, Atsushi Sainoki
Day2	MINE4-2	Mining Engineering IV	146	Assessment of Slope Stability Potential within Sand-Bearing Zones of the Northern Barapukuria Coal Basin for Open-Pit Mine Development	Md Tajib-Ul Islam, AKM Badrul Alam, Yoshiaki Fujii, Shakil Ahmed Razo
Day2	MINE4-3	Mining Engineering IV	457	Digital twin framework for site rehabilitation management for closed mine sites	Reiko Hamaguchi, Takahiko Arima, Takaya Hamai, Hisatoshi Furuya, Ryo Itano, Natsuo Okada, Yoko Ohtomo, Youhei Kawamura



Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day2	MINE4-4	Mining Engineering IV	98	Effect of Dip Angle and Connectivity of Geological Structures on Mining-induced Deformation in Open-pit mines	Cheng Zhang, Atsushi Sainoki, Takuya Tani, Jun-ichi Kodama
Day2	MINE4-5	Mining Engineering IV	301	Optical Investigation of Dynamic Tensile Fracture Behavior in Rock Spalling Tests	Gyeongjo Min, Tetsuya Amie, Daisuke Fukuda, Sangho Cho, Satoru Kawasaki
Day2	MINE4-6	Mining Engineering IV	333	Analytical approach to quantify the effect of increasing fault damage zone stiffness on the intensity of induced seismicity	Atsushi Sainoki, Mingwei Gang
Day2	CIV3-1	New Technologies in Civil Engineering III	369	Spatial distribution estimation of rock mechanical properties around tunnels using data assimilation with a self-organizing state-space model	Tetsuo Okuno
Day2	CIV3-2	New Technologies in Civil Engineering III	423	Dynamic updating of tunnel engineering geological models via excavation face imagery for construction monitoring applications	Yu-Cheng Lin, Tai-Tien Wang
Day2	CIV3-3	New Technologies in Civil Engineering III	464	Development of a Generalizable AI-Assisted Tunnel Blasting Design System Using Volume-Based Indicators	Kotaro Nakane, Yulin Xu, Koichi Aoki, Yuta Kagaya, Shigetaka Isihama, Natsuo Okada, Yoko Ohtomo, Youhei Kawamura
Day2	CIV3-4	New Technologies in Civil Engineering III	516	Field-Scale Assessment of a Hybrid Discrete Element Method for Underground Excavation in Jointed Rock Masses	Je-Kyum Lee, Chang-Yong Kim, Wan-Kyu Yoo, Ji-Seok Yun, Sean Seungwon Lee
Day2	CIV3-5	New Technologies in Civil Engineering III	184	Digital Hydro Mechanical Modelling of Pressurised Segmental Tunnel Linings for Underground Pumped Hydro Energy Storage	Iftikhar Ahmad, Qianbing Zhang
Day2	CIV3-6	New Technologies in Civil Engineering III	81	Remote construction of steel support installation for enhanced safety and labor reduction	Soichiro MURATA, Atsushi KUGE, Hiroto YAMANAKA, Daisuke FUJIOKA
Day2	MH3-1	Rock Properties: Mechanical / Hydraulic Aspects III	80	Study on the factors affecting rock shear strength	Kimihiro Hashiba, Jingai Wang, Katsunori Fukui
Day2	MH3-2	Rock Properties: Mechanical / Hydraulic Aspects III	14	Integration of Schmidt Hammer Testing with Core and Log Data for Improved UCS Profiling and Reduced Uncertainty in Wellbore Stability Analysis	Michał Kepiński
Day2	MH3-3	Rock Properties: Mechanical / Hydraulic Aspects III	259	Hydration and strength of cemented paste backfill with synthetic aggregates	Sumedha Koul, Niki Jackson, Ian van Wijk, Mehdi Serati
Day2	MH3-4	Rock Properties: Mechanical / Hydraulic Aspects III	113	Dual Roles of Wide and Narrow Apertures in Stress-Induced Permeability Evolution in Granite Fractures	Szuhsiang Chi, Zhiqi Li, Hiromasa Iwai, Sho Ogata, Kiyoshi Kishida, Hideaki Yasuhara
