

EAGE

CONFERENCE & EXHIBITION

NEAR SURFACE GEOSCIENCE'23

3-7 SEPTEMBER 2023 - EDINBURGH, UK

29th

European Meeting of
Environmental and
Engineering Geophysics

3rd

Conference on Geophysics
for Infrastructure Planning,
Monitoring and BIM

2nd

Conference on Hydrogeophysics
Contribution to Exploration and Management
of Groundwater, Land-Use and Natural Hazards
under a Changing Climate

1st

Conference on
Sub-surface Characterisation
for Offshore Wind

TECHNICAL PROGRAMME

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TECHNICAL PROGRAMME

Oral Presentations | Monday 4 September 2023

Last updated 30 August

29 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
TINTO	MOORFOOT
09:00	Opening Session
10:00	Coffee break
Best of SAGEEP	
10:30	Noise signature of microseismic monitoring systems of tailing dams - R. Harris ¹ ¹ Geonics Limited
10:50	Geotechnical and geophysics – bridging the gap - C. Nind ¹ ¹ Abitibi Geophysics
11:10	A towed marine time-domain electromagnetic method for evaluating the continuity of an aquitard - R. Harris ¹ ¹ Geonics Limited
11:30	Active bucking using a system on a chip field programmable gate array for geophysical investigations - M. Maxson ¹ ¹ USACE ERDC Cold Regions Research and Engineering Laboratory
11:50	Lunch break
Geophysical Applications in Mining/Mineral Exploration I	
13:00	GPR and ERT application for the detection and characterization of NYF-type pegmatite deposits in Tysfjord, Norway - G. Tassis ¹ ¹ Geological Survey of Norway (NGU)
13:20	PP- and SP-reflection imaging of the volcanogenic massive sulphide deposits from the Neves-Corvo mining site, Portugal - Y. Ding ¹ ¹ University of Helsinki
13:40	Broadband seismic acquisition and processing in hardrock environment: a case study from Blötberget, Sweden - L. Gyger ¹ ¹ Uppsala University
14:00	DasVision 3D IP distributed array system: Two case studies - C. Nind ¹ ¹ Abitibi Geophysics
Geophysics in Geohazard Studies I	
13:00	3D inversion of Radio-Magnetotelluric (RMT) and Controlled-Source RMT (CSRMT) data of a waste-site in Cologne, Germany - B. Tezkan ¹ ¹ University of Cologne
13:20	Integrated geophysical imaging reveals driving slip factors of anthropogenic origin, Cisiec, Southern Poland - M. Majdanski ¹ ¹ Institute of Geophysics, Polish Academy of Sciences
13:40	Making the most of seismic data for quick-clay landslide studies - A. Malehmir ¹ ¹ Uppsala University
14:00	Towards seismic-powered rockfall alarm systems for railway monitoring - T. Rebert ^{1,2} ¹ Mines Paris - PSL; ² Sercel
14:20	Coffee break

See the full schedule in the app!

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3 RD CONFERENCE ON GEOPHYSICS FOR INFRASTRUCTURE PLANNING, MONITORING AND BIM		2 ND CONFERENCE ON HYDROGEOPHYSICS		1 ST CONFERENCE ONSUB-SURFACE CHARACTERISATION FOR OFFSHORE WIND	
CARRICK		HARRIS		KILSYTH	
09:00	Opening Session				
10:00	Coffee break				
				Seismic Data Processing for Offshore Wind	
10:30	Keynote presentation - A. McKay ¹ ¹ PGS				
10:50	Maximizing resolution: Broadband processing for UHR seismic diffraction imaging in offshore windfarm site investigation - A. Ramadan ¹ ¹ Fraunhofer IWES				
11:10	Unlocking the potential of oil and gas seismic data by repurposing for offshore windfarm ground models - P. Cox ¹ ¹ RockWave				
11:30	Receiver Deghosting of High-Resolution Shallow-Tow Seismic Data - A. Juniper ¹ ¹ Petrosys Nz Ltd.				
11:50	Lunch break				
Geophysics & NDT for Linear Infrastructure		Special Session		Geoscience Integration for Offshore Wind I	
13:00	GPR as quality control for novel green highway construction in Norwegian peat - A.K. Lysdahl ¹ ¹ Norwegian Geotechnical Institute	13:00	DynaDeep: A coastal observatory to monitor the high-energy beach of Spiekeroog - N. Skibbe ¹ ¹ Leibniz Institute for Applied Geophysics	13:00	Keynote presentation - D. Dove ¹ ¹ British Geological Survey
13:20	Validation of the TSP results with the TBM parameters in Zagros long tunnel - S. Izadian ¹ ¹ Heriot-Watt University	13:20	Mine water geothermal research facilities at the UK Geoenery Observatory in Glasgow, UK - A. Gonzalez Quiros ¹ ¹ British Geological Survey (UKRI)	13:20	UHR 3D seismic study of ice-related deformation structures offshore NL - A. Sheridan-Parker ¹ ¹ University of Manchester
13:40	Multi-technique geophysical survey along the proposed route of the Chesterfield-Steveley regeneration route - J. Eason ¹ ¹ Aecom	13:40	MoreSpin: Development of a NMR based soil moisture sensor - M. Müller-Petke ¹ ¹ Leibniz Institute for Applied Geophysics (LIAG)	13:40	Interpretation and ground modelling uncertainty in glaciogenic, ice-marginal deposits. Case study from the Southern Baltic - B. Kurjanski ¹ ¹ University Of Aberdeen
14:00	Resistivity, seismic and LiDAR surveys to characterise clay cutting failures on the UK rail network - E. Cox ¹ ¹ Atkins Ltd., Ground Engineering and Tunnelling			14:00	Shallow gas and associated seabed features: a primary geohazard for offshore wind installations - G. Michel ¹ ¹ Gavin And Doherty Geosolutions
14:20	Coffee break				

