

EAGE

CONFERENCE & EXHIBITION

NEAR SURFACE GEOSCIENCE'24

8-12 SEPTEMBER 2024 | HELSINKI, FINLAND

X 30th

European Meeting of
Environmental and
Engineering Geophysics

X 5th

Conference on Geophysics
for Mineral Exploration
and Mining

X 4th

Conference on
Airborne, Drone and
Robotic Geophysics

PROGRAMME

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#NSG2024

X in f

Venue

NSG2024 is held in Helsinki, Finland's vibrant capital, blending modern design, rich history, and lush landscapes. The city's strong regional relevance adds an extra layer of significance to NSG2024, making it an ideal location to gather and explore the latest advancements in the field. The venue, Paasitorni, is a historic site with modern amenities, located in Siltasaari, where the city centre and the Kallio district meet. This location offers a wealth of services and cultural experiences, with convenient access to Helsinki-Vantaa Airport. Delegates can easily enjoy the city's vibrant culture, extensive cycling infrastructure, and eco-friendly initiatives, making Helsinki an enriching destination for NSG2024.

The Venue - Paasitorni

Address: Paasitorni, Paasivuorenkatu 5 A, FIN-00530 Helsinki

Registration & Helpdesk Opening Hours

Sunday 8 September 2024	08:00 - 17:30
Monday 9 September 2024	08:00 - 17:30
Tuesday 10 September 2024	08:30 - 17:00
Wednesday 11 September 2024	08:30 - 17:00

Credentials

You are required to wear your name badge at all times. Use of a badge by a person not named on the badge is grounds for confiscation.

Health & Safety

In case of an emergency, it is important that you contact the conference services desk by the main entrance or an EAGE staff member and provide: brief information of what has happened, location of incident, and nature of injury or symptoms if known.

Stay calm and prevent panic

Please scan the QR code to access the EAGE Event Code of Conduct and ensure a respectful and inclusive experience for all participants.



- Always put your own safety first.
- Always follow the instructions given by emergency services.
- Use the (emergency) exits to leave the building.
- Stay calm and prevent panic.

Catering

Coffee/tea breaks are included in the registration fee for all registered delegates and will be served at the Exhibition.

Wi-Fi

You will have free access to Wi-Fi throughout the venue.

Network: Paasitorni | Password: Paasi123+

NSG2024 Papers on EarthDoc and the Event App

EarthDoc is EAGE's online geoscience database and enables you to browse through thousands of event papers and journal articles online. EAGE members have free access to EarthDoc.

The event papers are available online. Go to www.earthdoc.org and log in with your EAGE membership credentials. If you are yet to be processed as an EAGE member, you can also access the papers via the Event App.

EAGE Event App

The EAGE Event App is at your disposal for NSG2024! Scan the QR code to download the app.

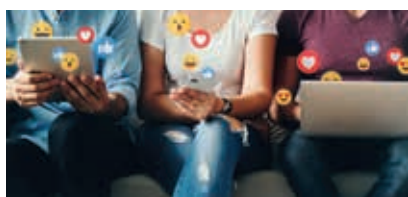


Event code: NSG2024

By downloading the app, you can:

- Check out the most up-to-date programme;
- Plan your own agenda;
- Access the extended abstracts;
- Browse through the floorplan and exhibitors;
- Network with fellow delegates;
- Interact with social media;
- And more!

Access more functionalities in the App (personal agenda, messaging services, etc.) by clicking on "Log In" then entering the email address and pin code provided in the email sent to you prior to the event.



Social Media



Stay connected with EAGE through our social media channels on LinkedIn, Facebook and Twitter, and join the conversation with #NSG2024.

Highlights of the Week

Opening Session

AI in Geosciences: Navigating the Opportunities and Risks

Monday 9 September | 09:00-10:00

Location: Sirkus

Join us for a discussion on the role of AI in geosciences, where we'll explore how artificial intelligence is revolutionizing data analysis, enhancing predictive models, and shaping the future of environmental science.

Special Session

Women in Geoscience

Wednesday 11 September | 11:10 - 12:10

Location: Tivoli

Join our inspiring women in geoscience for an open dialogue where we celebrate advancements, share success stories, and embrace the lessons learned on the journey to making a difference.

Closing Session

Wednesday 11 September | 17:15-17:45

Location: Karl Lindahl

Join us as we look into the takeaways of this year's Near Surface Geoscience, and what's awaiting you in next year's edition.

Community Programme

Student Exhibition Tour

Tuesday 10 September | 12:30 - 13:30

Location: Exhibition

Join the tour to connect with companies, learn about their latest projects and hear their advice for early careers entering their field. Start at the EAGE Community Hub.

Meet the Community

With several active groups among EAGE Local Chapters and Student Chapters in the area, NSG2024 is a great touch-point to connect with the work of our volunteers and get involved.

Volunteering Corner

Eager to take an active role within EAGE? You can! Stop by the EAGE stand to discover all the ways you can make a difference: from chairing and reviewing, to mentoring, leading communities and more.



Social Programme

Icebreaker Reception

9 September 2024 | 17:15 - 18:45

Location: Exhibition area

Meet with exhibitors, catch up with your colleagues and expand your network while enjoying delicious finger food and drinks.

Conference Evening

10 September 2024 | 19:30 - 24:00

Location: Ravintola Töölö

Runeberginkatu 14-16, 00100 Helsinki, Finland

Set in the iconic old School of Business building, designed by Woldemar Baeckman and Hugo Harmia, our conference dinner promises a perfect blend of culture, cuisine, and networking. Prepare for a night of exquisite gastronomy and enchanting melodies in this historic setting.

Make sure you pick up your conference evening ribbon at the Registration & Helpdesk in the conference venue!

Programme at a Glance

DAY 1 SUNDAY 8 SEPTEMBER	DAY 2 MONDAY 9 SEPTEMBER	DAY 3 TUESDAY 10 SEPTEMBER	DAY 4 WEDNESDAY 11 SEPTEMBER
Registration			
08:00 - 17:30	08:00 - 17:30	08:30 - 17:00	08:30 - 17:00
Workshops			
Workshop 1 - 2 - 3 09:00 - 17:00			
Exhibition			
	10:00 - 18:45	09:00 - 16:00	09:00 - 16:00
Conference			
	Opening Session 09:00 - 10:00		
	Technical Programme 10:30 - 17:15	Technical Programme 09:00 - 16:00	Technical Programme 09:00 - 17:10
	Poster Session 16:10 - 17:15	Poster Session 15:20 - 16:00	Closing Session 17:15 - 17:45
Field Demonstrations (in front of venue entrance)			
		16:00 - 17:30	
Social Programme			
	Icebreaker Reception 17:15 - 18:45	Conference Evening 19:30 - 24:00	



EAGE

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First EAGE Workshop on the Triassic and Jurassic Plays in Northwest Europe

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REGISTER NOW!

Regular Registration Deadline:
1 October 2024

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TECHNICAL PROGRAMME

Oral Presentations | Monday, 9 September 2024

30 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
KARL LINDAHL	TARJA HALONEN
09:00	Opening Session "AI in Geosciences: Navigating the Opportunities and Risks"
10:00	Coffee Break
Best of SAGEEP	
10:30	A community led GPR investigation of a former Indian Residential School site in Canada - A. McClymont ^{*1} , Leah Redcrow ² , Tyrell Cardinal ² , Scott Hamilton ³ , Paul Bauman ¹ , Max Layton ¹ ¹ BGC Engineering; ² Acimowin Opaspiw Society; ³ Lakehead University
10:50	Applying a Hydrogeophysical Toolbox to Identify Hotspots of Contaminated Groundwater Discharges into a Coastal Bay - D. Ntarlagiannis ^{*1} , H.E. Moore ¹ , M. A. Briggs ² , R. Iery ³ , D. Rey ⁴ , F. D. Day-Lewis ⁵ , L. Slater ^{1,5} ¹ Rutgers University Newark, Earth & Environmental Sciences; ² USGS Water Mission Area; ³ US Navy; ⁴ USGS, Hydrologic Remote Sensing Branch, Water Resources Mission Area; ⁵ Pacific Northwest National Laboratory, Energy & Environment Directorate
11:10	Retrieving Subsurface Properties Of Mars-Analog Glaciers With Drone-Based GPR - R. Aguilar ^{*1} , T. M. Meng ¹ , M.S. Christoffersen ² , S. Nerozzi ¹ , J. W. Holt ¹ ¹ University of Arizona; ² University of Alaska
11:30	Building Water Resilience in Uganda, One Well at a Time - P. Bauman ¹ , L. Woods ¹ , K. Robey ¹ , S. Edris ² ¹ BGC Engineering Inc; ² IsraAID
11:50	Lunch Break
New Technologies, Developments and Research Trends, Machine Learning I	
13:00	Variational Mode Decomposition Based Processing of Surface NMR Data - K. Naveed ¹ , J.J. Larsen ^{*1} ¹ Aarhus University
13:20	Nodal landstreamer vs. planted geophones for seismic imaging of shallow crystalline bedrock: a comparative performance study - M. Cyzi ^{*1} , M. Malinowski ¹ , V. Laakso ¹ , B. Brodic ² , E. Koskela ¹ ¹ Geological Survey of Finland; ² University of the Witwatersrand
13:40	Inversion of DC Resistivity Data using Physics-Informed Neural Networks - R. Sharma ^{*1} , D. Vashisth ² , K. Sarkar ¹ , U.K. Singh ¹ ¹ Department of Applied Geophysics, Indian Institute of Technology Dhanbad; ² Department of Energy Science and Engineering, Stanford University
14:00	Deep learning predictions of Dynamic Cone Penetrometer Data using Electromagnetic Induction mapping: a test site experiment. - J. Cárdenas Chapellín ^{*1} , C. Finco ² , A. Wang ² , F. Rejiba ¹ ¹ Sorbonne Université, CNRS, EPHE, UMR 7619 METIS; ² Cerema, Research Team END SUM, F-76121, Le-Grand-Quevilly
Groundwater Exploration and Hydrogeophysics I	
13:00	Estimation of hydraulic conductivity variations within glacial sediments at Endelave island by borehole NMR data - S.R. Mashhadi ^{*1} , D. Grombacher ¹ , J.B. Pedersen ¹ , F. Jørgensen ² , T.R. Andersen ³ ¹ Hydrogeophysics Group, Department of Geoscience, Aarhus University; ² Central Denmark Region, Viborg; ³ Research Centre for Built Environment, Climate, Water Technology and Digitalisation, VIA University College, Horsens
13:20	Uncertainty quantification in groundwater volume predictions from seismic data using neural networks - M. Khalili ^{*1} , P. Göransson ² , J.S. Hesthaven ³ , S. Heinonen ⁴ , A. Pasanen ⁵ , M. Vauhkonen ¹ , T. Lähivaara ¹ ¹ Department of Technical Physics, University of Eastern Finland; ² Department of Aeronautical and Vehicle Engineering, KTH Royal Institute of Technology, Stockholm; ³ Computational Mathematics and Simulation Science, Ecole Polytechnique Federale de Lausanne, Lausanne; ⁴ Institute of Seismology, University of Helsinki; ⁵ Geological Survey of Finland
13:40	Using tTEM and geostatistics to update and improve the hydrostratigraphic model for the island of Ærø - P. Thomsen ¹ , G. Hollenbo Westergaard ¹ , T. Norvin Vilhelmsen ¹ , K. Albers Grunnet ^{*1} , A. Pytlich ² ¹ Niras; ² Ministry of Environment of Denmark
14:00	Assessing groundwater-surface water connectivity using land and waterborne TEM surveys - P. McLachlan ^{*1} , J.C. Zamora Luria ¹ , D. Grombacher ¹ , A.V. Christiansen ¹ ¹ Aarhus University
14:20	Coffee Break

See the up-to-date schedule in the app!

