



# EURASIA GEOSCIENCE

## CONGRESS AND EXHIBITION

10-13 NOVEMBER 2023, ANTALYA

# EGCE 2023

## Technical Program Book

ORGANIZED BY



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## Welcome

On behalf of the Organizing Committee, it is a pleasure and a great honor for us to welcome you to **Eurasia Geoscience Congress and Exhibition 2023 (EGCE2023)**.

Ankara University organizes this event with support of King Fahd University of Petroleum and Minerals (KFUPM). The congress is also supported by national universities (ÇOMU, Kocaeli, KTÜ, Afyon Kocatepe, Süleyman Demirel... ). Leading supporters are the Chamber of Geophysical Engineers of Turkey and the Turkish Oil Company (TPAO). Without their support, we cannot make this congress. I would like to thank all of them.

In this event, we have 57 oral and 2 poster presentations on various topics. The topics about the geological and geophysical investigation of the deep earth, Oil and Gas Exploration to CO<sub>2</sub> monitoring, Mining Geophysics to Mining Geology, Geothermal Exploration to Site Investigation will undoubtedly attract geoscientists, engineers, representatives of oil, energy and mining companies, researchers and students from many different countries. We have participants not only from Türkiye, but also from Saudi Arabia, the USA, Iraq, China, Canada, and Iran.

We have a diamond sponsor (Phoenix/Tezcür), Gold Sponsors (FNC and TPIC), and 5 exhibitor companies. We also thank sponsors and exhibitors. We expect that you will all have an exciting and rewarding time attending talks, visiting the exhibition, and enjoying the Venue Hotel. For three days and during the congress, we will be together, and we can discuss new potential collaboration and joint Projects in different applications.

We would like to express our appreciation and congratulations to all those involved in organizing the EGCE2023.

**Prof. Dr. M. Emin CANDANSAYAR**  
**Congress Chairman**

**Prof. Dr. Pantelis SOUPIOS**  
**Technical Program Chairman**

## Organizing Committee

|                                      |  |                            |
|--------------------------------------|--|----------------------------|
| <b>Prof. Dr. M. Emin Candansayar</b> | Ankara University, Türkiye                                   | Congress Chairman          |
| <b>Prof. Dr. Pantelis Soupios</b>    | King Fahd University of Petroleum and Minerals, Saudi Arabia | Technical Program Chairman |
| <b>Cansu Arıcan</b>                  | Ankara University, Türkiye                                   | General Secretary          |
| <b>Demet Över</b>                    | Ankara University, Türkiye                                   | Responsible for Exhibition |

## Conveners/ Scientific Committee

(according to the topic number in alphabetic order)

| Topic No | Name SURNAME         | Title       | University, Department  | Country      |
|----------|----------------------|-------------|---|--------------|
| 1        | Bülent KAYPAK        | Prof. Dr.   | Ankara Univ., Geophysical Eng.Dept.                                 | Türkiye      |
| 1        | Veysel İŞIK          | Prof. Dr.   | Ankara Univ., Geological Eng.Dept.                                  | Türkiye      |
| 1        | Bülent TANK          | Prof.Dr.    | Boğaziçi Univ.  | Türkiye      |
| 1        | Erhan ERDOĞAN        | Dr.         | Phoenix Geophysics Limited  | Canada       |
| 1        | Naser MEQBEL         | Dr.         | 3D Consulting Geo.  | Germany      |
| 1        | Özlem HACIOĞLU       | Dr.         | Karadeniz Technical Univ., Geophysical Eng. Dept                    | Türkiye      |
| 2        | Emin U. ULUGERGERLI  | Prof.Dr.    | Çanakkale Onsekiz Mart Univ., Geophyscial Eng. Dept.                | Türkiye      |
| 2        | Ertan PEKŞEN         | Assoc.Prof. | Kocaeli Univ., Geophysical Eng. Dept.                               | Türkiye      |
| 3        | Selma KADIOĞLU       | Prof.Dr.    | Ankara Univ., Geophysical Eng.Dept.                                 | Türkiye      |
| 3        | N. Yıldırım GÜNDÖĞDU | Dr.         | Ankara Univ., Geophysical Eng.Dept.                                 | Türkiye      |
| 4        | Khalid RAMADAN       | Prof. Dr.   | King Fahd University of Petroleum and Minerals, Dept. of Geoscience | Saudi Arabia |