TECHNICAL PROGRAMME

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29 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
TINTO	MOORFOOT
Geophysics in Engineering Geology and Geotechnical Investigations I	Modelling, Inversion and Data-Processing in Near Surface Geophysics I
14:50	Mapping the Geology Beneath the Future Havant Thicket Reservoir: An Integrated Geophysical and Intrusive Ground Investigation - T. Semmens ¹ ¹ RSK
15:10	Potential of seismic attenuation for geotechnical investigation of carbonate subsurface - F. Bouchaala ¹ ¹ Khalifa University of Science and Technology
15:30	An unbiased spiral array for MASW: a step towards 3D survey - K. Suto ¹ ¹ Terra Australis Geophysica Pty Ltd
15:50	Road failure investigation using augmented 2-D resistivity survey - W.O. Raji ^{1,2} ¹ Carleton University; ² University of Ilorin
15:10	Estimating S-wave statics via a PS-receiver-stack image - Y. Sun ¹ ¹ Aramco Research Center - Delft, Aramco Europe
15:30	Recovering the induced polarization effect from 1-D coupled inversion of TEM data - F. Sharifi ¹ ¹ University of Cologne
15:50	GLOBAL SEARCH INVERSION FOR ELECTROMAGNETIC INDUCTION DATA USING LAYERED MODELS - M. Carrizo ¹ ¹ Delft University of Technology
17:30	Icebreaker Reception
19:30	End of the Day 1

Poster Presentations | Monday 4 September 2023

POSTER AREA	
Joint Poster Session Monday	
16:10	New insights in the use of electrical resistivity tomography for the detection of archaeological remains. - Sendrós ¹ ¹ University of Barcelona
	Assessment of near-surface geophysical measurements for geotechnical purposes at the area of Goudi (Athens, Greece) - V. Gkosios ¹ ¹ National and Kapodistrian University of Athens
	Understanding the origins of the Colonial Fort of San Lorenzo, Panama through geophysical surveys - A. Mojica ¹ ¹ Universidad Tecnológica de Panamá / SNI-SENACYT
	Imaging of subsurface structures by AEM surveys in Korea - M. Yi ¹ ¹ Korea Institute of Geoscience and Mineral Resources
	A possible new find of an Iberian ceramic kiln - A. Casas ¹ ¹ University of Barcelona
	Scanning for near-surface velocity anomalies using surface-wave dispersion characteristics - S. Hassing ¹ ¹ TU Delft
	Development of a 2D modified liquefaction potential index map using geophysical data in Pohang, Korea - A. Lee ¹ ¹ Kangwon National University
	Ground Penetrating Radar Investigation in the Central Yangsan Fault, Republic of Korea - T. Kobayashi ¹ ¹ Active Tectonics Research Center, Geologic Hazards Division, Korea Institute of Geoscience and Mineral Resources
	Integrated magnetic and ERT surveys to detect Spanish Civil War bombs hidden for 80 years - A. Casas ¹ ¹ University of Barcelona

See the full schedule in the app!

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Oral Presentations | Monday 4 September 2023

Last updated 30 August

3 RD CONFERENCE ON GEOPHYSICS FOR INFRASTRUCTURE PLANNING, MONITORING AND BIM		2 ND CONFERENCE ON HYDROGEOPHYSICS		1 ST CONFERENCE ONSUB-SURFACE CHARACTERISATION FOR OFFSHORE WIND	
CARRICK		HARRIS		KILSYTH	
Visualisation of Geophysics/ NDT Data in BIM and GIS		Changing Climate & Anthropogenic Hazard		Complementary and Novel Geophysical Methods for Sub-surface Characterisation	
14:50	Digital geotechnical data management platform enabling an uncertainty governed geotechnical design process - M. Svensson ¹ ¹ Tyrens	14:50	From near surface geophysics to groundwater reservoir characterisation and establishment of new water work - P. Gisselø ¹ ¹ SKyTEM Surveys ApS	14:50	Novel hardware development for UHR streamer hydrophone position correction using fiber optic shape sensing - C. Chapeland ¹ ¹ TU Delft
15:10	A New Online Representation Tool for Collaboration and Dissemination of combined Surface and Subsurface Activities: Share-Twin - D. Bonté ¹ ¹ IFP Energies Nouvelles	15:10	Characterization of a coastal aquifer prone to saline intrusion through integration of electrical and seismic data - G. De Donno ¹ ¹ University of Rome Sapienza	15:10	Practical considerations for optimising 3D ultra-high resolution seismic for efficient and effective ground model building - N. Woodburn ¹ ¹ Rockwave
15:30	GPR in a cloud-connected data ecosystem for easier integration into BIM - M. Kaufmann ¹ ¹ Screening Eagle	15:30	A Phased Approach to Mapping a Contaminant Plume - A. Verweerd ¹ ¹ AECOM Ltd	15:30	Distributed Acoustic Sensing for the geotechnical assessment of offshore renewable developments - A. Trafford ¹ ¹ University College Dublin
		15:50	Electrical resistivity tomography to measure and monitor hydrodynamic heterogeneities in a Malawian agricultural alfisol - R. Swift ¹ ¹ British Geological Survey	15:50	Deep-sea Microtremor Array Method for Floating Offshore Wind Farm - Y. Matsubara ¹ ¹ OYO Corporation
17:30	Icebreaker Reception				
19:30	End of the Day 1				