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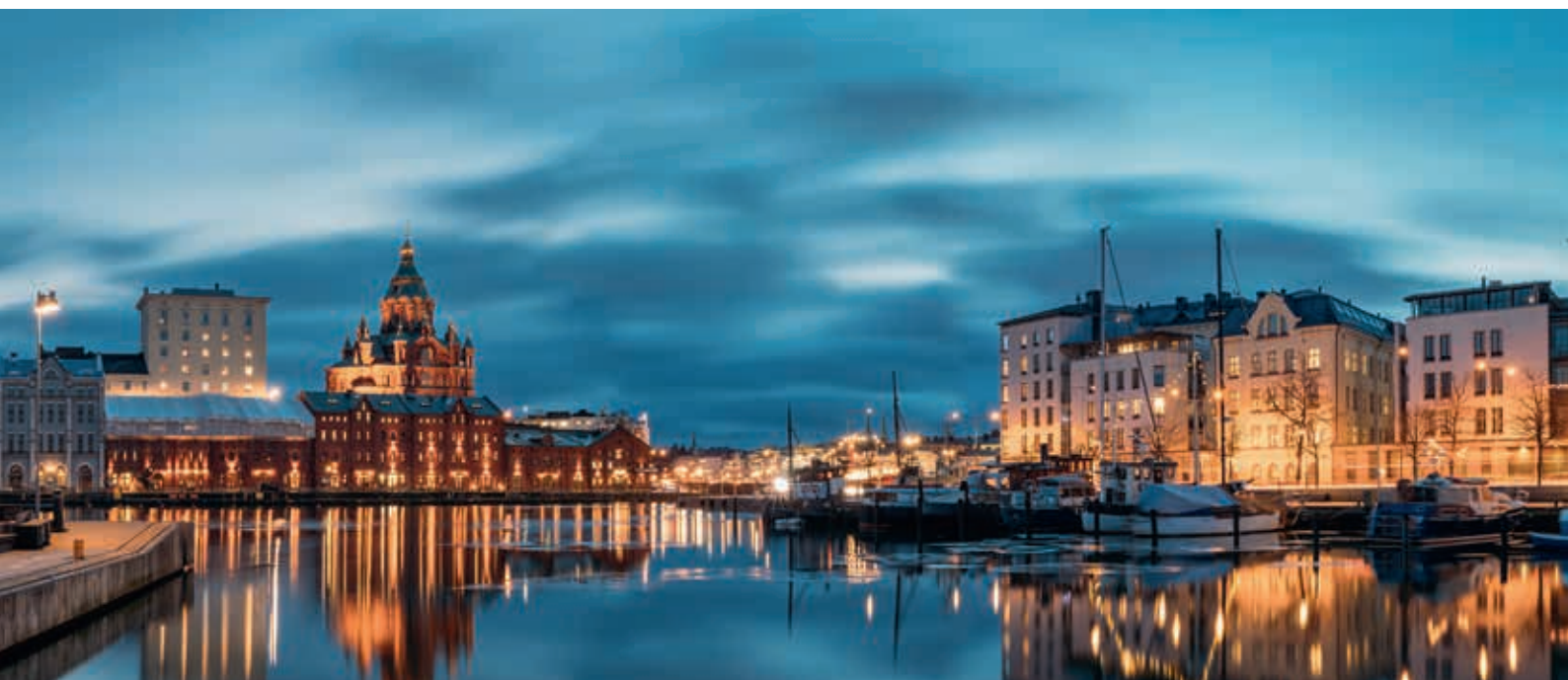
Oral Presentations | Monday, 9 September 2024

5 TH CONFERENCE ON GEOPHYSICS FOR MINERAL EXPLORATION AND MINING		4 TH CONFERENCE ON AIRBORNE, DRONE AND ROBOTIC GEOPHYSICS	
JUHO RISSANEN		TIVOLI	
10:00 Coffee Break			
AI and Machine Learning		Drone EM I	
10:30	An automated approach to incorporate structural information into the inversion using image segmentation - J. Kuttai ^{1*} , L. Heagy ¹ ¹ University Of British Columbia - Earth, Ocean And Atmospheric Sciences Department	10:30	Keynote talk
10:50	Inverting airborne electromagnetic data with machine learning - M. McMillan ^{1,2*} , B. Peters ² , O. Greif ² , P. Wozniakowska ² , E. Haber ³ ¹ Invert Geophysics; ² Computational Geosciences Inc; ³ University of British Columbia		
11:10	Predicting Rock Quality Designation with geophysical wireline data - D. Kieu ¹ , M. Parsajoo ^{1,2*} , A. Kopic ¹ ¹ RoqSense; ² Iranian Mining Engineering Organisation	11:10	UAV-electromagnetic measurements to map variations of depth to bedrock in southern Sweden - M. Bastani ^{1,3*} , L. Beckel ¹ , T. Martin ² ¹ Geological Survey of Sweden; ² Lund University; ³ Uppsala University
11:30	Comparing modern deep learning with traditional methods for seismic fault interpretation - N. Ngcobo ^{1*} , M. Manzi ¹ , G. Nwaila ¹ , J. Bourdeau ² , S. Zhang ² ¹ University Of The Witwatersrand; ² Geological Survey of Canada	11:30	Louhi - novel drone-based electromagnetic survey system - M. Pirttijarvi ^{1*} , P. Korkeakangas ¹ , A. Saartenoja ¹ ¹ Radai Oy
11:50 Lunch Break			
Downhole Geophysics		Drone EM II	
13:00	Simple Solutions By Using P And S Suspension Logging Data In Unstable Borehole Conditions - S.H. Majumdar ¹ , H. Butler ^{1*} ¹ Fugro	13:00	Exploring groundwater salinization using drone-based electromagnetics in the North Sea region, Germany - B. Blanco Arru ^{1*} , R. Rochlitz ¹ , T. Günther ¹ , M. Ronczka ¹ , M. Müller-Petke ¹ ¹ Liag Institute for Applied Geophysics
13:20	Polarization ellipse-driven Model Normalization for borehole EM anomaly residuals - H. Kaaretkoski ^{1*} , S. Dempsey ¹ , A. Pantze ¹ ¹ Boliden	13:20	Comparing inductive and galvanic sources in semi-airborne transient electromagnetic (TEM) method: a parameter analysis - A. Almpanis ^{1*} , A. Christiansen V. ¹ , P. McLachlan ¹ , D. Grombacher ¹ ¹ Aarhus University
13:40	Enhancing Deep Ore Exploration with Drillhole Electromagnetic Loop Inside Active Mine - M. Smirnova ^{1*} , A. Holmgren ¹ , K. McGimpsey ¹ , S. Schöttle ² ¹ Boliden Mineral AB; ² University of Cologne	13:40	Testing an airborne TEM system in Denmark using a heavy-lift drone - N.S. Nyboe ^{1*} , A.A. Pfaffhuber ² , K.S. Mohr ¹ , M. Panzner ³ ¹ SkyTEM Surveys; ² EMerald Geomodelling; ³ Equinor, formerly EMerald Geomodelling
		14:00	A new semi-airborne loop source TEM system for 3D mapping of groundwater and mineral resources - P. Maurya ^{1,*} , E. Auker ¹ , A.V. Christiansen ² , D.J. Grombacher ² , P.J. McLachlan ² , A.L.C. Harbo ³ , S. Jensen ³ , J.J. Naundrup ³ ¹ Temcompany Aps; ² Institute of Geosciences, Aarhus university; ³ Drone Research Lab Aalborg University
14:20 Coffee Break			