|           |                             |              |   |              |
|-----------|-----------------------------|--------------|---|--------------|
| <b>4</b>  | John D. HUMPHREY            | Assoc. Prof. | King Fahd University of Petroleum and Minerals, Dept. of Geoscience | Saudi Arabia |
| <b>5</b>  | Ammar ELHUSSEINY            | Assoc. Prof. | King Fahd University of Petroleum and Minerals, Dept. of Geoscience | Saudi Arabia |
| <b>5</b>  | SanLinn KAKA                | Assoc. Prof. | King Fahd University of Petroleum and Minerals, Dept. of Geoscience | Saudi Arabia |
| <b>6</b>  | Kurt STRACK                 | Dr.and CEO   | KMS Tech.Inc.   | USA          |
| <b>6</b>  | Pantelis SOUPIOS            | Prof. Dr.    | King Fahd University of Petroleum and Minerals, Dept. of Geoscience | Saudi Arabia |
| <b>7</b>  | M. Emin CANDANSAYAR         | Prof. Dr.    | Ankara Univ., Geophysical Eng.Dept.                                 | Türkiye      |
| <b>7</b>  | Shunguo WANG                | Dr.          | Norwegian University of Science and Technology                      | Norway       |
| <b>7</b>  | Ahmet YILDIZ                | Prof. Dr.    | Afyon Kocatepe Univ.  | Türkiye      |
| <b>7</b>  | Özcan ÖZYILDIRIM            | Dr.          | Afyon Kocatepe Univ.  | Türkiye      |
| <b>8</b>  | Husam Musa Mahmoud BAALOUSH | Assoc. Prof. | King Fahd University of Petroleum and Minerals, Dept. of Geoscience | Saudi Arabia |
| <b>8</b>  | Bassam TAWABINI             | Assoc. Prof. | King Fahd University of Petroleum and Minerals, Dept. of Geoscience | Saudi Arabia |
| <b>9</b>  | İrfan AKCA                  | Assoc.Prof.  | Ankara Univ., Geophysical Eng.Dept                                  | Türkiye      |
| <b>9</b>  | Alexandros STAMPOLIDIS      | Dr.          | Aristotle University of Thessaloniki, Dept. of Geology              | Greece       |
| <b>10</b> | Çağlayan BALKAYA            | Prof. Dr.    | Süleyman Demirel Univ., Geophysical Eng. Dept.                      | Türkiye      |
| <b>10</b> | İsmail Demirci              | Dr.          | Ankara Univ., Geophysical Eng.Dept.                                 | Türkiye      |
| <b>11</b> | Theis SOLLING               | Prof. Dr.    | King Fahd University of Petroleum and Minerals, Dept. of Geoscience | Saudi Arabia |

## Thanks to...

We would like to thank our Scientific Committee for their valuable assistance in preparing the technical program of EGCE2023.

# Topics

## 1- Geophysics and Geology Studies for deep Earth investigations

- 1.1. Seismology, Seismic Imaging, Crustal Fluids & Seismic Activity,
- 1.2. Tectonics, Geochemistry
- 1.3. Magnetotelluric, Gravity, and Magnetic, Heat Flow studies

## 2- Site Investigation with Geophysics and Geology Studies

- 2.1 Engineering Seismology /Seismic Methods (Refraction, MASW, REMI, Microtremor)
- 2.2 Electric and EM Methods (DC Resistivity, IP, GPR, Controlled Source EM)
- 2.3 Geotechnical, SPT, CPT Test

## 3- Geophysical Methods and other Non-Destructive Studies of Buildings before and After Earthquake

- 3.4. Earthquake Engineering
- 3.5. How to design an earthquake-resistant structure?
- 3.6. Micro-seismic, Structural GPR, and Micro DC Resistivity
- 3.7. Civil engineering in non-destructive structure investigation

## 4- Petroleum Geology

- 4.1. Sedimentology and impact of diagenesis on reservoir quality
- 4.2. Applications of carbonate diagenesis to petroleum reservoir characterization
- 4.3. Sedimentology and stratigraphy of carbonate sediments and rocks

## 5- Geological and geophysical investigations for Oil and Gas Exploration and development

- 5.1. Onshore and offshore geophysics (active/ passive seismic and non-seismic)
- 5.2. Seismic Reflection, Full Waveform Inversion
- 5.3. Integration of geophysics and geological data in E & P
- 5.4. Geological, geophysical, and petrophysical evaluation and monitoring of conventional and unconventional reservoir rocks
- 5.5. Application of AIs in oil and gas E & P

## 6- Geophysics contribution to the Energy transition (Geothermal, CO<sub>2</sub>, wind, solar, minerals)

- 6.1. Geothermal
- 6.2. CO<sub>2</sub> monitoring
- 6.3. Special mineral exploration

## 7- Mining Geology and Mining Geophysical Studies, Geothermal Exploration

- 7.1. Airborne Geophysics
- 7.2. IP/DC
- 7.3. Drone/Airborne Geophysics
- 7.4. Geothermal Exploration

## 8- Hydrogeology and Hydrogeophysics Studies

- 8.1. Groundwater modeling and monitoring
- 8.2. Aquifer storage and recovery (ASR)
- 8.3. Groundwater pollution assessment and control
- 8.4. Sustainable use of natural resources (water, minerals, energy, etc.)