Poster Presentations | Monday 4 September 2023 (continued)

POSTER AREA	
Joint Poster Session Monday	
16:10	A geophysical study of central Kyparissiakos Gulf coastal dune field (Ionian Sea, Greece) - G.S. Mitsika ¹ ¹ National and Kapodistrian University of Athens
	Environmentally friendly low impact, low carbon footprint, low power electromagnetic technique for shallow geothermal exploration - G. Stove ¹ ¹ Adrok Ltd
	Electrical Resistivity Tomography for Archaeological Characterization of a Late Antique Island Occupation, Isla del Fraile, Spain - P. Martínez-Pagán ¹ ¹ Universidad Politécnica de Cartagena
	Direct 1D Resistivity Estimation from Data Rescaling Using Cumulative Resistance Models - O.I. Calderon Hernandez ¹ ¹ Politecnico Di Torino
	A preliminary geophysical investigation regarding the possible extension of Alistrati cave in Serres Greece - I.K. Giannopoulos ¹ ¹ National and Kapodistrian University of Athens
	Geophysical investigation of submerged archaeological site on the eastern Brazilian Amazon: Preliminary results - R. Correa Rangel ¹ ¹ Universidade de São Paulo
	Removing of vehicle noise events observed in magnetic fields by fitting of magnetotelluric time series data - R. Kyeongho ¹ ¹ Kangwon National University
	GPR investigation at submerged archaeological site in Maranhão State, Brazil: Preliminary results - J.L. Porsani ¹ ¹ Universidade de Sao Paulo

TECHNICAL PROGRAMME

Oral Presentations | Tuesday 5 September 2023

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29 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
TINTO	MOORFOOT
New Technologies, Developments and Research Trends, Machine Learning I	Modelling, Inversion and Data-Processing in Near Surface Geophysics II
09:00 Latest developments of OhmPi: a new software architecture for modular, flexible and evolutive ERT acquisition systems - O. Kaufmann ¹ ¹ University of Mon	09:00 A Bayesian approach to elastic Full-Waveform inversion: application to a semi-real near surface model - S. Berti ^{1,2} ¹ University Of Florence; ² University of Pisa
09:20 Spectral ground penetrating radar - an innovative tool for multi-spectral subsurface probing and modelling - M. Dyrda ¹ ¹ Widmo Spectral Technologies	09:20 Comparison of tTEM-IP and ERT-IP: cases from mine tailing sites in Sweden - A.K. Kühn ¹ ¹ Aarhus University
09:40 Full-waveform inversion of ground-penetrating-radar data using an optimal-transport distance - J. Hunziker ¹ ¹ Université de Lausanne	09:40 Validation of a mixed-dimensional code for the analysis of highly resistive liners in landfills - L. Panzeri ¹ ¹ Politecnico di Milano
10:00 Assessing Thermal Maturity Levels in Unconventional Hydrocarbon Reservoirs through Interval Inversion and Simulated Annealing - R. Valadez Vergara ¹ ¹ University of Miskolc	10:00 Variational mode decomposition-based processing of time-domain induced polarization data - K. Naveed ¹ ¹ Aarhus University
10:40 Coffee break	
New Technologies, Developments and Research Trends, Machine Learning II	Geophysics for Shallow Geothermal Energy and CO2 Storage
11:10 Monitoring of water table level and volume of water in a porous storage by seismic data - T. Lähivaara ¹ ¹ University of Eastern Finland	11:10 Monitoring velocity changes of P-, SH- and SV-waves during a CO2 injection at the Svelvik test-site - U. Ködel ¹ ¹ Helmholtz-Centre for Environmental Research - UFZ
11:30 Using vehicle-induced noise as local seismic source through ML and interferometry - M. Karimpour ¹ ¹ Politecnico Di Torino	11:30 Geophysical survey to investigate the deep structure and the geothermal potential of Methana Volcano, Greece - G. Apostolopoulos ¹ ¹ National Technical University of Athens
11:50 Data driven auto-picking of surface wave dispersion curve - M. Karimpour ¹ ¹ Politecnico Di Torino	11:50 Distributed Acoustic Sensing and Machine Learning: Rockfall Detection at Mt. Meager, B.C. - J. Mish ¹ ¹ University of Calgary
12:10 Radiometrics with a RPAS: calibration method, surveying, and comparison to historical data - N. Martin-Burtart ¹ ¹ Radiation Solutions Inc	12:10 Fault zone identification using seismic noise autocorrelations at a prospective geothermal site in Singapore - K. Lythgoe ¹ ¹ School of Geosciences, University of Edinburgh
12:30 A novel normalization method of transient electromagnetic data for efficient neural network training - S. He ^{1,2} ¹ Aarhus University; ² China University of Geosciences (Wuhan)	12:30 Decoding the Coda: Crosshole Surveys using Distributed Acoustic Sensing at UKGEOS Glasgow Observatory, UK - A. Butcher ¹ ¹ University of Bristol
12:50 Lunch break	