TECHNICAL PROGRAMME

Oral Presentations | Monday, 9 September 2024

30 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS			
KARL LINDAHL		TARJA HALONEN	
Geophysical Surveys of Cryosphere and Arctic		Data processing, modeling and integrated approaches	
14:50	Nine years of the retreating Hans Glacier's (South Spitsbergen) frontal zone evolution in geophysical imaging - A. Marciniak ^{1*} , S. Oryński ¹ , S. Uhlemann ² , W. Dobinski ³ , J. Cader ⁴ , M. Majdański ¹ ¹ Institute of Geophysics, Polish Academy of Sciences; ² Lawrence Berkeley National Laboratory; ³ Faculty of Natural Sciences, University of Silesia; ⁴ Mineral and Energy Economy Research Institute, Polish Academy of Sciences	14:50	Low and intermediate frequency electromagnetic methods for cavity detection - F. Dubois ^{1*} , B. Bourgeois ¹ , M. Darnet ¹ ¹ BRGM
15:10	Modelling of temporal and spatial trends in soil conditions in Finland using HydroBlocks model - E. Kokko ^{1*} , N. Chaney ² , L. Torres-Rojas ² , D. Guyumus ² , L. Bacelar ² , J. Okkonen ³ ¹ Oulu Mining School, University Of Oulu; ² Environmental and Civil Engineering Department, Duke University; ³ Geological Survey Of Finland	15:10	Rayleigh surface wave focal spot imaging - G. Hillers ^{1*} , C. Tsarsitalidou ¹ , B. Giammarinaro ² , P. Boué ³ , L. Stehly ³ , K. Kolehmainen ¹ ¹ Institute of Seismology, Department of Geosciences and Geography, University of Helsinki; ² LabTAU, INSERM, Centre Léon Bérard, Université Claude Bernard Lyon 1; ³ Institut des Sciences de la Terre, Université Grenoble Alpes
15:30	Polythermal glaciers: a link between GPR EM facies and glacial thermal modeling - P. Gutgesell ^{1*} , E. Forte ² ¹ Università degli studi di Trieste, Dipartimento di Matematica Informatica e Geoscienze; ² Università degli studi di Trieste, Dipartimento di Matematica Informatica e Geoscienze	15:30	Multi survey investigation of active seismic techniques for environmental seismology - E. Roshdy ^{1,2*} , M. Majdański ¹ , A. Marciniak ¹ , S. Oryński ¹ , P. Popielski ³ , S. Kowalczyk ⁴ , I. Ostrzolek ⁵ , S. Długosz ⁶ ¹ Institute Of Geophysics Polish Academy Of Sciences; ² Geophysics Department, Faculty of Science, Cairo University; ³ Faculty of Building Services, Hydro and Environmental Engineering Warsaw University of Technology; ⁴ Faculty of Geology, University of Warsaw; ⁵ PGE Górnictwo i Energetyka, O. El. Rybnik; ⁶ SHM System SP. Z o.o.
15:50	Frostquakes and frost tremors in northern Finland and associated hazard to urban infrastructure - N. Afonin ¹ , E. Kozlovskaya ^{1*} , K. Moiso ¹ , E. Kokko ¹ , J. Okkonen ² ¹ University of Oulu; ² Geological Survey of Finland	15:50	Integrating Geophysical Inversion with Markov-Type Categorical Prediction for Improved Geological Modelling - L. Guo ^{1*} , T. Hermans ¹ , D. Duda ² , E. Van De Vijver ¹ , N. Benoit ³ , W. Deleersnyder ² ¹ Ghent University; ² Katholieke Universiteit Leuven; ³ Geological Survey of Canada
16:10	Joint Poster Session Monday	16:10	Joint Poster Session Monday
17:15	Icebreaker Reception		



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Oral Presentations | Monday, 9 September 2024

5 TH CONFERENCE ON GEOPHYSICS FOR MINERAL EXPLORATION AND MINING		4 TH CONFERENCE ON AIRBORNE, DRONE AND ROBOTIC GEOPHYSICS	
JUHO RISSANEN		TIVOLI	
Mine Planning & Safety		Remote Sensing	
14:50	3D seismic attribute analysis for gold exploration and mine planning in the Witwatersrand Basin, South Africa - N. Mutshafa ^{1*} , M. Manzi ¹ , R. Durrheim ¹ ¹ University Of The Witwatersrand	14:50	The integral role of digital outcrop models in geological disposal facility site selection and environmental management. - D. Hodgetts ^{1*} , B. Burnham ¹ , W. Head ² ¹ VRGeoscience Limited. https://www.vrgeoscience.com ; ² Westinghouse Electric Company.
15:10	Surface wave attributes for the mapping of geo-structural features in mineral exploration - C. Colombero ^{1*} , F. Khosro Anjom ¹ , S. Gomo ¹ , V. Socco ¹ , M. Manzi ² ¹ Politecnico Di Torino; ² Wits University	15:10	High-Resolution Near-Surface Soil Water Content Estimation, Using Remote Sensing Data and Deep Computer Vision Methods - M. Rafiei ^{1*} , M.R. Asif ¹ , M. Nørremark ¹ , C.A.G. Sørensen ¹ ¹ Aarhus University
15:30	UAV magnetic surveys for mineral exploration: implications for mine planning and safety - J. Dildar ^{1*} , M. Manzi ¹ , O. Brovko ² , M. Sihoyiya ¹ ¹ University Of The Witwatersrand; ² GF International and GeoFocus (Pty) Ltd.	15:30	Deep learning based identification of oil-slick emissions in the Arctic using satellite SAR data - O. Millinge ^{1*} , C. Böttner ¹ , M.R. Asif ^{1*} ¹ Aarhus University
15:50	3D-Underground Seismics with a focus on clay rocks - H. Richter ^{1,2*} , K. Jaksch ¹ , R. Giese ¹ , R. Esefelder ^{1,3} , B. Wawerzinek ¹ , S. Lüth ¹ ¹ Helmholtz Centre Potsdam, GFZ German Research Centre for Geosciences; ² Technical University Berlin; ³ Friedrich Schiller University Jena	15:50	Exploring Mineralization Potential Through Remote Sensing and Geophysical Analysis Along Fatira Shear Zone, Eastern Desert, Egypt - M. Badawi ^{1*} , A. Shebl ² , N. Németh ¹ ¹ Miskolc Egyetem; ² Debrecen University
16:10	Joint Poster Session Monday	16:10	Joint Poster Session Monday
17:15	Icebreaker Reception		



TECHNICAL PROGRAMME

Poster Presentations | Monday, 9 September 2024

POSTER AREA

Joint Poster Session Monday

16:10	An analysis of the application of the electromagnetic slingram method for peatland monitoring. - S. Orynski ^{1*} , S. Kowalczyk ² ¹ Institute of Geophysics, Polish Academy of Sciences; ² Faculty of Geology, University of Warsaw
	Analysis of Sea Effects on Magnetotelluric data from the Yeonil Tectonic Line and Ulsan Fault, Korea - K. Ryu ^{1*} , H. Kwon ¹ , S. Oh ¹ ¹ Kangwon National University
	Automatic algorithm detection of microbialites in geophysical data. - A. Urruela Garcia ^{1*} , M. Himi ¹ , L. Rivero ^{1,2} , F. Pinheiro ³ , A. Sendrós ^{1,2} , C. Abancó ¹ , R. Lovera ^{1,2} , A. Casas ^{1,2} ¹ Earth Science Faculty - Universitat de Barcelona; ² Water Research Institute - Universitat de Barcelona; ³ Universidade Federal do Rio Grande do Norte
	Automatic surface-consistent analysis for geohazard detection - E. Sandoval Curiel ^{1*} , D. Colombo ¹ , T. Alyousuf ¹ , E. Turkoglu ¹ ¹ EXPEC Advanced Research Center, Saudi Aramco
	Co-locating glacial seismicity, temperature, and snow cover: geophones as weather stations - R. Ferguson ^{1*} , C. Mosher ² ¹ University of Calgary; ² MoMacMo
	Comparison of inversion algorithms for traffic noise data - Y. Choi ^{1*} , S. Jang ¹ , D. Lee ¹ , W. Son ¹ , Y. Joo ¹ , S. Cheong ¹ , B. Kim ¹ ¹ Korea Institute Of Geoscience And Mineral Resources
	ERT survey to determine the geometry of a landslide at Pont de Bar (Central Pyrenees-Spain) - C. Herrero ^{1,3} , L. Rivero ^{1,2} , J.M. Vilaplana ¹ , R. Lovera ^{1,2} , C. Abancó ¹ , L. Galone ⁴ , A. Urruela ^{1*} , M. Himi ^{1,5} , A. Sendros ^{1,2} , A. Casas ^{1,2} ¹ Earth Science Faculty-University of Barcelona; ² Water Research Institute-University of Barcelona; ³ Enviro Engineerig; ⁴ University of Malta; ⁵ Institute of Archaeology-University of Barcelona
	Getica Ccs Project-Feasibility Of Local Logging Technologies - S. Anghel ^{1*} ¹ National Research and Development Institute for Marine Geology and Geoecology
	Imaging of Cole-Cole parameters from time domain SIP inversion results - M. Yi ^{1*} , S. Jeong ¹ , B. Jochum ² , D. Ottowitz ² ¹ Korea Institute of Geoscience and Mineral Resources; ² Geosphere Austria
	Integration of surface wave analysis with electrical resistivity and seismic refraction tomography to characterise rock glaciers - S.J. Gaona Torres ^{1*} , M. Pavoni ¹ , I. Barone ¹ , A. Bast ^{2,3} ¹ Dipartimento di Geoscienze, Università di Padova; ² WSL Institut for Snow and Avalanche Research SLF, Alpine Environment and Natural Hazards / Permafrost, Davos Dorf.; ³ Climate Change, Extremes and Natural Hazards in Alpine Regions Research Center CERC, Davos Dorf"
	Location of favourable areas for compressed air energy storage in salt domes using gravity data - V. Serrano ¹ , A. Sendrós ^{1,2} , L. Rivero ^{1,2} , R. Lovera ^{1,2} , A. Urruela ¹ , M. Himi ¹ , A. Casas ^{1,2*} ¹ Earth Science Faculty, Universitat de Barcelona; ² Water Research Institute, Universitat de Barcelona
	Seismic activity of the Kurbnesh-Kukes-Prizren cross-border transversal fault and its effects on the Albanian-Kosovo cities - K. Skrame ^{1,2,3*} , R. Ormeni ^{2,3} , I. Hoxha ⁴ , N. Peci ⁵ , B. Shala ⁵ ¹ Polytechnic University of Tirana, Albania; ² Albanian Association of Geoscientists and Engineers – AAGE; ³ Academy of Sciences of Albania; ⁴ Polytechnic University of Tirana, Institute of Geosciences; ⁵ University Isa Buletini of Mitrovica
	Seismic methods for geoenery-related site investigations in crystalline rocks: case study from Pirkkala, Finland - E. Koskela ^{1*} , B. Brodic ² , M. Malinowski ¹ , V. Laakso ¹ , A. Martinkauppi ¹ , M. Cyz ¹ ¹ Geological Survey of Finland; ² University of the Witwatersrand
	Seismic microzonation geotechnical and geophysical tests. A case study of Granada (Spain) focused on seismic risk - I. Valverde Palacios ^{1*} , P. Martínez-Pagán ³ , A. García-Jerez ² , J.J. Hellin-Rodríguez ¹ , M. Navarro-Bernal ³ , M. Martínez-Segura ³ , K. Suto ⁴ , K. Hayashi ⁵ ¹ University of Granada; ² University of Almería; ³ University of Cartagena; ⁴ Terra Australis Geophysics; ⁵ Geometrics
	Study on Depth-domain Seismic Imaging Subsurface Structures for CO2 Storage of Gunsan Basin, Yellow Sea, Korea - W. Son ^{1*} , S. Cheong ¹ , B. Kim ¹ , M. Kang ¹ ¹ Korea Institute of Geoscience and Mineral Resources
	Subsoil investigation through geophysical surveys on the shores of the "Bagno dell'Acqua" lake in Pantelleria, Italy - P. Capizzi ¹ , F.L. Chiocci ² , S. D'Amico ³ , R. Martorana ^{1*} , A. Canzoneri ¹ , A. Carollo ¹ , E. Colica ³ ¹ Department of Earth and Marine Sciences - University of Palermo; ² Department of Earth Sciences - Sapienza University of Rome; ³ Department of Geosciences - University of Malta
	The Importance Of Seismic Microzonation In Historic Buildings:A Case Study - M.A. Martinez ^{1*} , M.C. García-Nieto ¹ , M. Navarro ² ¹ Universidad Politecnica de Cartagena; ² Universidad de Almería"
	The integration of geophysical data in mud volcano research, a case study from Romania - A. Mihai ^{1*} , A. Gere ¹ , D. Tataru ¹ , E. Nastase ¹ , B. Zaharia ¹ , B. Grecu ¹ , B. Cerbu ¹ , D. Toma ¹ ¹ National Institute for Earth Physics Romania
	Time-lapse electrical resistivity tomography to monitor moisture content in a laboratory compacted soil dam - L. Guireli Netto ^{1,2*} , M.P. De Oliveira ³ , R. Serafim ¹ , T.M. Spinelli ⁴ , C.C. Arbiato ⁴ , P.D.G. Orlando ¹ ¹ Institute For Technological Research of The State of São Paulo - IPT; ² São Paulo State University; ³ São Paulo University; ⁴ Intergeo Geofísica Aplicada