## 9- Archaeometry, Archaeogeophysics and Archaeogeology

## 10- Modeling, Inversion and Optimization in Geoscience

- 10.1. Inversion and Joint inversion of different geophysical data sets
- 10.2. Global optimization and Deep Learning Algorithm in Geoscience

## 11- Exhibitor Session

## Congress Overview

| Overview   |              |   |
|--|--------------|---|
| Date   | Time         | Event Name  |
| 10 November 2023   Friday  | 17:00-18:00  | Icebreaker and Congress Photo<br>LOCATION: Amphitheater in front of the swimming pool<br>NOTE: Please take your drinks from the bar with you. |
| 11 November 2023   Saturday                                      | 9:00-9:20    | Opening Ceremony  |
|  | 9:20-9:40    | Exhibiton Session: Exhibition Companies Short (3 minutes) Presentations<br>Opening Exhibition   |
|  | 10:30-12:30  | Technical Program and Exhibition  |
|  | 12:30-13:30  | Lunch Time  |
|  | 13:30-17:30  | Technical Program and Exhibition  |
| 12 November 2023   Sunday  | 08:40-12:30  | Technical Program and Exhibition  |
|  | 12:30-13:30  | Lunch Time  |
|  | 13:30-17:30  | Technical Program and Exhibition  |
|  | 13:30- 17:00 | Course  |
| 13 November 2023   Monday  | 9:00-12:00   | Check out and safe back to home   |
| Note: Registration desk will be open everyday between 9:00-18:00 |              |   |

## Technical Program (POSTER)

| Sunday - 12 November 2023 - Morning Sessions |    |  |
|--|----|--|
| Time   | ID | POSTER PROGRAM   |
| 10:30  | P1 | Electric field measurement in poor grounding conditions  NİKİTA ZORİN (STC NORD-WEST), DMITRII EPİSHKİN (STC NORD-WEST), ANDREY YAKOVLEV (MOSCOW STATE UNIVERSITY), DENİS YAKOVLEV (NORD-WEST) |
| 10:40  | P2 | Airborne Magnetic Investigation For Detection of Exploded and Unexploded Ordnance Using UAV Systems in a Former Military Area  COSKUN ERTUGRUL (SAGTECH GEOPHYSICS)                            |