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CARRICK		HARRIS		KILSYTH	
Detection and Localisation of Buried Objects, Voids and Utilities		Characterisation and Monitoring (water content and flux) of the Critical Zone Interfaces I		Challenges and Opportunities in Offshore Wind	
09:00	Detection of anthropogenic change in a lossy medium by orthogonal dual polarization GPR measurement (40 MHz) - T. Kobayashi ¹ ¹ Korea Institute Of Geoscience And Mineral Resources	09:00	Modelling approaches in frequency domain electromagnetics and applied in shallow groundwater investigations - P.J. Saksa ¹ ¹ Geosto Oy	09:00	3D Ground Model for Hesselø, DK: site characterization and risk communication - S. Hinsken ¹ ¹ Equinor
09:20	GPR method for void detection and characterization beneath factory concrete floor: a commercial case study - T. Bicudo ¹ ¹ Oriti Solutions Engineering Services	09:20	Small coil surface nuclear magnetic resonance in dynamic river systems in New Zealand - M. Vang ¹ ¹ Hydrogeophysics group, Aarhus University	09:20	Geospatial interpolation and geological complexity in data-driven ground models - G. Sauvin ¹ ¹ Norwegian Geotechnical Institute
09:40	Evaluation of ground-penetrating radar (GPR) survey for void detection - E. Nadasi ¹ ¹ University of Miskolc	09:40	Use of geoelectrical data for coastal aquifer characterization and management (Torredembarra, Spain) - A. Sendrós ¹ ¹ Universitat de Barcelona	09:40	Predicting Piezocone penetration test response from reflection seismic using machine learning - S. Beyer ¹ ¹ Norwegian Geotechnical Institute
10:00	Mechanical reconstruction of a material heterogeneity using FWI at laboratory scale - Q. Didier ¹ ¹ Avignon Université	10:00	Hydrogeophysical Investigation for the Monitoring of the Unsaturated Zone Hydrology during an Infiltration Experiment - A. Papadopoulos ¹ ¹ National Technical University of Athens	10:00	Mapping Geotechnical Variability in the Shallow Subsurface: An Irish Sea Case Study - M. Long ¹ ¹ University College Dublin
10:20	Imaging and Locating Buried Tunnels Using a High-Resolution S-wave Seismic Survey: Feasibility Field Test From Netherlands - D. Draganov ¹ ¹ TU Delft			10:20	Spatial statistical analysis and geostatistical mapping of offshore magnetometric acquisition data - P. Masoudi ¹ ¹ Geovariance
10:40	Coffee break				
Applications of New and Emerging Geophysical Technologies to Infrastructure		Advances in Methods from Monitoring, Modelling to Processes		Geoscience Integration for Offshore Wind II	
11:10	3D models integrating GPR and Apple LiDAR to improve results visualization in engineering and geotechnical applications - T. Bicudo ¹ ¹ Oriti Solutions Engineering Services	11:10	Integrated use of spatial and time-lapse TEM data for accurate mapping of salt-water intrusion - J.C. Zamora-Luria ¹ ¹ Aarhus University	11:10	Engineering geological interpretation of glacial terrains in the Berwick Bank Offshore Wind Farm - G. Ellery ¹ ¹ Global Maritime
11:30	The use of L-band SAR Derived Soil Moisture Data in Protecting Critical Infrastructure - J. Lynch ¹ ¹ ASTERRA	11:30	Automated processing of a large-scale airborne electromagnetic survey by deep learning - T. Bording ¹ ¹ Aarhus GeolInstruments	11:30	Multi-disciplinary Characterization of Sedimentary Environments on Glaciated Margins: Implications for Engineering of Offshore Windfarm Sites - B. Bellwald ¹ ¹ Norwegian Geotechnical Institute
11:50	Automated interpretation of subsurface resistivity models using machine learning - B. Bloss ¹ ¹ Emerald Geomodelling	11:50	Unsupervised machine learning assisted hydrogeophysical borehole logging inversion for robust aquifer characterization - M. Abdelrahman ¹ ¹ University Of Miskolc	11:50	Investigation of complex shallow geology in the German North Sea with wind farm UHR MCS data - J. Haberkern ¹ ¹ Fraunhofer Institute for Wind Energy Systems IWES
12:10	Railway near-surface passive seismic using trains as sources and fiber optic monitoring - T. Bardainne ¹ ¹ Sercel	12:10	Improvements in gravity precision provide enhanced opportunities in hydrological monitoring - O. Eiken ¹ ¹ Quad Geometrics Norway AS	12:10	Integrated geological investigations for offshore wind infrastructure - J. Brendryen ¹ ¹ University Of Bergen
		12:30	Prestack Least-Squares Reverse Time Migration for Ground Penetrating Radar - L. Xu ¹ ¹ University Of Lausanne	12:30	Integrating geological and geotechnical considerations in buried glacial landscapes - H. Petrie ¹ ¹ University of Bergen
12:50	Lunch break				