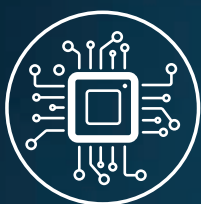
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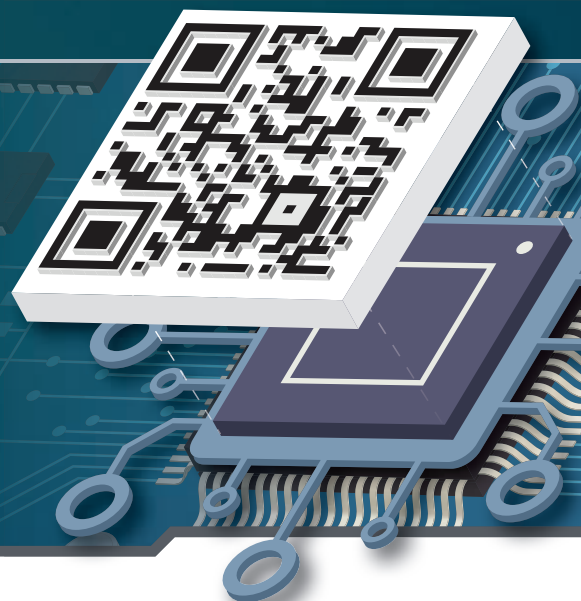
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TECHNICAL PROGRAMME

Oral Presentations | Tuesday, 10 September 2024

30 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
KARL LINDAHL	TARJA HALONEN
Geophysics in Geohazard Studies I	Geophysics in Engineering Geology and Geotechnical Investigations I
09:00 Evaluation of karstification risks using borehole radar measurements during tunnel excavation in Slovenia - J. Roth ^{1*} , M. Opelt ¹ , P. Lehmann ¹ , M. Prelovšek ² , J. Fux ³ , V. Vukadin ³ ¹ Bo-Ra-tec GmbH; ² ZRC SAZU; ³ IRGO Consulting d. o. o.	09:00 Improved planning of geotechnical investigations using GPR - J. Gustafsson ^{1*} , J. Emilsson ¹ , J. Friborg ¹ , M. Langton ¹ , A. Viberg ¹ , A. Abrahamsson ¹ ¹ Guideline Geo
09:20 Fast and agile 3D Deep ERT for imaging complex geological features: example at La Soufriere volcano - F. Fischanger ² , C. Truffert ^{1*} , A. Rosselli ² , F. Barsuglia ² , S. Del Ghianda ³ , G. Penno ³ , A. Ferdeghini ² , A. Coletti ² , M. Lupi ⁴ , G. Savard ⁴ , E.A. Jiwani-Brown ⁴ , S. Bouteille ¹ ¹ Iris Instruments; ² GEG Experts; ³ Geostudi Astier; ⁴ Department of Earth Sciences, University of Geneva	09:20 Combined geophysical, geological and geotechnical study of offshore soft sediments at a planned wind farm area - M. Saresma ^{1*} , D. Mohapatra ² , S. Mohammadi Hasanbarough ² , W. Sotowski ² , J.J. Virtasalo ¹ ¹ Geological Survey of Finland; ² Aalto University
09:40 Investigation of subsidence impacting a UK motorway using electromagnetic and multidimensional resistivity surveys - A. O'Reilly ^{1*} , J. Whiteley ¹ , E. Cox ¹ , S. Oakley ¹ , S. Archer ¹ , A. Thomas ² , R. Speller ³ , I. McKenzie ⁴ ¹ AtkinsRéalis; ² TerraDat; ³ South Wales Trunk Road Agent (SWTRA); ⁴ Welsh Government	09:40 Seasonal variation in railway embankment condition from passive analysis of train generated surface waves using DAS - A. Trafford ^{1*} , M. Saqlain ¹ , J. Chambers ² , B. Dashwood ² , R. Crickmore ³ , J. Harms ⁴ , S. Donohue ¹ ¹ University College Dublin; ² British Geological Survey; ³ Luna Innovations; ⁴ Network Rail
10:00 Importance of time-lapse high quality bathymetric dataset in dynamic environment for geohazard evaluation: a case study - M. Marello ^{1*} , M. Sammartini ¹ , F. Zolezzi ¹ ¹ RINA Consulting S.p.a	10:00 Geophysical investigations of a new subway in the city of Stockholm, Sweden - M. Dehghannejad ^{1*} , C. Albrechtsen ² , S. Knappe Hansén ¹ ¹ Ramboll Sweden; ² Ramboll Denmark
10:20 Engineering Geophysical Solutions A Tool For Ground Risk Management In Karstic Environments - S.H. Majumdar ¹ , H. Butler ^{1*} ¹ Fugro	10:20 Structural health investigation of the earthen dam using passive seismic - S. Jang ^{1*} , D. Lee ¹ , K. Lee ² , B. Kim ¹ ¹ KIGAM; ² K-water Research Institute, Korea water Resource Corporation
10:40 Coffee Break	
New Technologies, Developments and Research Trends, Machine Learning II	Modelling, Inversion and Data-Processing in Near Surface Geophysics I
11:10 Using machine learning to estimate thermal conductivity based on optical image data - R. Kiuru ^{1,2*} , D. Wawita Widanalage Don ³ ¹ Rock Physics Finland Ltd; ² Aalto University, School of Engineering; ³ University of Oulu, Oulu Mining School	11:10 ERT and TDIP survey for mapping of leachate plumes: application to a MSW landfill in Italy - D. Melegari ^{1*} , G. De Donno ¹ ¹ Sapienza - University Of Rome
11:30 Bayesian inversion for large-scale towed transient electromagnetic data using probabilistic neural networks - J. Chen ^{1*} , G. Fiandaca ¹ ¹ University Of Milan	11:30 Coupling ERT and SRT data through cross-gradient joint inversion and clustering on structured meshes incorporating topography - G. Penta De Peppo ^{1*} , M. Cercato ¹ , G. De Donno ¹ ¹ "Sapienza" University of Rome – DICEA
11:50 Feasibility study of steady-state surface NMR with adiabatic pulses - M. Hardenberg ¹ , M.P. Griffiths ¹ , D. Grombacher ¹ , J.J. Larsen ^{1*} ¹ Aarhus University	11:50 Surface-wave supervirtual seismic interferometry: the ugly, the bad, and the good - S. Hassing ^{1*} , D. Draganov ¹ , E. Verschuur ¹ ¹ TU Delft
12:10 A new compact, portable, and fast transient electromagnetic system for rapid subsurface imaging - sTEMprofiler - P. Maurya ^{1*} , E. Auker ¹ , T. Bording ¹ ¹ Temcompany Aps	12:10 Automated processing of time-domain electromagnetic data influenced by induced polarization effects - M.R. Asif ^{1*} , J.J. Larsen ¹ , A.V. Christiansen ¹ ¹ Aarhus University
12:30 Physics-guided deep learning DC-resistivity inversion with uncertainty quantification - F. Rincón ^{1*} , M. Aleardi ¹ , A. Tognarelli ¹ , E. Stucchi ¹ ¹ Università Di Pisa	12:30 EEMverter, a new modelling tool for Electric and Electromagnetic data with focus on induced polarization - G. Fiandaca ^{1*} , J. Chen ¹ , B. Zhang ² ¹ University of Milano "La Statale"; ² Jilin University
12:50 Lunch Break	

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Oral Presentations | Tuesday, 10 September 2024