## Technical Program (ORAL SESSIONS)

| Saturday - 11 November 2023 (MORNING SESSIONS)  |      |   |
|---|------|---|
| Time  | ID   | ORAL SESSION HALL A   |
| 09:00   |      | OPENING CEREMONY  |
| 09:20   |      | Exhibition Session: Exhibition Companies Short (3 minutes) Presentation   |
| 10:00   |      | Exhibition Opening - (Exhibition Area)  |
| 10:00-10:30   |      | Tea/Coffee Break  |
| SESSION 6: Geophysics contribution to the Energy transition (Geothermal, CO2, wind , solar, minerals) |      |   |
|   |      | Conveners: Kurt M. STRUCK, Pantelis SOUPIOS   |
| 10:30   | 6,1  | AI-Based Integration of Geoscience and other Data for Carbon Sequestration and Enhanced Oil Recovery   Fred AMİNZADEH (Energy Transition International)   |
| 10:50   | 6,2  | Using Electromagnetic Fluid Imaging During the Energy Transition   Kurt M STRACK (KMS TECHNOLOGIES), C. BARAJAS-OLALDE (EERC UNIV. NORTH DAKOTA), P. SOUPIOS (KFUMP)  |
| 11:10   | 6,3  | How important is multiphysics for electromagnetic imaging   Kurt M. STRUCK (KMS TECHNOLOGIES)   |
| 11:30   | 6,4  | Volcanic Massive Sulfide (VMS) Ore Deposit in Western Saudi Arabia: A Geophysical Study   A. KHOGALI (KFUMP), K.CHAVANIDIS (KFUMP), A. STAMPOLIDIS (ARISTOTLE UNIV. OF THESSALONIKI), R. COLES (GOLDS AND MINERALS COMPANY LTD.), S.HANAFY ((KFUMP), Pantelis SOUPIOS (KFUPM)                           |
| 11:50   | 6,5  | GeoCluster-ExpertNet: A Proposed Model Integrating Unsupervised Learning with Expert for Optimal Geothermal Drilling   Orkun TEKE (Manisa Celal Bayar Univ.)  |
| 12:30-13:30   |      | LUNCH   |
| Saturday - 11 November 2023 (AFTERNOON SESSIONS)  |      |   |
| Time  | ID   | ORAL SESSION HALL A   |
| SESSION 5: Geological and geophysical investigations for Oil and Gas Exploration and development      |      |   |
|   |      | Conveners: Sanlînn I. KAKA, Can ÖREN  |
| 13:30   | 5,1  | ONLINE: Leveraging Generative Adversarial Networks (GANs) to Enhance Well Logging Data Interpretation for Sustainable Near-Field Exploration   Abdulrahman AL-FAKHİ (KFUMP), S.I. KAKA (KFUMP), A. KOESİDAYATULLAH (KFUMP)  |
| 13:50   | 5,2  | ONLINE: Potential use of Sonic data for rock typing and geosteering in bioturbated carbonate strata Ammar EL-HUSSEİNY (KFUPM), H. ELTOM (KFUPM)   |
| 14:10   | 5,3  | Challenges In Microseismic Technology for Reservoir Characterization and Monitoring: A Brief Review.   Sanlînn I. KAKA (KFUPM)  |
| 14:30   | 5,4  | Elastic reverse time migration for imaging through gas clouds Can ÖREN (TPAO), Saygın İLERİ (TPAO)  |
| 14:50   | 5,5  | AVA analysis of multi-component seismic wave modes (P-Sv, Sv-P) Saygın İLERİ (TPAO)   |
| 15:10-15:30   |      | Tea/Coffee Break  |
| SESSION 5: Geological and geophysical investigations for Oil and Gas Exploration and development      |      |   |
|   |      | Conveners: Sanlînn I. KAKA, Saygın İLERİ  |
| 15:30   | 5,6  | Gas-Water detection technology and application of LOTEM combined with well logging and seismic data   Liangjun YAN (YANGTZE UNIVERSITY)   |
| 15:50   | 5,7  | SIP Detection and Quantification of Iron Sulfide (FeS) Materials: A Pathway to Early Monitoring   Panagiotis KIRMİZAKİS (KFUPM), A. EL-HUSSEİNY (KFUPM), M. MAHMOUD (KFUPM), P. SOUPIOS (KFUPM)   |
| 16:10   | 5,8  | Reconstruction of the 3D subsurface of the Al-Hassa Oasis, Eastern Saudi Arabia Abid KHOGALI (KFUPM), P. KIRMİZAKİS (KFUPM), K. CHAVANIDIS (KFUPM), A.L. ASHADI (KFUPM), A. STAMPOLIDIS (ARISTOTLE UNIV. OF THESSALONIKI), M. Emin CANDANSAYAR (ANKARA UNIVERSITY), PANTELIS SOUPIOS (KFUPM)            |
| 16:30   | 5,9  | Determination of Deep-seated Faults Using Gravity and Magnetic Methods: Preliminary Results From North Adiyaman, Southeastern Turkiye   Bahar DİNÇER (TPAO), V. İŞIK (Ankara U.), R. SABER (Ankara U.), A. ÇAĞLAYAN (Ministry Of Environment, Urbanisation and Climate Change), R.N. BEKTAŞ (Ankara U.) |
| 16:50   | 5,10 | Determining the Structural Features of the Gulf of Antalya and Its offshore by using Gravity-Magnetic Methods Ahmet KIRMIZITAS (TPAO), M.A.SÜNNETÇİOĞLU (TPAO)  |

NOTE: The speakers names are written in red colored font.