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29 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
TINTO	MOORFOOT
Nearshore/ Offshore Geophysical Techniques	Geophysics Monitoring the Effects of Climate Change
14:00 3D Ultra High Resolution Seismics in a confined lake environment, Mjøsa, Norway - A.L. Mikalski ¹ ¹ Cowi A/S	14:00 Machine learning and seismic hodogram analysis for ice-event locating: Mt. Meager, Canada - R. Ferguson ¹ ¹ University of Calgary
14:20 High-resolution core-log-seismic integration and igneous seismic geomorphology of IODP Expedition 396 sites on the mid-Norwegian margin - S. Planke ^{1,2} ¹ VBER; ² University of Oslo	14:20 Seismic imaging of the Gassum formation in Denmark for CO2 storage potential using a dual-recording method - M. Westgate ¹ ¹ Uppsala University
14:40 Diachronic monitoring of Psatha active Fault at a costal zone, by combining near surface geophysical methods - C. Katsora ¹ ¹ National and Kapodistrian University of Athen	14:40 Borehole Nuclear Magnetic Resonance Studies at Four Danish Peatlands - S.R. Mashhadi ¹ ¹ Aarhus University
15:00 Using multilevel composition to map rare seafloor gas-seepage habitats of the Palmahim disturbance, southeastern Mediterranean Sea - R. Findlay ² ² AspenTech	
15:20 Coffee break	
Geophysical Applications in Mining/Mineral Exploration II	Geophysical Surveys of Cryosphere and Arctic
16:10 Las Cruces Mine. A living laboratory for applied geophysics. - I. Fernández ¹ ¹ Gaia Exploración S.L.	16:10 The shape of permafrost in the Fuglebekken catchment, Spitsbergen as a result of time-lapse geophysical imaging - M. Majdanski ¹ ¹ Institute of Geophysics, Polish Academy of Sciences
16:30 Application of Ground Penetrating Radar (GPR) for Marble Quality Assessment in a Quarry - A. Koufopoulou ¹ ¹ Aristotle University of Thessaloniki	16:30 4D continuous geoelectrical monitoring of freeze-thaw processes in deglaciated Arctic soils - M. Cimpoiasu ¹ ¹ British Geological Survey
16:50 2D reprocessing of a sparse 3D seismic dataset in central Sweden for improved targeting purposes - J. Putnaite ¹ ¹ Uppsala University	16:50 Passive seismic experiments in front of a Svalbard outlet glacier: opportunities and challenges for glacier monitoring - H.M. Stemland ^{1,2} ¹ University of Bergen; ² ARCEX, UiT The Arctic University of Norway
17:10 Ground geophysical measurements made on mine-tailings in Sweden. Case studies and lessons learnt - M. Bastani ^{1,2} ¹ Geological Survey of Sweden; ² Uppsala University	17:10 Water accumulation dynamics of Tête Rousse glacier revealed by 3D-SNMR measurements - J.-M. Baltassat ¹ ¹ BRGM
17:30 End of the Technical Programme Day 2	
19:30 Conference Evening Dinner	
23:30 End of the Day 2	



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3 RD CONFERENCE ON GEOPHYSICS FOR INFRASTRUCTURE PLANNING, MONITORING AND BIM		1 ST CONFERENCE ONSUB-SURFACE CHARACTERISATION FOR OFFSHORE WIND	
CARRICK		KILSYTH	
Geophysics for Manmade Structure		Special Session: Challenges of Nearshore Landfall Investigation I	
14:00	Towards quantitative, spatially resolved estimates of dam seepage by time-lapse electrical resistivity imaging (ERI) - K. Butler ¹ ¹ University Of New Brunswick	14:00	Nearshore acquisition - a developer's perspective - A. Kirkland ¹ ¹ Corio Generation
14:20	Seismic imaging of a historic quay wall using a high-resolution S-wave reflection survey - D. Draganov ¹ ¹ TU Delft		Contractor, logistical, operation and environmental challenges on nearshore acquisition - E. Tanasie ¹ ¹ Fugro
14:40	Integrity and quality evaluation of a reinforced concrete diaphragm wall using field and laboratory tests - A. Tijera ^{1,2} ¹ CEDEX; ² Universidad Politécnica de Madrid		Site characterisation requirements for cable landing feasibility and preliminary engineering purposes - L. Burley ¹ ¹ Cathie Associates
		15:00	Q&A
15:20	Coffee break		
		Special Session: Challenges of Nearshore Landfall Investigation II	
		16:10	Leading nearshore technologies - K. Sayers ¹ , P. Roach ¹ ¹ Fugro
17:30	End of the Technical Programme Day 2		
19:30	Conference Evening Dinner		
23:30	End of the Day 2		