Day2	MH3-5	Rock Properties: Mechanical / Hydraulic Aspects III	253	Geometry-controlled shear scaling and dislocation-induced fluid flow in fractured rock	Lauri Uotinen, Masoud Torkan, Sandaru Liyanarathna Vidanage, Arttu Anttilainen, Mikael Rinne
Day2	MH3-6	Rock Properties: Mechanical / Hydraulic Aspects III	264	Microscopic Mechanical Behaviour of Sedimentary Rocks during Cyclic Loading: Implications for the Loading and Unloading Elastic Moduli	Yuchen ZHAO, Leyi WANG, Atsushi SAINOKI, Shojiro MATSUKI, Yasuhito ARAI, Nao IKEDA, Yusuke NAGAE, Hideyuki MURAYAMA

Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day3	TUN5-1	Tunnels and Underground Spaces V	106	Numerical investigation of crack initiation behavior in rock masses using a two-dimensional tunnel excavation model incorporating damage mechanics	Kento Kawata, Sho Ogata, Kazuhei Aoyagi, Yusuke Ozaki, Hiromasa Iwai, Hideaki Yasuhara
Day3	TUN5-2	Tunnels and Underground Spaces V	171	Incremental Lining Internal Force Estimation Based on Tunnel Cross-Sectional Displacement	Cheng-Hung Wu, Ya-Chu Chiu, Tai-Tien Wang, Mitani Yasuhiro
Day3	TUN5-3	Tunnels and Underground Spaces V	173	Effect of Radial Joint Stiffness on Shield Tunnel Behavior across Varying Soil Conditions	Quoc Viet Tran, Kosuke Kawata, Nobuharu Isago
Day3	TUN5-4	Tunnels and Underground Spaces V	174	Displacement Control Measures for Shallow Overburden Tunnels Constructed Directly Beneath Cut Slopes with Collapse History	T. Ishida, D. Kobayashi, T. Shirai, T. Fukuda, T. Akita, J. Kikuchi, Y. Nagao
Day3	TUN5-5	Tunnels and Underground Spaces V	175	Role of matrix permeability in fractured rock tunnel inflow: A case study of Nanwan Tunnel	Yu Zhang, Yi Rui, Xiaojun Li
Day3	TUN5-6	Tunnels and Underground Spaces V	219	Update of Excavation Rock Mass Rating System for assessment of excavatability of Bimrocks	Milorad Jovanovski, Igor Peshevski
Day3	SLOP2-1	Slope Stability II	366	Three-dimensional stability of disturbed rock slopes with spatially decaying Hoek-Brown disturbance: Limit analysis and FLAC3D verification	Dowon Park, Sung-Jin Kim
Day3	SLOP2-2	Slope Stability II	367	Coupled Hydromechanical Modelling of a Slope Failure in an Ultramafic Open Pit Mine	Abhishek Kumar, L B Roy, Sufi Md Gulzar
Day3	SLOP2-3	Slope Stability II	170	Machine Learning-Based Assessment of Rainfall-Induced Slope Stability Using Geometric and Shear Strength Parameters	Xun Li, Yujing Jiang
Day3	SLOP2-4	Slope Stability II	91	Terrain-induced jump-ramp effects on cross-canyon rockfall kinematics	Chia-Ning Chang, Meng-Chia Weng, Cheng-Han Lin, You-Jin Lin
Day3	SLOP2-5	Slope Stability II	47	InSAR coherence analysis for landslide detection in tropical mountainous terrain: A case study from the Suai Phase I Highway, Timor-Leste	Abel Fernandes, Oktoviano Viegas Tilman de Jesus, Shinichiro Nakashima
Day3	SLOP2-6	Slope Stability II	143	Geotechnical-hydrological modelling of landslide initiation under CMIP6: a case study of a mountainous area in Iide town, Yamagata prefecture, Japan	Sartsin Phakdimek, Anisong Chitnarin, Prachya Tepnarong, Daisuke Komori
Day3	RISK5-1	Risk and Geohazards Management V	472	Back analysis of rockfall with fragmentation: a case study from the Newcastle coastal cliffs	Davide Ettore Guccione, Saroj Kundu, Alison McQuillan, Anna Giacomini, Olivier Buzzi