5 TH CONFERENCE ON GEOPHYSICS FOR MINERAL EXPLORATION AND MINING		4 TH CONFERENCE ON AIRBORNE, DRONE AND ROBOTIC GEOPHYSICS	
JUHO RISSANEN		TIVOLI	
Seismic Methods in Mineral Exploration I		Drone geophysics	
09:00	Reassessing seismic legacy data of crooked-line acquisition for deep mineral exploration in Outokumpu, Finland - Y. Ding ^{1*} , I.T. Kukkonen ¹ , S. Heinonen ^{1,2} ¹ University of Helsinki; ² Institute of Seismology	09:00	Snow measurements with UAV GPR tools - B. Dupuy ^{1*} , M. Lee ¹ , M. Chatel ¹ , A. Grøver ¹ , S. Garambois ⁴ , H. Dahle ² , A. Tobiesen ¹ , S. Salazar ³ , R. Frauenfelder ³ , T. Humstad ² , J. Hendrikx ⁵ ¹ SINTEF; ² NPRA; ³ NGI; ⁴ Université Grenoble Alpes; ⁵ UIT
09:20	Broadband seismics for deep mineral exploration at South Deep gold mine, South Africa - M. Sihoyiya ^{1*} , M. Manzi ¹ , I. James ¹ , M. Rapetsoa ¹ ¹ University Of The Witwatersrand	09:20	The guidelines for drone geophysics: radiometric UAV-borne guidelines - S. Van Der Veeke ^{1*} , H. Limburg ¹ , R. Koomans ¹ ¹ Medusa Radiometrics
09:40	Mapping Regional Reflectivity of Mineral-prone Koillismaa Layered Intrusion Complex in Northern Finland using Crooked Seismic Profiles - B. Singh ^{1*} , A. Górszczyk ¹ , M. Malinowski ^{1,2} , S. Heinonen ³ , U. Autio ² , M. Wojdyla ⁴ , J. Kamm ² ¹ Institute of Geophysics, Polish Academy of Sciences Warsaw; ² Geological Survey of Finland; ³ Institute of Seismology, University of Helsinki; ⁴ Geopartner Geofizyka Sp. z o.o.	09:40	Design of the EM metal objects detection system based on the GPR experience - A. Dobrovolskiy [*] , S. Zelenkov, V. Zolotarev ¹ SPH Engineering; ² Radar Systems, Inc.
10:00	Seismic imaging of the deep-seated orebody and fault systems at South Deep Gold Mine, South Africa - M.K. Rapetsoa ^{1*} , M. Manzi ¹ , A. Malehmir ² , V. Socco ³ , C. Colombero ³ ¹ University of the Witwatersrand; ² Uppsala University; ³ Politecnico di Torino	10:00	Results from two generations of SkyTEM systems at Liikavaara, Sweden - P. Gisselø ^{1*} , A. Voutilainen ² ¹ SkyTEM Surveys ApS; ² Boliden
10:20	The impact of seismic nodes on enhancing subsurface imaging for nickel mining - E. Murray ^{1*} , A. Stone ¹ , C. Giersz ¹ , A. Ourabah ¹ , B. Bengert ² ¹ Stryde; ² Talon Metals Corp.	10:20	Magnetic UAV survey enhances the geological interpretation of the Aijala-Metsämonttu VMS region, southwestern Finland - H. Levaniemi ^{1*} , J. Hokka ¹ , V. Järvinen ¹ ¹ Geological Survey of Finland
10:40	Coffee Break		
Geophysics for critical metals		AEM Modelling and Inversion I	
11:10	Multimethod geophysical modelling for granite-related tungsten exploration: example of the Puy-les-vignes/ Saint-Goussaud district (Limousin, France) - G. Dubreuil ^{1*} , M. Harlaux ¹ , G. Martelet ¹ , G. Vic ¹ , J. Bernard ¹ , P. Reninger ¹ , A. Raingeard ¹ , F. Dubois ¹ , A. Peyrefitte ¹ ¹ Brgm	11:10	Validation of the wavelet-based deterministic inversion ensemble approach with Markov-Chain Monte Carlo - W. Deleersnyder ^{1,2*} , T. Hermans ² , D. Duda ¹ ¹ Department of Physics, KU Leuven Kulak; ² Department of Geology, Ghent University
11:30	Exploration of Fe-Ti-V oxides in an Orthomagmatic system using the Airborne Induced Polarization - F. Dauti ^{1*} , A. Viezzoli ² , A. Jesus ³ , M. Guerra ⁴ , F. Delgado ⁴ , I. Fernandez ² , G. Fiandaca ¹ ¹ The EEM Team for Hydro & eXploration, Univeristy Of Milan; ² EMergo srl; ³ Instituto Dom Luiz, University of Lisbon; ⁴ Xcalibur Smart Mapping; ⁵ Gaia Exploration	11:30	Resistivity imaging test based on resistivity models from airborne electromagnetic surveys - P. Reninger ^{1*} , D. Ciolczyk ^{1,2} ¹ BRGM; ² LMV-UCA
11:50	Integrated geophysical approach for REE exploration: A case study using MASW, P-wave tomography and reflection seismic - B. Brodic ^{1*} , M.S.D. Manzi ¹ , M. Sihoyiya ¹ , M. Mkhomazi ¹ , B.A. Jogee ¹ ¹ University of the Witwatersrand	11:50	Correcting canopy effect for HEM resistivity using DEM: An example of quick-clay mapping from Norway - V.C. Baranwal ^{1*} , B.E. Larsen ¹ , S. Gradmann ¹ , I. Solberg ¹ ¹ Geological Survey of Norway (NGU), Trondheim
12:10	Unveiling Tysfjord's subsurface: GREENPEG project's 4-year journey in pegmatite exploration through GPR and ERT - G. Tassis ^{1*} , M. Brönnner ¹ , B.E. Larsen ¹ ¹ Geological Survey of Norway (NGU)	12:10	Is AEM really useless for prospectivity mapping ? - S. Campo ^{1*} , A.H. Rasmussen ² ¹ EMergo; ² Aarhus Geophysics Aps
12:30	Geophysics for Lithium Exploration - C. Nind ^{1*} , P. Coles ¹ , C. Phaneuf ¹ , M. Chemam ¹ ¹ Abitibi Geophysics	12:30	Three-dimensional vector finite element forward modelling and inversion for airborne electromagnetic data using adaptive Octree mesh - J. Chen ^{1*} , B. Zhang ² , G. Fiandaca ¹ ¹ University Of Milan; ² Jilin University
12:50	Lunch Break		

TECHNICAL PROGRAMME

Oral Presentations | Tuesday, 10 September 2024

30 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
KARL LINDAHL	TARJA HALONEN
Geophysical investigations in Archaeology (Archaeogeophysics)	Groundwater Exploration and Hydrogeophysics II
14:00 Assessment of walls coverings and floor of historical Portuguese buildings with GPR and ERT - R. Mota ^{1*} , D. Costa ¹ , M. Pereira ¹ , N. Senos ² , M.J. Coelho ¹ , A. Pais ³ , J. Mimoso ¹ ¹ National Laboratory for Civil Engineering-LNEC; ² Universidade Nova de Lisboa; ³ Azulejo Museum	14:00 Towards the use of passive seismic for hydrogeological characterization - J. Cunha Teixeira ^{1*} , L. Bodet ¹ , A. Rivière ³ , A. Hallier ² , M. Dangeard ² , A. Gesret ³ , A. Dhemaied ² , J. Boisson Gaboriau ² ¹ Sorbonne University, CNRS, EPHE, UMR 7619 METIS, 4 place Jussieu, 75252 Paris 05; ² SNCF Réseau, 6 avenue François Mitterrand, 93210 Saint-Denis; ³ Geosciences Department, Mines Paris - PSL, PSL University, Paris
14:20 New findings at Hacimusalar Mound through the Ground-Penetrating Radar Measurements - B. Karadoller ^{1*} , C. Imren, B. Arkan ¹ Istanbul Technical University	14:20 Synthetic studies to investigate the ability of steady-state surface NMR to resolve T2 - M. Griffiths ^{1*} , D. Grombacher ¹ , J.J. Larson ¹ ¹ Aarhus University
14:40 Geophysical and remote sensing multi-method analysis on the largest unexplored mound in Neamț County, Romania - A.G. Gereia ^{1*} , D. Tătaru ¹ , V. Diaconu ² , E. Năstase ¹ , B. Grecu ¹ , B. Cerbu ¹ , A.E. Mihai ¹ ¹ National Institute for Earth Physics Romania; ² Museum of History and Ethnography Târgu Neamț, Neamț National Museum Complex	14:40 Clustering on SNMR and TEM parameters over a saline-fresh-water interface to resolve hydrogeological layers - M. Vang ^{1*} , D. Grombacher ¹ , J.J. Larsen ² , A.V. Christiansen ¹ ¹ HydroGeophysics Group, Aarhus University; ² Department of Electrical and Computer Engineering, Aarhus University
15:00 The creation of a mobile geophysical laboratory, lessons from studies on national heritage - A. Mihai ^{1*} , D. Tataru ¹ , A. Gereia ¹ , E. Năstase ¹ , B. Grecu, D. Toma-Danila ¹ , B. Zaharia ¹ , A. Tiganescu, B. Cerbu ¹ National Institute of Earth Physics	15:00 Unveiling environmental dynamics: on the use of time-lapse TEM for remediation assessment - J.C. Zamora-Luria ^{1*} , A. Almpanis ¹ , D. Grombacher ¹ , A.V. Christiansen ¹ ¹ HydroGeophysics Group, Aarhus University
15:20	Coffee Break & Joint Poster Session Tuesday



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Oral Presentations | Tuesday, 10 September 2024

5TH CONFERENCE ON GEOPHYSICS FOR MINERAL EXPLORATION AND MINING

JUHO RISSANEN

Innovative EU-funded Projects

14:00	Time-synchronized surface-underground seismic surveys for improved deep targeting - A. Malehmir ^{1*} ¹ Uppsala University
14:20	Deep underground mines – perfect laboratories to conduct in-mine seismic experiments for deep mineral exploration - M. Manzi ^{1*} , C. Colombero ² , A. Malehmir ³ , M. Sihoyiya ¹ , F.K. Anjom ² , L.V. Socco ² , O. Valishin ⁴ ¹ University of the Witwatersrand; ² Politecnico di Torino, Department of Environment, Land and Infrastructure Engineering (DIATI); ³ Uppsala University, Dept. of Earth Sciences; ⁴ Sercel
14:40	UAV-borne geophysical measurements for mapping mineral resources: Examples from Enåsen Au-Cu-deposit and Blöthberget Fe-oxide-deposit, Central Sweden - M. Bastani ^{1,2*} , S. Luth ¹ , J. Jönberger ¹ , H. Johansson ¹ ¹ Geological Survey of Sweden; ² Department of Earth Sciences, Uppsala University
15:00	Integrating seismic and electromagnetic methods for deep mineral exploration – results from the SEEMS DEEP project - U. Autio ^{1*} , M. Darnet ² , A. Górszczyk ³ , J. Kamm ¹ , S. Heinonen ⁴ , M. Malinowski ¹ , B. Kim ² , B. Singh ³ , S. Vedrine ² , F. Breteau ² , C. Patzer ¹ , T. Karinen ¹ , T. Kalscheuer ⁵ , C. Truffert ⁶ , M. Wojdyła ⁷ , A. Kivinen ⁸ , Y. Koltun ⁹ ¹ Geological Survey Of Finland; ² BRGM; ³ Institute of Geophysics, Polish Academy of Sciences; ⁴ Institute of Seismology, University of Helsinki; ⁵ Uppsala University; ⁶ IRIS Instruments; ⁷ Geopartner Geofizyka; ⁸ GRM-services; ⁹ Laakso Minerals
15:20	Coffee Break & Joint Poster Session Tuesday