| Saturday - 11 November 2023 (MORNING SESSIONS)            |      |  |  |
|---|------|--|--|
| Time  | ID   | ORAL SESSION HALL B  |  |
| 09:00   |      |  |  |
| 09:20   |      |  |  |
| 10:00   |      |  |  |
| 10:00-10:30   |      | Tea/Coffee Break   |  |
|   |      | <b>SESSION 4: Petroleum Geology</b>  |  |
|   |      | <b>Conveners: Imad GHAFOR, Mehmet HAZAR</b>  |  |
| 10:30   |      |  |  |
| 10:50   | 4,1  | Stratigraphy From the Pungalla Section, Ashdagh Mountain, North Eastern Iraq<br><b>Imad GHAFOR (UNIV. OF SULAIMANI)</b>  |  |
| 11:10   | 4,2  | Exhibition Similarities and Disparities Upper Cretaceous Source Rocks from Southeastern Anatolia from Lithologic Content Perspective   <b>Mehmet HAZAR (TPAO)</b> , T. ISCHIMEN (TPAO), Y. D. ERDAL (TPAO), S.G. KOSE (TPAO)   |  |
| 11:30   | 4,3  | ONLINE: Characterization of an Unconventional Organic-Rich Carbonate Mudstone, Late Jurassic Of Saudi Arabia   <b>John HUMPHREY (KFUPM)</b> , Septriandi CHAN (KFUPM)  |  |
| 11:50   | 4,4  | ONLINE: Understanding the origin of Quartz Cementation in Sandstones for Better Pre-Drill Reservoir Quality Prediction   <b>Khalid AL-RAMADAN (KFUMP)</b>  |  |
| 12:30-13:30   |      | LUNCH  |  |
| Saturday - 11 November 2023 (AFTERNOON SESSIONS)          |      |  |  |
| Time  | ID   | ORAL SESSION HALL B  |  |
|   |      | <b>SESSION 2: Site Investigation with Geophysics and Geology Studies</b>   |  |
|   |      | <b>Conveners: Emin U. ULUGERGERLİ and Ertan PEKŞEN</b>   |  |
| 13:30   | 3,1  | Non-Destructive Geophysical Investigation of Support Structure Element By Using 3D Inversion of Direct Current Resistivity Data   <b>Cansu ARICAN (Ankara Univ.)</b> , M. E. CANDANSAYAR (Ankara Univ.), N. Y. GÜNDÖĞDU (Ankara Univ.)   |  |
| 13:50   | 2,1  | Geophysical Insights into the Tectonic Regime of the Chania Basin in the Aegean Region<br>Panagiotis KIRMIZAKIS (KFUMP), U. DİKMEN (Ankara Univ.), <b>Pantelis SOUPIOS (KFUPM)</b>   |  |
| 14:10   | 2,2  | Seismic shielding of urban areas by using integrated geophysical methods<br>Panagiotis KIRMIZAKIS (KFUMP), G. KRITIKAKIS (Technical Univ.of Crete), E. KOKKINOU (Hellenic Mediterranean Univ), N.THEODULIDIS (Inst. of Eng. Seismology and Earthquake Engineering), B. MARGARIS , N. PAPADOPOULOS (Inst. For Mediterranean Studies, Foundation for Research & Technology Hellas), M. STEIAKAKIS (Tech. Univ. Of Crete), U.DİKMEN (Ankara Univ.), M.-D. Mangriotis (Univ. of Southampton), A SAVAILDIS (Univ. of Texas), C. LOUPASAKIS (Nat. Univ. Of Athens), A. VAFIDIS (Tech. Univ. Of Crete), <b>Pantelis SOUPIOS (KFUPM)</b> |  |
| 14:30   | 2,3  | Resistivity image of leakage from Çanakkale Old Open Waste Disposal Site<br>Ebru Ş. ULUOCAK (Çanakkale Onsekiz Mart Univ.), <b>Emin U. ULUGERGERLİ (Çanakkale Onsekiz Mart Univ.)</b>  |  |
| 14:50   | 2,4  | Investigation of the mineralogical-petrographical and geochemical properties of Darende (Malatya) region limestone   <b>Metin BAĞCI (Afyon Kocatepe Univ.)</b>   |  |
| 15:10-15:30   |      | Tea/Coffee Break   |  |
|   |      | <b>SESSION 10: Modeling, Inversion and Optimization in Geoscience</b>  |  |
|   |      | <b>Conveners: Çağlayan BALKAYA, İsmail DEMİRÇİ</b>   |  |
| 15:30   | 10,1 | Estimating the Electrical Anisotropy Coefficient, Strike Direction, and Dip Angle using Square Electrode Array Data with Generalized Regression Neural Networks<br><b>Ertan PEKŞEN (Kocaeli Univ.)</b> , D. DURDAĞ (Kocaeli Univ.), E.GASIMOV (Kocaeli Univ.)  |  |
| 15:50   | 10,2 | Constrained inversion of geophysical data without regularization parameter using Pareto-optimal swarm intelligence: Application to magnetotelluric problem   <b>Ersin BÜYÜK (TÜBITAK-MAM)</b>  |  |
| 16:10   | 10,3 | A new Software for 3-Dimensional Inversion of Magnetotelluric and Gravity data: Part 1: Software Interface and Gravity Inversion   <b>Özcan ÖZYILDIRIM (Afyon Kocatepe Univ.)</b>  |  |
| 16:30   | 10,4 | A New Magnetotelluric 3D Modeling Algoirthm: Comparison Based on Different Direct and Iterative Solver Performances   <b>İsmail DEMİRÇİ (Ankara Univ.)</b>   |  |
| 16:50   | 10,5 | Seismic Velocity Inversion by Improved InversionNet Deep Model: Noisy and Noiseless Training Data sets   <b>Mojtaba NAJAFIKHATOUNABAD (Ankara U.)</b> , H. Y. KELEŞ (Hacettepe U.), S. KADIOĞLU (Ank.U.)   |  |
| NOTE: The speakers names are written in red colored font. |      |  |  |