Day3	RISK5-2	Risk and Geohazards Management V	123	Probabilistic 3D slip surface inversion using Gaussian process implicit modelling	Yong-Zhi Huang, Jia-Hong Chiu, Tai-Tien Wang
Day3	RISK5-3	Risk and Geohazards Management V	159	A Reliability-Based Study on Time-Dependent TBM Shield Loading in Rheological Soft Rock	Qian Zhang, Yulu Li, Yaoqi Nie
Day3	RISK5-4	Risk and Geohazards Management V	324	Fragility assessment of nuclear power plant foundation ground through dynamic nonlinear analysis and deformation-based verification	Masataka Sawada, Masato Nakajima, Taiki Yoshida, Makoto Ishimaru
Day3	RISK5-5	Risk and Geohazards Management V	169	Application of the observational design approach to one of the world's largest underground rock caverns constructed for the Hyper-Kamiokande project	Chiho Miura, Yasumasa Suzuki, Hiroshi Morioka, Yoichi Asaoka, Hidekazu Tanaka, Shoei Nakayama, Takaaki Kobuchi
Day3	RISK5-6	Risk and Geohazards Management V	131	Enhanced physics-informed neural network for simulating stress redistribution around a circular opening	Geeta Singh, Ranjan Pramanik
Day3	FIELD2-1	Field Tests and Measurements II	20	In-situ evaluation of gas permeability in engineering rock masses: fundamental theory, equipment development, and field pilot testing	Jiangfeng Liu, Yixu Zhao, Zhipeng Wang, Ju Wang, Hongyang Ni, Shijia Ma
Day3	FIELD2-2	Field Tests and Measurements II	134	Effects of Vegetation at Installation Sites on Corner Reflector Detectability in SAR Observations	Kota Mizutani, Shinichiro Nakashima
Day3	FIELD2-3	Field Tests and Measurements II	360	Studies on stress state of dam foundation rock with weak layers based on stress measurements and FEM analysis	Tatsuya Yokoyama, Takahiro Fujii, Kazuo Nakamura, Shoji Tsutsui
Day3	FIELD2-4	Field Tests and Measurements II	439	Long-term Observations and Monitoring of Ancient Rock Engineering Structures in Ryukyu Archipelago, Japan	Naohiko Tokashiki, Ömer Aydan
Day3	FIELD2-5	Field Tests and Measurements II	467	Deformation analysis of stone walls in Nanao castle damaged by the 2024 Noto Peninsula Earthquake using 3-D point clouds obtained from 3-D laser scanning	Miyu Tanaka, Tomofumi Koyama, Minoru Yamanaka, Masayasu Kitabayashi
Day3	FIELD2-6	Field Tests and Measurements II	208	Research on determination method of deformation and strength parameters of fractured rock mass	Rong Luo, Fengqi Li, Peng Chen, Liming Zhou, Changdong Ding
Day3	CIV4-1	New Technologies in Civil Engineering IV	388	Development of a stone identification system using shape matching and its application to the cultural property stone walls of Kanazawa Castle	Kohei Hara, Tomofumi Koyama, Minoru Yamanaka, Ikuno Nishida, Wakio Tomita
Day3	CIV4-2	New Technologies in Civil Engineering IV	315	Improving the Generalization and Reliability of CNN-Based Rock Mass Strength Classification via Null Class Training	Yutaro Maruyama, Hiyori Kunisawa, Shinichiro Nakashima, Hirokazu Ueda
Day3	CIV4-3	New Technologies in Civil Engineering IV	179	Development of an Automated 3D Modelling Pipeline for Visualisation towards Mining Digital Twin	Yosuke Tanaka, Ruiyu Liang, Chengguo Zhang, Ismet Canbulat