TECHNICAL PROGRAMME

Poster Presentations | Tuesday, 10 September 2024

POSTER AREA

Joint Poster Session Tuesday

15:20	A Multi-Faceted Approach for 3D Thermophysical Characterisation of Geological Heterogeneity in a Rock-Mass for Heat Transfer - H. Lharti¹, C. Sirieix^{1*}, S. Fabien¹, J. Riss¹, A. Marache¹, C. Verdet¹, D. Lacanette¹ ¹University of Bordeaux Application of machine learning for fast detection of karst bauxite deposits based on synthetic geophysical models - J. Kapuralic^{1*}, L. Perkovic¹, F. Šumanovac¹ ¹University of Zagreb, Faculty Of Mining, Geology And Petroleum Engineering Automatic time lapse monitoring of fluid injection using self-potential method - F. Muin^{1*}, M.F. Yuliasongko¹, Y. Udin², S. Mufidah², M.N.A. Fuadillah², T.M. Imaka, E. Hartantyo², R. Nirmalasari², B.N. Suwardi¹, T. Suroso¹, N.C. Wibowo¹ ¹Upstream Innovation Pertamina Hulu Energi; ²Geophysics Laboratory, Faculty of Mathematics and Natural Sciences, Universitas Gadjah Mada Case study for accurate density log estimation considering mineral composition of crystalline rock in South Korea - J. Choi^{1*}, Y. Lee¹, J. Shin¹, S.K. Lee¹, D. Cheon¹ ¹Korea Institute of Geoscience and Mineral Resources Data acquisition for DAS performance evaluation at Aquistore CCS site in Canada - T. Kobayashi^{1*}, N. Shimoda¹, H. Tanaka¹, H. Shimizu¹, Z. Movahedzadeh², D. White³, M. Mondanos⁴, A. Stork⁴, A. Poulin⁴ ¹JOGMEC; ²PTRC Sustainable Energy; ³Geological Survey Canada; ⁴Silixa Ltd. Deciphering meteorological influencing factors for historical instabilities time series in the Pyrenees - J. Bruneau^{1*} ¹University of Bordeaux Development of geophysical apps in Matlab since undergraduate studies - F. Pace^{1*}, A. Amendola¹, C. Francardo¹, A. Godio¹ ¹Politecnico di Torino DroneSOM – more precise, efficient, and environmentally friendly mineral exploration - N. Thurman^{1*}, J. Kamm¹, L. Xiao¹, B. Chudasama¹, J. Pesonen², S. Niemi², R. Forsberg³, A. Knobloch⁴, A. Saartenoja⁵ ¹Geological Survey of Finland, P.O. Box 96, 02151 Espoo; ²Geological Survey of Finland, P.O. Box 1237, 70211 Kuopio; ³Technical University of Denmark, Elektrovej, 328, 016, 2800 Kgs. Lyngby; ⁴Beak Consultants GmbH, Am St.-Niclas-Schacht 13, 09599 Freiberg; ⁵Radai Oy, Teknologiantie 18, 90590 Oulu Experiments of Spectral Density, Neutron-Neutron, and Neutron-Gamma Logging in Small-Diameter Cased Boreholes - S. Hwang^{1*}, J. Shin¹, J. Choi, S. Jeong^{1,2} ¹Korea Institute of Geoscience and Mineral Resources; ²Chonnam National University Initial analysis of ERT monitoring data measured on a platinum tailings dam - A. Hojat^{1,2*}, G. Tresoldi³, L. Zanzi¹ ¹Dipartimento di Ingegneria Civile e Ambientale, Politecnico di Milano; ²Department of Mining Engineering, Shahid Bahonar University of Kerman; ³LSI LASTEM Inversion of time-domain induced-polarization decay curve using second-order differentiation - H. Yu^{1*}, M.J. Nam^{1,2}, B. Kim³ ¹Energy and mineral resources engineering, Sejong University; ²Energy Resources & Geosystems Engineering, Sejong University; ³Bureau de Recherches Géologiques et Minières Laboratory study on the relationship between NMR parameters and hydraulic conductivity of peat soil - G. Beisembina¹, T. Hiller¹, S. Costabel^{1*} ¹German Federal Institute for Geosciences and Natural Resources Large Scale Deployment of Self-Potential Monitoring System in The Kawengan Oil Field - S. Mufidah^{1*}, Y. Udin¹, M.N.A. Fuadillah¹, D. Alfiansyah¹, E. Hartantyo¹, F. Muin², N. Wibowo², M.F. Yuliasongko², B. Nurdianto², T. Suroso², T.M. Imaka¹ ¹Geophysics Laboratory, Faculty of Mathematics and Natural Sciences, Universitas Gadjah Mada; ²Pertamina Hulu Energi Upstream Innovation Net Pay Thickness Estimation Using Band-Limited Impedance Approach: Pannonian Basin Case Study - M. Elbalawy^{1*}, M. Balash¹, E. Takács², F. Velledits¹ ¹Miskolc University; ²Geological Directorate, Supervisory Authority for Regulated Services Phosphorus Content Estimation in Iron Ore Mine Using Advanced Neural Networks - S.T. MOUSAVIPOURTAGHIZADEH^{1*}, A. Najafabadipour², M. Bahadori³, M.M. Rajizadeh¹ ¹Islamic Azad University; ²Shahid Bahonar University of Kerman; ³University of Gonabad
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Poster Presentations | Tuesday, 10 September 2024 (continued)

POSTER AREA

Joint Poster Session Tuesday

15:20	Quantitative interpretation of the seismic reflection data from Ni-Cu-PGE ore-bearing Kevitsa intrusion, northern Finland - N. Junno ^{1*} , E. Koivisto ² , I. Kukkonen ² ¹ Institute of Seismology, University of Helsinki; ² Department of Geosciences and Geography, University of Helsinki
	Regional subsurface mapping with geological database construction in the southern region of South Korea - J. Shin ^{1*} , S. Yu ¹ , J. Jung ¹ , J. Choi ¹ , H.S. Moon ¹ , S. Hwang ¹ ¹ Korea Institute of Geoscience and Mineral Resources
	The establishment of the Finnish mobile seismic instrument pool - R. Courbis ^{1*} , G. Hillers ¹ , E. Koivisto ² , P. Haapanala ¹⁰ , I. Kukkonen ² , Y. Ding ² , T. Fordell ³ , S. Heinonen ¹ , N. Junno ¹ , A. Juntunen ¹ , K. Komminaho ¹ , E. Kozlovskaya ⁵ , J. Leveinen ⁶ , J. Mäkinen ⁸ , T. Luhta ⁴ , K. Moisio ⁵ , J. Näränen ⁷ , T. Oksanen ¹ , E. Tanskanen ⁹ , T. Tiira ¹ ¹ Institute of Seismology, Department of Geosciences and Geography, University Of Helsinki; ¹⁰ Research Infrastructure Services, Natural Resources Institute Finland; ² Department of Geosciences and Geography, University Of Helsinki; ³ Technical Research Center of Finland Ltd, National Metrology Institute VTT MIKES; ⁴ Geologian tutkimuskeskus GTK--Geological Survey of Finland; ⁵ Oulu Mining School, Faculty of Technology, University of Oulu; ⁶ Department of Civil Engineering, Aalto University; ⁷ Department of Geodesy and Geodynamics, Finnish Geospatial Research Institute FGI, National Land Survey of Finland; ⁸ Department of Geography and Geology, University of Turku; ⁹ Sodankylä Geophysical Observatory, University of Oulu
	The use of geo-electric geo-membrane leakage detection and localization method in Hungary - L. Vincze ^{2*} ¹ Geoelectro; ² University of Miskolc, Department of Geophysics
	Use of electrical resistivity tomography for characterising the quality of aggregates in a gravel pit - M. Himi ^{1*} , L. Martí ¹ , C. Abancó ¹ , A. Sendrós ^{1,2} , L. Rivero ^{1,2} , R. Lovera ^{1,2} , A. Urruela ¹ , A. Casas ^{1,2} ¹ Earth Science Faculty - Universitat de Barcelona; ² Water Research Institute - Universitat de Barcelona