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Poster Presentations | Tuesday 5 September 2023

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POSTER AREA	
Joint Poster Session Tuesday	
15:20	GPR and UAV remote sensing for detecting changes in soil moisture across a heterogeneous agricultural field - M. Zajc ¹ ¹ Geological Survey of Slovenia
	3D inversion of airborne transient electromagnetic data including topography - S. Jeong ¹ ¹ Korea Institute Of Geoscience And Mineral Resources
	Romanian ccs demo project - reservoir simulation model construction - S. Anghel ¹ ¹ National Research and Development Institute for Marine Geology and Geoecology
	Electrical resistivity method in supporting electro kinetic remediation of Vertisoil polluted by hydrocarbon - Z. Plank ¹ ¹ John Wesley Theological College
	A novel marine seismic-electromagnetic joint acquisition station - Y. Yao ¹ ¹ Southern University Of Science And Technology
	Enhancing site investigation for karst geohazards using high-resolution, quasi-3D electrical resistivity tomography surveying - J. Whiteley ¹ ¹ Ground Engineering & Tunnelling, Atkins SNC-Lavalin
	Geophysical evidence of the most common gas expressions in the Western Black Sea area - M. Sammartini ¹ ¹ RINA Consulting
	Horizon and fault CNN identification technique for coal field 3D seismic data - W. Du ¹ ¹ China University of Mining & Technology (Beijing)
	Monitoring the remediation of organic contaminants by colloidal activated carbon: a spectral induced polarization study - A. Almpanis ¹ ¹ University of Western Ontario
	Integrated Analysis of Geoelectric Methods in a Brownfield: Characterization and Environmental Assessment - M. Barros ¹ ¹ University of Sao Paulo
	Mapping a nutrient-rich groundwater plume from a septic system to lake water using electrical resistivity tomography - C. Power ¹ ¹ Western University
	Near-surface site characterization using active and passive surface wave analysis in Addis Ababa, Ethiopia - B. Wolde ¹ ¹ Addis Ababa University
	Rapid grout level monitoring in UKGEOS boreholes using downhole electrical measurements - Y.J. Ngui ¹ ¹ British Geological Survey
	Revealing Fault Structures on Subsidence Prone Zones in Residential Areas with Seismic and Resistivity Tomography - M.D.W.H. Hardiyan Syahputro ¹ ¹ University Of Indonesia
	Supervised neural network for surface waves data-driven Vs-model prediction - F. Rincón ¹ ¹ University of Pisa
	Stimulated noise and surface wave interferometry processing for hybrid seismic imaging - T. Bardainne ¹ ¹ Sercel
	Latest developments of OhmPi: towards small-scale ERT surveys and monitoring experiments in the field - A. Watlet ¹ ¹ University of Mons, Geology and Applied Geology