Day3	CIV4-4	New Technologies in Civil Engineering IV	50	Impact of Hammering Sound Spectrogram Parameters on CNN-Based Automatic Rock Classification	Hiyori Kunisawa, Yutaro Maruyama, Shinichiro Nakashima, Hirokazu Ueda
Day3	CIV4-5	New Technologies in Civil Engineering IV	8	Preceding displacement measurement for evaluating stability of adjacent structures and surrounding rock in tunnels	Hideo Kinashi, Atsushi Watanabe, Daisuke Fujioka, Koji Tsujimura
Day3	CIV4-6	New Technologies in Civil Engineering IV	138	Complete Unmanned Operation of Explosive Charging at Tunnel Faces Using an Automated Charging System	Atsushi Kuge, Izumi Kotani, Takahiro Nozaki
Day3	LAB3-1	Rock Properties: Laboratory Tests and Measurements III	96	Variability of Estimations of Joint Roughness Coefficient in Rock Samples	Jakub Rohac, Natalie Silinkova

Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day3	LAB3-2	Rock Properties: Laboratory Tests and Measurements III	249	Shear strength behavior of partially saturated colluvium deposits using laboratory large scale direct shear test	Abhishek Kumar Meena, Tejinder Thakur, Aditya Singh
Day3	LAB3-3	Rock Properties: Laboratory Tests and Measurements III	296	Study on the Frictional Behavior of Rock Discontinuities under Dynamic Loading Conditions	Yiyang CHEN, Daisuke FUKUDA, Gyeongjo MIN, Eiji MIKAMI, Sangho CHO
Day3	LAB3-4	Rock Properties: Laboratory Tests and Measurements III	51	An Optimized Method for Microbially Aided CO ₂ -Serpentine Interactions under Geological Carbon Sequestration Conditions	Xiurong Yang, Hiroaki Ito, Atsushi Sainoki
Day3	LAB3-5	Rock Properties: Laboratory Tests and Measurements III	92	Calculation of Fracture Aperture Based on Roughness Measurement of a Single Rock Crack Surface	Natsuki Koga, Riku Ito, Shinichiro Nakashima
Day3	LAB3-6	Rock Properties: Laboratory Tests and Measurements III	317	Application of Ridge Detection to Fracture Characterization in X-ray CT Imaging of Rock Samples	Riku Ito, Shinichiro Nakashima, Li Zhiqi, Kiyoshi Kishida
Day3	THMC-1	Complex Coupled Processes	145	Three-dimensional frequency-domain analysis of tidal pore pressure and strain responses around CO ₂ plume in an offshore reservoir	Toshifumi Akaki, Hajime Yamamoto
Day3	THMC-2	Complex Coupled Processes	89	Structural Fabric Controls on Fault Reactivation and CO ₂ Leakage During Injection in Faulted Saline Aquifers	Ming-Hsieh Chuang, Meng-Chia Weng, Peng-Hsuan Tan, Chih-Hsi Liu, Po-Lin Wu
Day3	THMC-3	Complex Coupled Processes	129	Hierarchical surrogate-assisted inverse modeling of coupled hydro-mechanical responses in geological CO ₂ sequestration	Ying Xin, Zhao Feng, Fengshou Zhang
Day3	THMC-4	Complex Coupled Processes	415	CO ₂ hydrate formation model in seabed ground using coupled THC analysis	Daichi Torii, Hiromasa Iwai, Haruto Suzuki, Hideaki Yasuhara
Day3	THMC-5	Complex Coupled Processes	371	Distinct Roles of Temperature-dependent Density and Viscosity in Non- isothermal Fracture Flow and Transport	Yeeun Nam, Peter K. Kang, Jinhyun Choo
Day3	THMC-6	Complex Coupled Processes	418	Cross-dimensional machine-learning inversion of fracture parameters from thermo-hydraulic simulation: a Chingshui geothermal case	Ping-Hua Sung, Tai-Tien Wang, Meng-Chia Weng, Jian-Cheng Lee