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TECHNICAL PROGRAMME

Oral Presentations | Wednesday, 11 September 2024

30 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
KARL LINDAHL	TARJA HALONEN
Geophysics in Geohazard Studies II	Modelling, Inversion and Data-Processing in Near Surface Geophysics II
09:00 Seismotectonics and near-surface features for geohazard studies in Southern Ukraine - O. Tiapkin ^{1*} , M. Dovbnich ¹ , L. Anisimova ² , A. Skjeltorp ³ , I. Viktosenko ⁴ ¹ Dnipro University of Technology; ² M.S. Poliakov Institute of Geotechnical Mechanics of NAS of Ukraine; ³ Institute for Energy Technology; ⁴ Charles University	09:00 Conventional approaches for new usage: Pre-Stack simultaneous inversion method of Ultra-High Resolution seismic - A. Comanescu ^{1*} , P. Cox ² , S. Caruso ¹ , W. Hodshon ¹ ¹ Vysus Group; ² RockWave
09:20 Integrated subsoil model for a better earthquake emergency response plan: the case of Durres city, Albania - K. Skrame ^{1,2,3*} , R. Ormeni ^{2,3} , R. Muci ¹ ¹ Polytechnic University of Tirana, Albania; ² Albanian Association of Geoscientists and Engineers; ³ Academy of Sciences of Albania	09:20 Investigating Near Offset Seismic Wave Propagation in Elastic Media - C. Cearley ^{1*} , S. Sloan ¹ , D. Feigenbaum ¹ , L. Zhang ¹ , A. Scates ¹ ¹ U.S. Army Engineer Research And Development Center
09:40 Possible cause of seismic activity in the Tugela Terrane in KwaZulu-Natal, South Africa - V. Mapuranga ^{1*} ¹ Seequent	09:40 Efficient workflow for near-surface characterization from the joint inversion of surface and compressional wave data - R. Tarnus ^{1*} , C. Cai ¹ , T. Allemand ¹ , T. Bardainne ¹ ¹ Sercel
10:00 Assessing 3D slope condition with fibre optic seismic imaging using trains as sources - E. Thevenet ¹ , H. Toubiana ¹ , A. Trafford ² , S. Donohue ² , J. Harms ³ , T. Bardainne ^{1*} ¹ sercel; ² university college dublin; ³ network rail	10:00 EEMstudio: process and model electric and electromagnetic data with a QGIS plugin - N.A.L. Sullivan ^{1*} , A. Viezzoli ² , G. Fiandaca ³ ¹ The EEM Team Spin-off company Srl; ² EMergo Srl; ³ The EEM Team for Hydro & eXploration
10:20 S-wave velocity structure in the source area of liquefied mud-flow detected by MASW method - Y. Li ^{1*} , J. Wang ¹ , H. Yang ¹ , W. Huang ¹ ¹ Chang 'An University	10:20 Surface waves back-scattering analysis of a vertical surface crack - R. Puiggros Valentines ^{1,2*} , I. Barone ¹ , G. Cassiani ¹ , C. Strobbia ² ¹ Università degli Studi di Padova; ² Realtimeseismic
10:40 Coffee Break	
Geophysical Investigations on Soils & Agriculture	Geophysical Monitoring of Buildings/Structures
11:10 Influence of tree removal on the water dynamic of the Lascaux hill by time lapse ERT - M. Larcanché ¹ , C. Sirieix ¹ , C. Verdet ^{1*} , J. Domec ² , F. Salmon ¹ , S. Matéo ¹ , J. Riss ¹ , S. Perrin ³ ¹ University Of Bordeaux; ² Bordeaux Sciences Agro; ³ Forêt Conseils	11:10 Geophysical Survey for Tank's Foundation Integrity Evaluation: SAVM and MASW Case Study - F. Abbas ¹ , H. Butler ^{1*} ¹ Fugro
11:30 Monitoring the Critical Zone with ambient seismic noise recorded on a dense nodal array - K. Davidson ^{1*} , J. Hammond ¹ , V. Lane ² , L. Finch ² , J.M. Kendall ³ , C. Ogden ⁴ , C. Han ¹ , J. Wu ¹ , D. Ryan ¹ , K. Doherty ⁵ , N. Tranter ⁵ , T. O'Toole ⁵ ¹ Birkbeck, University Of London; ² SEIS-UK; ³ University of Oxford; ⁴ University Of Leicester; ⁵ Stryde	11:30 Geophysical insight into a near-failure of a water dam - S. Ostrowski ^{1*} , M. Lasocki ¹ , P. Wilkołazki ¹ ¹ Polish Geological Institute
11:50 Integrating electromagnetic induction measurements and electrical resistivity tomography to monitor rainwater lenses in Dutch polders - M. Carrizo ^{1*} , F. Riakhi ² , E. Slob ¹ , D. Werthmüller ¹ , B. Van Breukelen ² ¹ Delft University of Technology, Faculty of Civil Engineering and Geosciences, Department of Geosciences and Engineering; ² Delft University of Technology, Faculty of Civil Engineering and Geosciences, Department of Water Management	11:50 Eigenmode identification and characterization via GF3DPM analysis - G. Dal Moro ^{1*} ¹ Institute of Rock Structure and Mechanics (Czech Academy of Sciences)
12:10 Ground-penetrating radar to map peatland subsurface and the impacts of forest-to-bog restoration - L. Hughes-Dowdle ^{1*} , B. Kulesa ^{1,2} , T. Murray ¹ , J. Walker ¹ , R. Low ³ , R. Cox ⁴ , J. Pickard ^{1,5} , T. Irvine-Fynn ⁶ ¹ Swansea University; ² University of Tasmania; ³ Rigare Ltd; ⁴ Vattenfall Wind; ⁵ Lost Peatlands Project; ⁶ Aberystwyth University	12:10 Ground-penetrating radar (GPR) test measurements to examine the wall structure of Diósgyőr Castle - E. Nadasi ^{1*} ¹ University of Miskolc
12:30 Prepolarized surface nuclear magnetic resonance for characterising peat soils using T1-T2* correlation maps - S. Costabel ^{1*} , T. Splith ² , T. Hiller ¹ , M. Müller-Petke ² ¹ Federal Institute for Geosciences and Natural Resources; ² Leibniz Institute for Applied Geophysics	
12:50 Lunch Break	

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Oral Presentations | Wednesday, 11 September 2024

5 TH CONFERENCE ON GEOPHYSICS FOR MINERAL EXPLORATION AND MINING	
JUHO RISSANEN	
Seismic Methods in Mineral Exploration II	
09:00	A novel 3D seismic survey over the 2.5-2.4 Ga Koillismaa Layered Intrusion Complex, Finland - M. Malinowski ^{1*} , S. Heinonen ² , A. Górszczyk ³ , B. Singh ³ , L. Sito ⁴ , T. Karinen ¹ , U. Autio ¹ ¹ Geological Survey of Finland (GTK); ² Institute of Seismology University of Helsinki; ³ Institute of Geophysics PAS; ⁴ Geopartner Geofizyka
09:20	Oak Dam sparse 3D seismic application: geological model and ICG exploration implications - M. Norman ^{1*} , R.T.T. To ² , M.L. Chua ² , M. Huang ² ¹ CGG; ² CGG
09:40	Reverse time migration with vector reflectivity acoustic wave equation - L. Zhang ^{1*} , D. Feigenbaum ¹ , S. Sloan ¹ , J. McCleave ¹ ¹ US Army Corps of Engineer Research and Development Centert
10:00	Estimation of anisotropy from real SV and SH seismic data acquired in a circular acquisition geometry - G. Bohm ^{1*} , A. Affatato ¹ , L. Baradello ¹ , G. Brancatelli ¹ , E. Forlin ¹ ¹ OGS - Istituto Nazionale di Oceanografia e di Geofisica Sperimentale
10:20	Challenges in 3D geomodelling for mineral exploration: complex reflectivity patterns in the Kylylahti mining area, Finland - S. Heinonen ^{1*} , P. Sorjonen-Ward ² , H. Leväniemi ² ¹ University Of Helsinki; ² Geological Survey of Finland
10:40	Coffee Break
Electrical / EM Methods in Mineral Exploration I	
11:10	Keynote presentation: Getting geology from geophysics - S. Hallinan*
11:50	GROUND ELECTRICAL AND ELECTROMAGNETIC METHODS FOR DEEP MINERAL EXPLORATION – RESULTS FROM THE SEEMS DEEP PROJECT - M. Darnet ^{1*} , S. Vedrine ¹ , B. Kim ¹ , J. Deparis ¹ , F. Bretaudeau ¹ , J. Gance ² , F. Vermeersch ² , C. Truffert ² , U. Autio ³ , J. Kamm ³ , C. Patzer ³ , T. Kalscheuer ⁴ , S. Heinonen ⁵ ¹ BRGM; ² IRIS Instruments; ³ GTK; ⁴ Uppsala University; ⁵ Institute of seismology, University of Helsinki, Finland
12:10	Magnetotellurics across the Koillismaa Layered Intrusion Complex – passive electromagnetic data from the SEEMS DEEP project - U. Autio ^{1*} , C. Patzer ¹ , J. Kamm ¹ , V. Pajunen ² , M. Darnet ³ , F. Bretaudeau ³ , S. Vedrine ³ , B. Kim ³ , S. Heinonen ⁴ ¹ Geological Survey Of Finland; ² University of Oulu; ³ BRGM; ⁴ Institute of Seismology, University of Helsinki
12:30	Efficient 3D imaging of airborne and ground electromagnetics - C. Scholl ^{1*} , R. Mackie ¹ , W. Soyer ¹ , T. Kimura ¹ , S. Hallinan ¹ ¹ CGG
12:50	Lunch Break