Workshops

Workshop 1

Updated CIRIA Geophysical Standard
09:00 - 13:00

Workshop 2

From AEM Data to 3D Hydrogeological Conceptual Model
09:00 - 17:30

Field Trips

Field Trip 1

Arthur's Seat: Explore an Extinct Volcano in Edinburgh
18:00 - 20:00

Field Trip 2

The Interface Between Geoscience, Human Impacts
and Conservation
08:00 - 17:00

TECHNICAL PROGRAMME

Oral Presentations | Wednesday 6 September 2023

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29 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
TINTO	MOORFOOT
Geophysics in Engineering Geology and Geotechnical Investigations II	Geophysics in Geohazard Studies II
09:00	09:00
Novel electrode design for non-destructive resistivity measurement on material in geotechnical standard sample cylinders - T. Dahlin ¹ ¹ Lund University	Estimating areal extent of accidental oil & gas leakage into near surface formation using InSAR data - A. Al-Ghareeb ¹ ¹ Kuwait Oil Company
09:20	09:20
Monitoring internal erosion in embankment dams using 3D Electrical Resistivity Tomography: Älvkarleby test embankment dam - T. Dahlin ¹ ¹ Lund University	Separation and calculation of anthropogenic and natural dose rate from airborne gamma ray spectrometer data - V.C. Baranwal ¹ ¹ Geological Survey of Norway (NGU)
09:40	09:40
Trial of the PRIME system for geoelectrical condition monitoring on critical railway earthwork infrastructure - P. Wilkinson ¹ ¹ British Geological Survey	Preliminary 2D modelling of gravimetric profiles through the Bogd-Uul granite massif in central Mongolia - B. Buyantogtokh ¹ ¹ Institute of Astronomy and Geophysics of Mongolian Academy of Sciences of MAS
10:00	10:00
Development and assessment of MASwAI - a deep learning algorithm for shear wave velocity prediction - J. Adcock ¹ ¹ Guideline Geo AB	Dispersion image constraint for linear-array passive surface wave via mini-Sosie technique - Y. Li ¹ ¹ Chang 'An University
10:40 Coffee break	
New Technologies, Developments and Research Trends, Machine Learning III	Integrated Approaches in Near Surface Geophysics
11:10	11:10
A new light weight and easy-to-use transient electromagnetic instrument for subsurface characterization: sTEM - T. Bording ¹ ¹ Aarhus GeolInstruments ApS	Multi-Scale characterisation of a clay flood embankment, Warden, Northumberland - A. White ¹ ¹ University of Bristol
11:30	11:30
Objective function approximation through machine learning: application to a global inversion of ERT data - F. Macelloni ¹ ¹ University Of Pisa	Multi-sensor geophysical measurements in a simulated, lab-scaled urban environment - R. Nieboer ¹ ¹ Deltares
11:50	11:50
Hyperbola fitting for characterising cylindrical targets in GPR data using deep learning permittivity predictions - O. Patsia ¹ ¹ School of Engineering, The University of Edinburgh	Ambient seismic noise and surface wave tomography of the Thinia Valley (Kefalonia, Greece) - C. Colombero ¹ ¹ Politecnico Di Torino
12:10	
Efficient finite-difference time-domain simulation of step-frequency continuous-wave ground penetrating radar systems - A. Giannopoulos ¹ ¹ University of Edinburgh	
12:30	
P- and S-wave reflection seismic imaging using DAS and nodal receivers: an example from Kurikka, Finland - B. Brodic ^{1,2} ¹ Geological Survey Of Finland; ² University of the Witwatersrand	
12:50 Lunch break	
Geophysical investigations in Archaeology (Archaeogeophysics)	Adapting Approaches from Oil & Gas industry in Near Surface Geophysics
14:00	14:00
Developing tactile resources from archaeo-geophysical data to benefit engagement with heritage data - E. Cox ¹ ¹ Atkins SNC-Lavalin	Characterising deep groundwater salinity in the Lower Kutai Basin, Indonesia, from resistivity logs - A. Arifin ¹ ¹ University College London
14:20	14:20
A high-resolution reflection seismic survey in the historical Kefalonia island, Greece - S. Zappala ¹ ¹ Uppsala University	Imaging of near-surface seismic reflections with light vibratory sources - A. Ben Khalifa ¹ ¹ Gustave Eiffel University
14:40	14:40
A Case Study for Archaeo-geophysics: GPR Application on Hacimusalar Mound/Elmalı/Antalya - B. Karadoller ¹ ¹ Istanbul Technical University	Optimizing onshore seismic acquisition by estimating near-surface property from ambient noise - T. Dotare ¹ ¹ INPEX Idemitsu Norge AS
15:00	15:00
Optimized measuring schemes for three-dimensional electrical resistivity tomography applied for imaging wall foundations - P. Louvaris ¹ ¹ Aristotle University Of Thessaloniki	Can we detect seismic anisotropy in glacial sediments using crosshole seismics? - S. Beraus ¹ ¹ Leibniz Institute for Applied Geophysics
15:20 Coffee break	

See the full schedule in the app!

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Oral Presentations | Wednesday 6 September 2023

Last updated 30 August

2ND CONFERENCE ON HYDROGEOPHYSICS

HARRIS

Characterisation and Monitoring (water content and flux) of the Critical Zone Interfaces II

09:00	Investigation of the Hydrogeology at a Chalk Cliff Site in Normandy Using Multiple Research Approaches - C. Fauchard ¹ ¹ Cerema Normandie Centre
09:20	An integrated approach to characterise the subsurface using near-surface geophysical methods - J. Dildar ¹ ¹ University Of The Witwatersrand
09:40	Coupled hydrogeophysical modelling as a tool for determining unsaturated soil parameters in landslides - J. Boyd ^{1,2} ¹ British Geological Survey; ² Lancaster University
10:00	Geophysics to mitigate brownification of lake water – first results - T. Martin ¹ ¹ Lund University
10:20	Comparison of hydrogeological properties based on DCIP, surface NMR and hydraulic tests - T. Martin ¹ ¹ Lund University
10:40	Coffee break

12:50 Lunch break

KILSYTH

14:00	Panel Discussion: Building Public Trust with Near Surface Industries: A Pathway to Rebuilding the Talent Pipeline Needed for a Green Energy Transition
15:20	Coffee break