Day3	THMC-7	Complex Coupled Processes	67	Development of coupled THMC numerical model with integrated chemical reaction module: importance of pH change and fracture geometry	Tomoki Sakashita, Sho Ogata, Mamoru Kikumoto, Hiromasa Iwai, Hideaki Yasuhara
Day3	THMC-8	Complex Coupled Processes	337	Numerical Investigation of Thermo-Mechanically Induced Borehole Spalling using PFC2D-SNBV model	JeongHwan Yoon, Ki-Bok Min, Leandro Lima Rasmussen, David Oskar Potyondy
Day3	THMC-9	Complex Coupled Processes	168	Continuum - scale reaction transport study of fracture matrix system in CO ₂ mineralization process	Yuang Yan, Xianda Shen
Day3	GEOL-1	Geological/Hydrogeological Issues	25	Influence of Clay Mineralogy and Rainfall on Slope Failure in the Bobonaro Mélange: Insights from XRD, Geotechnical, and ERT Analyses along the Bee-Mean Road, Timor-Leste	Oktoviano Viegas Tilman de Jesus, Shinichiro Nakashima, Abel Fernandes, Hamude Alkatiri, Benjamim Hopffer Martins
Day3	GEOL-2	Geological/Hydrogeological Issues	133	Airborne LiDAR DEM and visual geological model platform for rock-mass characterization: The Dongao Tunnel, Northeastern Taiwan	Pai-Chiao Lo, Yong-Zhi Huang, Ya-Chu Chiu, Tai-Tien Wang
Day3	GEOL-3	Geological/Hydrogeological Issues	290	Strain-dependent hydro-mechanical coupled modeling of mechanical and hydraulic property evolution in deep low-permeability geological materials	Chi-Wei Huang, Tai-Tien Wang
Day3	GEOL-4	Geological/Hydrogeological Issues	364	Geological mapping enhanced by UAV photogrammetry and LiDAR: a practical methodology for discontinuity characterisation at dam sites	Vladimir Lopez Suarez, David Gibbons
Day3	GEOL-5	Geological/Hydrogeological Issues	406	Evaluation of Shear Behavior under Different Stress Paths	Sang Seob Kim, Kwang Yeom Kim
Day3	GEOL-6	Geological/Hydrogeological Issues	479	Pressure solution control on frictional healing of limestone fractures	Kai Guo, Wei Wu
Day3	GEOL-7	Geological/Hydrogeological Issues	56	Application of the Geological Strength Index to Shallow Foundations in Carbonates: Preliminary Evidence from Al Ain, Abu Dhabi, UAE	Hasan Arman, Saffet Yagiz, Ahmed Gad, Osman Abdelghany, Safwan Paramban, Mahmoud Abu Saima
Day3	GEOL-8	Geological/Hydrogeological Issues	183	3D DEM Simulation of Seepage in Jointed Rock Masses Based on Regular Triangulation and Particulate Interface Model	Chia-Chi Chiu
Day3	GEOL-9	Geological/Hydrogeological Issues	517	Laser Reinforcement of Weak Rock Borehole	Mengxue Wang, Xiaowei Feng, Zewei Li
Day3	GEOP-1	Geophysical Issues	58	Continuous Nonlinear Ultrasonic Monitoring for Objective Determination of Crack Damage Stress Thresholds in Brittle Rocks	Jiangwan He, Mehdi Serati, Martin Veidt, Mitch Dunn
Day3	GEOP-2	Geophysical Issues	70	Seismic Projection Tomography and Continuous State Monitoring for Enhanced Geothermal Systems	David D. Nolte, Chet Hopp, Laura J. Pyrak-Nolte
Day3	GEOP-3	Geophysical Issues	88	Verification and Summary of Progressive Accuracy Improvement in Long-distance Survey Method Ahead of the Face	Masahito Yamagami, Shuntaro Miyana, Kohei Tone, Kazunori Murata
Day3	GEOP-4	Geophysical Issues	189	Groundwater inflow prediction and hydrogeological model calibration for mountain tunnels based on three sub-parallel tunnel cases	Kuan-Yu Shih, Chia-Hong Chiu, Tai-Tien Wang, Ya-Chu Chiu