| Sunday - 12 November 2023 -Morning Sessions   |      |   |
|---|------|---|
| Time  | ID   | ORAL SESSION - HALL A   |
| SESSION 1: Geophysics and Geology Studies for deep Earth investigations                               |      |   |
|   |      | <b>Chairpersons: Bülent KAYPAK, Veysel İŞIK</b>   |
| 08:40   | 1,1  | Northwestern Anatolia Lithospheric Resistivity Structure Revealed by 3D Inversion of Long Period Magnetotelluric Data: Comparison With Velocity Lithospheric Structure   <b>M. Emin CANDANSAYAR</b> (Ankara Üniv.), İ. DEMİRCİ (Ankara Üniv.), N.Y. GÜNDÖĞDU (Ankara Üniv.), H. YILMAZ (Sivas Cumhuriyet Üniv.)                               |
| 09:00   | 1,2  | Identifying and Localizing of Seismogenic EM Anomalies from Data Observed by Permanent MT Stations <b>Wenbao HU</b> (Yangtze Univ.)   |
| 09:20   | 1,3  | An Insight Into The East Anatolian Fault Zone And Surroundings Through Earthquake Tomography: The Relocation of February 6, 2023 Main and Aftershocks Using Past Seismic Activity <b>Bülent KAYPAK</b> (Ankara Univ.), Begüm KOCA (Ankara Univ.)  |
| 09:40   | 1,4  | ONLINE: What actually Rotational Seismology Means to a Seismologist?   <b>Gizem İZGİ</b> (University of Potsdam)  |
| 10:00   | 1,5  | ONLINE: Evaluating the Performance of Rotational Sensors Across Different Source Types: Earthquakes, Explosions, and Vibroseis Sweeps   <b>Gizem İZGİ</b> (University of Potsdam), Eva P.S. EIBL (University of Potsdam), Frank Krüger (University of Potsdam), Felix Bernauer (Ludwig-Maximilians Universität München)                       |
| 10:20-10:50   |      | Tea/Coffee Break  |
| SESSION 6: Geophysics contribution to the Energy transition (Geothermal, CO2, wind , solar, minerals) |      |   |
|   |      | <b>Conveners: Duygu KIYAN and Burcu TURHAN</b>  |
| 10:50   | 6,6  | Investigation of the Relationship Between the Topography and the Fluid Circulation Depth on the Geothermal Systems of Central Anatolia Region   <b>Sultan BURHANUDDIN</b> (Marmara Univ.), Kamil ERKAN (Marmara Univ.)  |
| 11:10   | 6,7  | 3D Velocity structure and fluid flows inferred from the microseismic events in the geothermal field, Turkey <b>Burcu TURHAN (TPAO)</b> , T. BİLGİC (MİKROSİSMİK MÜH.DAN. LTD.ŞTİ.), Ü.S. SELEK (MİKROSİSMİK MÜH.DAN. LTD.ŞTİ.), K. BALCI (MASPO ENERGY SAN. ve TİC.A.Ş), A. YILDIRIM (MASPO ENERGY SAN. ve TİC.A.Ş), B. KAYPAK (ANKARA UNIV.) |
| 11:30   | 6,8  | Magnetotelluric system NORD   <b>D. EPİSHKİN</b> (STC NORD-WEST), A. Yakovlev (Lomonosov Moscow State Univ.) and N. Zorin (STC Nord-West)   |
| 11:50   | 6,9  | DIG: A Research Project to Assess Ireland's Geothermal Energy Potential <b>Duygu KIYAN</b> (DUBLIN INSTITUTE FOR ADVANCED STUDIES)  |