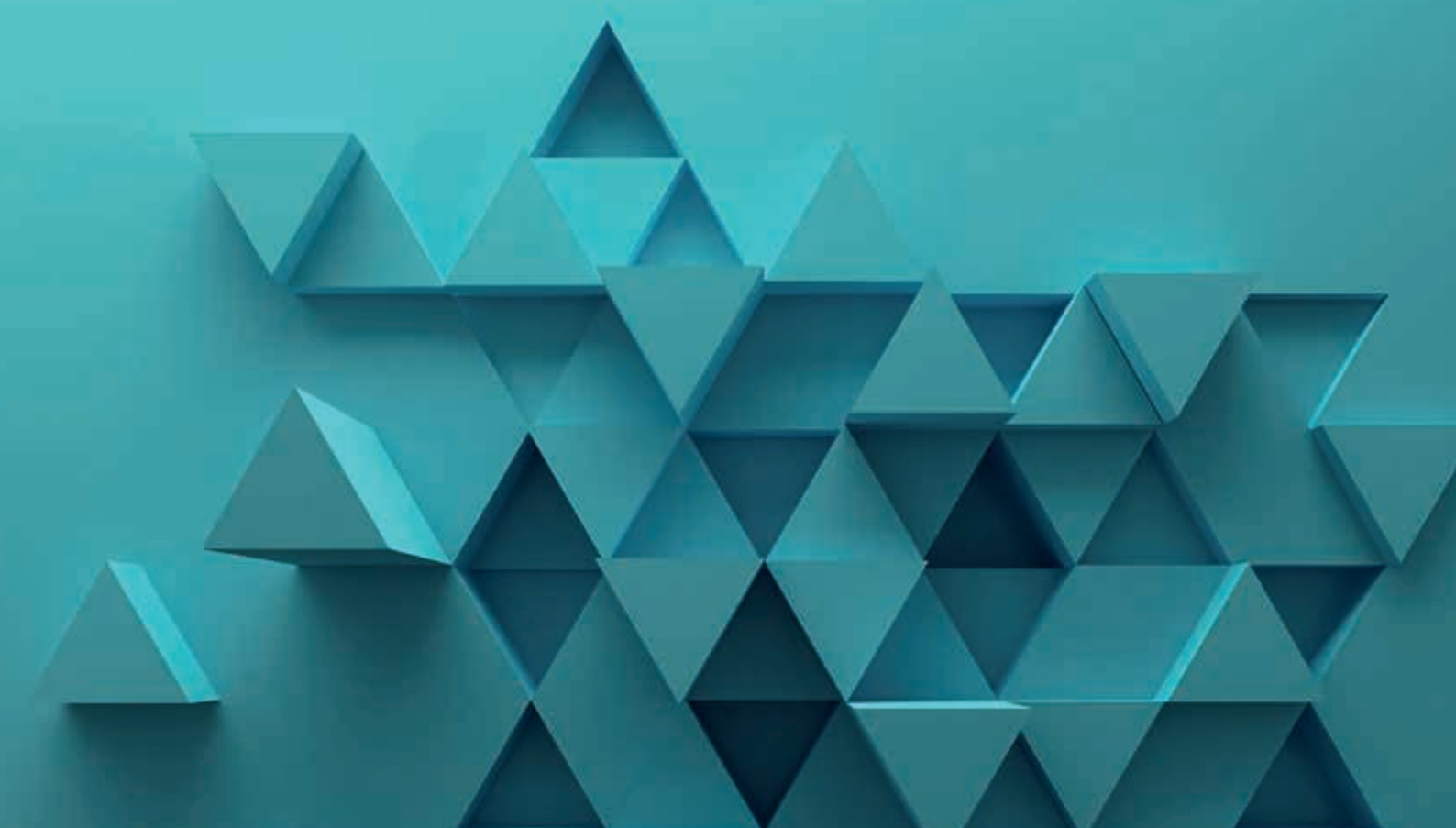
TECHNICAL PROGRAMME

Oral Presentations | Wednesday 6 September 2023



Last updated 30 August

29 TH EUROPEAN MEETING OF ENVIRONMENTAL AND ENGINEERING GEOPHYSICS	
TINTO	MOORFOOT
Geophysics in 3D Geological/ Geotechnical Modelling	Modelling, Inversion and Data-Processing in Near Surface Geophysics III
	15:50 Shallow shear-wave (SV) reflection surveying with distributed acoustic sensing in Zuidbroek, the Netherlands - D. Zhang ¹ ¹ TU Delft
16:10 Improving seismic velocity mapping using Standard Penetration Test data in a cokriging interpolation - P. Masoudi ¹ ¹ Geovariances	16:10 Estimating the volume of recoverable materials from a former gypsum landfill using frequency-domain electromagnetics - W. Deleersnyder ^{1,2} ¹ KU Leuven Kulak; ² Ghent University
16:30 Development of a 3D Numerical Modelling to Describe the Conductivity of Acid Fracturing Treatment - M. Mirhashemi ¹ ¹ Islamic Azad University	16:30 Global inversion of electrical resistivity tomography data for cavity detection - M. Cercato ¹ ¹ Sapienza University of Rome
16:50 Geostatistical joint inversion of FDEM and ERT data: a three-dimensional real case application - J. Narciso ¹ ¹ CERENA/Instituto Superior Técnico	16:50 Ray-based adjoint-state surface wave travelttime tomography - T. Lei ¹ ¹ Southern University of Science and Technology
17:10 Closing Session	
17:50 End of the Day 3	





SEE YOU NEXT YEAR IN HELSINKI!

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