TECHNICAL PROGRAMME

Oral Presentations | Wednesday, 11 September 2024

30 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
KARL LINDAHL	TARJA HALONEN
Adapting Approaches from Oil & Gas industry in Near Surface Geophysics	Geophysics in Engineering Geology and Geotechnical Investigations II
14:00 Full-Waveform inversion of surface waves with Annealed Stein Variational Gradient Descent - S. Berti ^{1*} , M. Ravasi ² , M. Aleardi ¹ , E. Stucchi ¹ ¹ University Of Pisa; ² King Abdullah University of Science and Technology	14:00 Efficient 2D Vs profiling via surface wave multi-component passive data - G. Dal Moro ^{1*} ¹ Institute of Rock Structure and Mechanics (Czech Academy of Sciences); ² ELIOSOFT
14:20 High-resolution, large-scale seismic imaging of halokinetic-induced structures for geological carbon storage: results from East Jutland, Denmark - M. Westgate ^{1*} , A. Malehmir ¹ , E. Konstantinidis ¹ , K. Kucinskaite ¹ , M. Keiding ² , U. Gregersen ² , M. Bjerager ² ¹ Uppsala University; ² Geological Survey of Denmark and Greenland	14:20 An applied study of surface wave method for detecting hidden faults - J. Wang ^{1*} , Y. Li ¹ , H. Yang ¹ , W. Huang ¹ ¹ Chang'an University
14:40 Fracture characterization using pre-stack seismic anisotropy approaches - F. Bouchaala ^{1*} ¹ Khalifa University of Science and Technology	14:40 Imaging of temporal changes in large scale critical objects – Earthfill dam in Rybník - M. Majdanski ^{1*} , E. Roshdy ¹ , A. Marciniak ¹ , S. Oryński ¹ , P. Popielski ² , S. Kowalczyk ³ , R. Mieszkowski ³ , Z. Trześniowski ⁴ , S. Długosz ⁵ , I. Ostrzolek ⁶ ¹ Institute of Geophysics Polish Academy of Sciences; ² Faculty of Building Services, Hydro and Environmental Engineering, Warsaw University of Technology; ³ Faculty of Geology, University of Warsaw; ⁴ WIDMO Spectral Technologies SP. z o.o., Kraków; ⁵ SHM System Sp. z o.o. Sp. kom., Kraków; ⁶ PGE GiEK O. El. Rybnik
15:00 Advanced seismic imaging solutions for nuclear waste repository site evaluation and characterization - C. Cosma ^{1*} , N. Enescu ² ¹ Vibrometric Oy; ² Vibrometric	15:00 GEOPHYSICAL METHODS FOR MINING TAILINGS DEPOSITS CLOSURE. A CASE STUDY AT THE LIRIO MINING DEPOSIT(SE SPAIN) - X.K. Capa Camacho ^{1*} , J.J. Hellín-Rodríguez ² , I. Valverde-Palacios ³ , L. García ⁵ , P. Martínez-Pagán ² , M.A. Martínez-Segura ² , R. Mollehuara-Canales ⁴ ¹ Sustainable Use, Management and Reclamation of Soil and Water Research Group, Universidad Politécnica de Cartagena, Paseo Alfonso XIII 52, 30203, Cartagena; ² Applied Near-Surface Geophysics Research Group. Departamento de Ingeniería Minera y Civil, Universidad Politécnica de Cartagena, Paseo Alfonso XIII 52, 30203, Cartagena; ³ Andalusian Institute of Geophysics and Prevention of Seismic Disasters, University of Granada, C/ Profesor Clavera, 12, 18071, Granada; ⁴ Oulu Mining School, University of Oulu, 90570; ⁵ Department of Mining and Civil Engineering, Universidad Politécnica de Cartagena, Pº Alfonso XIII, 52, 30203, Cartagena
15:20 Coffee Break	
Geophysics in 3D Geological/Geotechnical Modelling	Geophysics in Engineering Geology and Geotechnical Investigations III
15:50 Characterising the condition of a Napoleonic era embankment using multi-disciplinary, non-intrusive ground investigation - S. Oakley ^{1*} , J. Whiteley ¹ , R. Whitehead ² , E. Cox ¹ , R. Newton ³ ¹ AtkinsRéalis; ² Zetica; ³ Environment Agency	15:50 Innovative 3D karst structure detection in the Rauenthal Tunnel using borehole radar - J. Dreiling ^{1*} , M. Opelt ¹ , M. Schmidt ¹ , D. Schulte ² , P. Johnen ² ¹ Bo-Ra-tec GmbH; ² Deutsche Bahn InfraGO AG
16:10 Data-driven, reliable translation of shear-wave velocity to CPT cone-tip resistance using machine learning - E. Revelo Obando ^{1*} , R. Ghose ¹ , M. Hicks ¹ ¹ Dept. of Geoscience and Engineering, Delft University Of Technology	16:10 GPR detection of underground galleries to prevent subsidence of workshop floor - M.J. Coelho ^{1*} , M. Pereira ¹ ¹ Laboratorio Nacional de Engenharia Civil - LNEC
16:30 Tunnel seismic reflection survey planning using 3D numerical simulations at South Deep Gold Mine, South Africa - S. Plaatjie ^{1*} , M. Manzi ¹ , L. Linzer ^{1,2} , M. Sihoyiya ¹ ¹ University Of The Witwatersrand; ² SRK Consulting	16:30 Long-term characterization of innovative backfilling grout for mechanized tunnelling via ultrasonic pulse velocity - F. Pace ^{1*} , C. Todaro ¹ , A. Di Giovanni ¹ , E. Barbero ² , D. Peila ¹ , A. Godio ¹ ¹ Politecnico di Torino; ² Mapei
16:50 Quantum-annealing based seismic refraction residuals estimation on field data - D. Rovetta ^{1*} , M. Dukalski ¹ ¹ Aramco Research Center Delft, Aramco Europe	16:50 Towards the automation of MASW data acquisition and processing for the diagnosis of railway earthworks - A. Burzawa ^{1,2*} , L. Bodet ¹ , M. Dangeard ² , J. Cardenas ¹ , N. Radic ² , R. Vidal ² , R. Whitehead ³ , B. Barrett ³ , D. Byrne ³ , C. Chaptal ³ , J. Cunha Teixeira ^{1,2} , R. Sanchez Gonzalez ⁴ , A. Eriksen ³ , A. Dhemaied ² ¹ Sorbonne Université, CNRS, EPHE, UMR 7619 METIS; ² SNCF Réseau; ³ Zetica Ltd, Zetica House; ⁴ Geosciences Department, Mines Paris – PSL

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Oral Presentations | Wednesday, 11 September 2024

5 TH CONFERENCE ON GEOPHYSICS FOR MINERAL EXPLORATION AND MINING	
JUHO RISSANEN	
Electrical / EM Methods in Mineral Exploration II	
14:00	An integrated geophysical study to understand the structural architecture of Kheis Terrane for future mineral exploration - M. Motsoai ^{1*} , M. Manzi ¹ , S. Enslin-Scheiber ¹ , D. Khoza ² ¹ University Of The Witwatersrand; ² Integrated Geoscience Solutions
14:20	Large-scale mineral exploration using semi-Airborne EM in Harz Mountains, Germany - S. Nazari ^{1*} , C. Walther ^{2,5} , A. Thiede ³ , M. Schiffler ⁴ , R. Rochlitz ¹ , M. Becken ³ , T. Günther ¹ ¹ LIAG Institute for Applied Geophysics; ² Federal Institute for Geosciences and Natural Resources (BGR); ³ Institute for Geophysics, University of Münster; ⁴ Leibniz Institute of Photonic Technology; ⁵ Public Authority for Mining, Energy and Geology (LBEG)
14:40	Evaluation of Specific Capacitance for Faradaic and Non-Faradaic Electron-Conducting Minerals - N. Oncul ^{1*} , J. Kingman ² , L. Slater ^{1,3} ¹ Department of Earth and Environmental Science, Rutgers University Newark; ² Terrigena Ltd; ³ Pacific Northwest National Laboratory, Energy and Environment Directorate, Richland
15:00	Joint Inversion of DC Resistivity and MT Data using Multi-Objective Grey Wolf Optimization - R. Sharma ^{1*} , D. Vashisth ² , K. Sarkar ¹ , U.K. Singh ¹ ¹ Department of Applied Geophysics, Indian Institute of Technology Dhanbad; ² Department of Energy Science and Engineering, Stanford University
15:20	Coffee Break
Passive seismic & surface waves	
15:50	Near-surface characterization of an active mine through surface wave analyses - S. Gomo ^{1*} , F. Anjom ² , C. Colombero ² , M. Karimpour ² , M. Manzi ¹ , V. Socco ² ¹ University of the Witwatersrand; ² Politecnico di Torino
16:10	Seismic tomography with diamond drilling and permanent arrays - A. Kepic ^{1*} , D. Kieu ¹ , B. Crettenden ² , R. Zawadzki ² ¹ RoqSense; ² Veracio
16:30	Passive seismic imaging of Akanvaara V-Cr-PGE deposit in Northern Finland using coda wave interferometry - N. Afonin ¹ , E. Kozlovskaya ^{1*} , K. Moision ¹ , J. Puputti ¹ ¹ University of Oulu, Finland
16:50	Seismic surface-wave attributes to detect geological discontinuities in deep mines. - F. Khosro Anjom ^{1*} , C. Colombero ¹ , S. Gomo ¹ , V. Socco ¹ , M. Manzi ² ¹ Politecnico di Torino; ² University of the Witwatersrand



Workshops

Workshop 1: Digital Outcrop Modelling: From Subsurface Applications to Virtual Field Trips

Sunday, 8 September | 09:00-17:00

This workshop covers the creation and application of Digital Outcrop Models (DOMs) for geological interpretations. The morning session will focus on data acquisition, processing techniques, and case studies. The afternoon session will feature hands-on digital outcrop modeling.

Workshop 2: Transient Electromagnetic Method (TEM)

Sunday, 8 September | 09:00-17:00

This workshop introduces the Transient Electromagnetic Method (TEM) for mapping shallow geology. It covers theory, measurement configurations, field demonstrations, and practical applications of TEM.

Workshop 3: Physical Properties of Rocks in Hard Rock Environments

Sunday, 8 September | 09:00-17:00

This workshop explores the physical properties of rocks in hard rock environments, focusing on their application in mineral exploration, mining, and geophysical modeling. Topics include laboratory testing, in situ measurements, and the use of physical property data for model development and calibration.

Field Trips

Field Trip 1: Suomenlinna Fortress Island - Geology and History

Wednesday 11 September | 17:45-20:30

Explore the UNESCO World Heritage site of Suomenlinna Fortress Island, just outside Helsinki. This trip offers a unique blend of history and geology, focusing on the 1.9 Ga crystalline rocks deformed during the Svecofennian orogeny. Observe glacially polished outcrops and learn about the ancient mountain-building processes that shaped the island.

Field Trip 2: Salpausselkä Geopark - Ice Age Formations

Thursday, 12 September | 08:30-19:00

Visit the UNESCO-designated Salpausselkä Geopark, home to unique ice-marginal formations from the end of the Ice Age. Experience breathtaking landscapes, including Devil's Nest and Häränsilmä kettle pond, and enjoy panoramic views from the Ski Jumping Tower. The trip includes transportation, lunch, and snacks.

Field Trip 3: Tytyri Mine Experience - Geology and Mining Industry

Thursday, 12 September | 08:30-14:30

Descend 110 meters below the surface at Tytyri Mine to explore the geology and mining industry of Finland. Learn about the Fennoscandian industry and visit the KONE elevator testing facility. The trip includes transportation and lunch.



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Exhibition

Come and meet with exhibitors, learn about new technology and products, expand your network, and see the future of the near surface field! The Exhibition takes place in the Congress Hall & Foyer (floor 2,5).

Opening Hours

Monday 4 September	10:00-18:45
Tuesday 5 September	09:00-16:00
Wednesday 6 September	09:00-16:00

Exhibitors (Last update: 26 August 2024)

Advanced Geosciences Europe S.L.	2
Ambrogeo Instruments	CD 1
Applied Acoustic Engineering	47
Bell Geospace	51
Chongqing Gold Mechanical & Electrical	CD 5
DMT / ALT	17
EEGS	CD 3
EIWT	5
Emerald Geomodelling	8
Gaia Exploración S.L	7
GEODEVICE	CD 4
Geometrics Inc.	50
Geonics	3
Geopartner Geofizyka	CD 6
Geovista Ltd.	53
GRM-services Oy	21
GTK	19
Guideline Geo	32
I-GIS	4
Impulse Radar	54
IRIS Instrument	49
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Loupe Geophysics Pty Ltd	CD 8
Medusa	CD 2
Radai - Agemera Project	34
Seequent	22
Seismic Source Company	CD 7

Skytem	52
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SPH Engineering & Radar Systems	36
Stryde	6
TEMcompany	37
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- All our reviewers, session chairs, workshop convenors, field trip leaders and volunteers for their unwavering dedication and commitment to NSG2024.

Contact

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EAGE Events

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Conference Programme

The Programme has been reduced in size to focus on the most essential information, therefore reducing paper usage. The Event App serves as a useful compliment/replacement and provides the most accurate version of the programme schedule in addition to networking and discussion functions.



Transport

We fully encourage the use of shared transport for our staff and delegates. Where possible, the conference accommodation options are offered within walking distance from the venue and nearby public transport stations.



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Our lanyards are made in Europe using recycled rPET material. The metal hooks and fabric will be sent to a local supplier for recycling after the event. We also provide recyclable name badges without a plastic pouch.

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