| 12:10   | 6,10 | Geoelectrical Characterization of Geothermal Reservoirs – Case Studies from Gediz Geothermal Area (Türkiye) <b>Özlem HACIOĞLU</b> (Kardeniz Teknik Univ.), A.T. BAŞOKUR (LEMİNİS Geoscience)  |
| 12:30-13:30   |      | LUNCH   |
| Sunday - 12 November 2023 - Afternoon Sessions  |      |   |
| Time  | ID   | ORAL SESSION - HALL A   |
| SESSION 7: Mining Geology and Mining Geophysical Studies, Geothermal Exploration                      |      |   |
|   |      | <b>Chairpersons: M. Emin CANDANSAYAR, Erhan ERDOĞAN</b>   |
| 13:30   | 7,1  | Phoenix New Generation MT/CSAMT Technologies with Real Time Data Transfer Capabilities <b>Erhan ERDOĞAN</b> (PHOENIX GEOPHYSICS Limited)  |
| 13:50   | 7,2  | Real time Monitoring of the Natural Broadband EM Signals: Applications for monitoring the active volcanoes <b>Erhan ERDOĞAN</b> (PHOENIX GEOPHYSICS Limited)  |
| 14:10   | 7,3  | The magnetotelluric method in geothermal exploration: case studies   <b>N. PALSHİN</b> (SHIRSHOV INST.OF OCEANOLOGY RAS), D. EPİSHKİN (STC NORD-WEST), A.YAKOVLEV (MOSCOW STATE UNIV.), D. YAKOVLEV (NORD-WEST), <b>Nikita ZORİN</b> (STC NORD-WEST)  |
| 14:30   | 7,4  | Magnetotellurics in Deep Mining Operations: Case studies from North America <b>Erhan ERDOĞAN</b> (PHOENIX GEOPHYSICS Limited)   |
| 14:50   | 7,5  | Joint application of electromagnetic prospecting methods for mineral exploration: case studies <b>Anastasiya SOLOVYeva</b> (NORD-WEST), D.EPİSHKİN (STC NORD-WEST), V.KULIKOV (MOSCOW STATE UNIVERSITY), D. YAKOVLEV (NORD-WEST), N. ZORİN (STC NORD-WEST)  |
| 15:10-15:30   |      | Tea/Coffee Break  |
| SESSION 7: Mining Geology and Mining Geophysical Studies, Geothermal Exploration                      |      |   |
|   |      | <b>Chairpersons: Ahmet YILDIZ, Özcan ÖZYILDIRIM</b>   |
| 15:30   | 7,6  | KMS array system for CSEM/MT <b>Kurt STRACK</b> (KMS Technologies)  |
| 15:50   | 7,7  | Lithium-The Important Resource of Green Technology: Properties, Geology and Turkey's Potential <b>Ahmet YILDIZ</b> (AFYON KOCATEPE UNIV.)   |
| 16:10   | 7,8  | The Geochemistry of Clays Çavuşağı (Ilgın, Konya)   <b>Hakan FİDAN</b> (Kütahya Dumlupına Univ.), G.YANIK (Kütahya Dumlupına Univ.), A.YILDIZ (Afyon Kocatepe Univ.), C.ÖZKUL (Kütahya Dumlupına Univ.)   |
| 16:30   | 7,9  | A large scale ERT survey for locating clay minerals   <b>Alexandros STAMPOLİDIS</b> (Aristotle Univ. of Thessaloniki), P. LOUVARIS , E. AMANATIDOU, K. POLYDOROPOULOS, N. KORDATOS  |
| 16:50   | 7,10 | ONLINE: Using Marine CSEM For Reservoir Monitoring Based on Petrophysical Modeling <b>Mohammed ETTAYEBI</b> (Norwegian University of Science and Technology), <b>Shunguo WANG</b> (Norwegian University of Science and Technology), Martin LANDRØ (Norwegian University of Science and Technology)  |