Day3	GEOP-5	Geophysical Issues	233	Combining SIP and DIC methods to characterize the hydro-mechanical effects induced by desiccation of clay rock samples	Stephen Hedan, Aida Mendieta, Damien Jougnot, Philippe Cosenza
Day3	GEOP-6	Geophysical Issues	305	Precursory Seismic Response: Energy-Based and b-value interpretation of Failure Evolution	Iris Yana, Nadia Bustos, Ernesto Villaseca
Day3	GEOP-7	Geophysical Issues	412	Coupling Geochemical Kinetics with Meso-mechanical Interfacial Stability in Basaltic CO ₂ Reservoirs	Mengyi Li, Zhijun Wu
Day3	GEOP-8	Geophysical Issues	434	Heterogeneity of Olkiluoto migmatite from the perspective of thermal property estimation	Risto Kiuru

Day	Session ID	Session Title	Submission ID	Paper title	Authors
Day3	GEOP-9	Geophysical Issues	473	Differential stress measurements within a fault damage zone in an underground hard rock mine, Japan	Kosuke Shimada, Atsushi Sainoki, Yusuke Mukuhira, Daisuke Asahina, Takatoshi Ito
Day3	ENV-1	Earth Science and Environment	59	Investigation of gypsum alteration through climatic-chamber simulations replicating natural degradation conditions associated with the Ollon landslide.	Jérémy Torche, Erika Prina Howald
Day3	ENV-2	Earth Science and Environment	105	Estimation of the strength of lunar rocks using lunar rock simulants occurring on Earth	Youqing Chen, Amane Nakagawa, Takaaki Wajima
Day3	ENV-3	Earth Science and Environment	116	Identification of Spatial Vibration during the Damage Process of a Tension- Splitting Rock Mass Based on Frequency- Domain Polarization Analysis	Chen Zhao, Mowen Xie, Yan Du
Day3	ENV-4	Earth Science and Environment	161	Control of Clay Orientation on the Diversity of Fault Slip Behaviors	Bang Li, Fengshou Zhang
Day3	ENV-5	Earth Science and Environment	182	Dynamic Response of Fragile Rock Pillars in Active Seismic Regions	Alaa Jbara, Guy Yonatan, Michael Tsesarsky
Day3	ENV-6	Earth Science and Environment	203	3D printed technology-based numerical and experimental study on the microscopic strain and stress state within a fault damage zone	Zhe Zhang, Atsushi Sainoki, Mingwei Gang
Day3	ENV-7	Earth Science and Environment	389	Geomechanical and geochemical alteration of Basalt Induced by CO ₂ - Brine Interaction for Geological Carbon Sequestration	Duvvada Vamsikrishna, Deepak Amban Mishra, Himangshu Kakati, Susmita Nandi
Day3	ENV-8	Earth Science and Environment	33	Study on axial compressive behavior and damage evolution of FRP-confined coal gangue concrete in goaf areas	Linli Yu, Hai Pu, Junwu Xia, Kangsheng Xue
Day3	ENV-9	Earth Science and Environment	121	Attempts at atmospheric carbon dioxide fixation using construction-generated soils and its simple evaluation	Ryo Nakajima, Masahiro Katayama, Gao Shuaiqiang, Hajime Iwaki, Ryoya Sato, Tsutomu Sato
Day3	PET-1	Petroleum Engineering	136	Pore Structure Evolution Of Deep Coal Rock During Displacement Based On Fiber-Optic Monitoring And Multisource Joint Characterization	Liang Fan, Hou Bing, Wang Linghao, Cui Zhuang, Xie Jinyang
Day3	PET-2	Petroleum Engineering	167	GPU-Accelerated Finite Element Modeling of Salt Creep for Wellbore Applications	Nelson Inoue, Sergio A. B. da Fontoura, Eugênio Silva, Abraão Cavalcante
Day3	PET-3	Petroleum Engineering	228	Local pressurized hydraulic fracturing with rubber sleeve packer equipped with rupture disc	Akihisa Kizaki, Kazuyasu Kawamura, Tadao Imai
Day3	PET-4	Petroleum Engineering	257	Predicting seafloor subsidence induced by gas production in a deepwater ultra- shallow gas reservoir based on geomechanical modelling	Xuyang Guo, Yunhu Lu, Yan Jin
Day3	PET-5	Petroleum Engineering	286	Spatiotemporal Prediction of Hydraulic Fracture Propagation Dynamics Using Distributed Optical Fiber Sensing and CNN- LSTM	Jinyang Xie, Bing Hou, Zhuang Cui, Shan Liu
Day3	PET-6	Petroleum Engineering	455	Wellbore instability mechanisms and key control methods for drilling large diameter wells within high clay formations	Yingjian Xiao, Ziling Shang, Hailong Jiang, Yifan Dai, Bing Hou, Xiaoying Song, Zhenghan Xing, Ye Wang, Shiyu Liu, Ruiyang Chong
Day3	PET-7	Petroleum Engineering	488	Impacts of Biot's coefficient on hydraulic fracturing interactions with a natural fracture	Mohsen Moaref, Tao You, Tomoya Hiramatsu, Akira Fujimoto, Tsutau Takeuchi, Kohei Tamura, Hirofumi Okano, Keita Yoshioka
Day3	PET-8	Petroleum Engineering	180	Determination of the invisible orientation of isotropic plane and elastic constants of transversely isotropic rock by gradient descent	Yoonsung Lee, Jung-Woo Cho, Hoon Kang, Ki-Bok Min
Day3	PET-9	Petroleum Engineering	86	Numerical modelling for the assessment of damage zones in geological faults and their impact on reservoir production	Roberto Quevedo, Deane Roehl, Bruno Carvalho
Day3	NUM-1	Rock Properties: Modeling/Numerical Analysis	42	Directional effects of joint geometry on projectile penetration in rock masses: a validated 3D DEM investigation	Hoang-Khanh Le, Meng-Chia Weng, Ho Thi Kim Thoa
Day3	NUM-2	Rock Properties: Modeling/Numerical Analysis	413	Permeability evaluation using PNM and corrected LBM on an X-ray CT-based digital core	Ha Jung Je, Kwang Yeom Kim
Day3	NUM-3	Rock Properties: Modeling/Numerical Analysis	200	Numerical model calibration for longwall gate roadways considering anisotropic brittle failure of laminated shale roofs	Wenbing Guo, Fan Wu, Gaobo Zhao
Day3	NUM-4	Rock Properties: Modeling/Numerical Analysis	329	Pore-Scale Simulation of Soil Water Retention Curves Using Computational Fluid Dynamics	Wenjie Liao, Xianda Shen
Day3	NUM-5	Rock Properties: Modeling/Numerical Analysis	90	A CUDA-based parallel computing coupled thermal-mechanical model combining FDM and FDEM	Zihan Liu, Louis Ngai Yuen Wong
Day3	NUM-6	Rock Properties: Modeling/Numerical Analysis	199	Numerical study on rock fracture healing through MICP	Ibuki Nishimura, Hitoshi Matsubara
Day3	NUM-7	Rock Properties: Modeling/Numerical Analysis	440	Experimental Investigation of Quasi-Static Disc Cutter Indentation for the Undercutting Method	V. Satar, M. Karakus, G. Nguyen, T. Ren, M. Kizil
Day3	NUM-8	Rock Properties: Modeling/Numerical Analysis	491	Numerical analyses of anisotropic Utah coal behaviour with variation in boundary condition within a continuum grain-based model	Poralla Venkata Sathesh, Deepanshu Shirole, Sankhaneel Sinha
Day3	NUM-9	Rock Properties: Modeling/Numerical Analysis	144	CT-based simulation of internal flow behaviours evolution in a rough granite fracture under multiple experimental conditions	Zhiqi Li, Sho Ogata, Shinichiro Nakashima, Hideaki Yasuhara, Kiyoshi Kishida