NOTE: The speakers names are written in red colored font.

|   |     | Sunday - 12 November 2023 - Morning Sessions   |  |  |  |
|---|-----|--|--|--|--|
| Time  | ID  | ORAL SESSION - HALL B  |  |  |  |
| SESSION 9: Archaeometry, Archaeogeophysics and Archaeogeology           |     |  |  |  |  |
| SESSION 8: Hydrogeology and Hydrogeophysics Studies                     |     |  |  |  |  |
|   |     | <b>Chairpersons:</b> İrfan AKCA, Alexandros STAMPOLİDIS, N. Yıldırım GÜNDÖĞDU  |  |  |  |
| 08:40   | 8,1 | Comparing The Efficiency of Synthetic Vs Natural-Based Liquid Activated Carbon in Removing Organic Pollutants from Contaminated Water   Bassam TAWABİNİ (KFUPM), T. SALEH (KFUPM), M. AL-RAYYAN (SAUDİ ARAMCO), R. NASSER (SAUDİ ARAMCO), P. SOUPIOS (KFUPM), P. KIRMİZAKİS (KFUPM)  |  |  |  |
| 09:00   | 8,2 | Resistivity Imaging of Aquifer Structure With 2D/3D Inversion of Direct Current Resistivity and Audio-Magnetotelluric Data   N. Yıldırım GÜNDÖĞDU (ANKARA UNIV.), M. Emin CANDANSAYAR (ANKARA UNIV.)   |  |  |  |
| 09:20   | 9,2 | Geophysical and remote sensing surveys at the archaeological site of Philippi, N. Greece   Alexandros STAMPOLİDIS (ARİSTOTLE UNIVERSITY OF THESSALONİKİ), A. KARAMİTROU (UNİVERSİTY OF SOUTHAMPTON), G. TSOKAS (ARİSTOTLE UNIVERSITY OF THESSALONİKİ)  |  |  |  |
| 09:40   | 9,3 | Imaging Archaeological Ruins By GPR and ERT Surveys: The Case of Ancient Seleukeia Sidera In Pisidia   Çağlayan BALKAYA (Süleyman Demirel Univ.), O. ÇAKMAK (Süleyman Demirel Univ.), H.E. TÜTÜNSATAR (Isparta Univ.)  |  |  |  |
| 10:00   | 9,4 | Water-Borne Archaeogeophysical Investigations at Lake İznik   İrfan AKCA (Ankara Univ.), Mustafa ŞAHİN (Uludağ Univ.)  |  |  |  |
| 10:20-10:50   | ID  | Tea/Coffee Break   |  |  |  |
| SESSION 1: Geophysics and Geology Studies for deep Earth investigations |     |  |  |  |  |
|   |     | <b>Conveners:</b> Veysel İŞIK, Rıza SABER  |  |  |  |
| 10:50   | 1,6 | Analysis of Surface Rupture Patterns and Fault Offset Variability Associated with the 06 February 2023 Pazarcık (Kahramanmaraş) Earthquake (Mw 7.7) In İslahiye Area, Türkiye   Ayşe ÇAĞLAYAN (Ministry Of Environment, Urbanisation and Climate Change), V. İŞIK (Ankara Univ.), R. SABER (Ankara Univ.), H. ÜNAL (GEOMEK Mühendislik) F. CHİTEA (Bucharest University) |  |  |  |
| 11:10   | 1,7 | Evaluation of Relative Tectonic Activity in The Eastern Part Of Khazar Fault Zone, North Iran   Marjan TOURANI (Ankara Univ.), R. SABER (Ankara Univ.), V. İŞIK (Ankara Univ.), A. ÇAĞLAYAN (Ministry Of Environment, Urbanisation And Climate Change), Fiorina CHİTEA (Bucharest University)  |  |  |  |
| 11:30   | 1,8 | Probabilistic Earthquake Risk Analyses In The Region Of Sındırı – Sinanpaşa Fault Zone, Türkiye   Aycan GÜNEY (Ankara Univ.), A. ÇAĞLAYAN (Ministry Of Environment, Urbanization And Climate Change), R. SABER (Ankara Univ.), V. İŞIK (Ankara Univ.),   |  |  |  |
| 11:50   | 1,9 | Morphotectonic Characteristics And Paleoseismological Analysis of Aras Fault Zone (Nw Iran); Preliminary Results From Remote Sensing and Field Studies   Rıza SABER (Ankara Univ.), V. İŞIK (Ankara Univ.), A. ÇAĞLAYAN (Ministry Of Environment, Urbanisation And Climate Change), F. CHİTEA (Bucharest University)   |  |  |  |
| 12:10   |     |  |  |  |  |
| 12:30-13:30   |     | LUNCH  |  |  |  |
| Sunday - 12 November 2023 - Afternoon Sessions                          |     |  |  |  |  |
| Time  | ID  | ORAL SESSION - HALL B  |  |  |  |
|   |     |  |  |  |  |
| 13:30   |     |  |  |  |  |
| 13:50   |     |  |  |  |  |
| 14:10   |     |  |  |  |  |
| 14:30   |     |  |  |  |  |
| 14:50   |     |  |  |  |  |
| 15:10-15:30   |     | Tea/Coffee Break   |  |  |  |
|   |     |  |  |  |  |
| 15:30   |     |  |  |  |  |
| 15:50   |     |  |  |  |  |
| 16:10   |     |  |  |  |  |
| 16:30   |     |  |  |  |  |
| 16:50   |     |  |  |  |  |
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