

**5th International congress on Earth and Geological Sciences (ICEGS-2026) in Vienna, Austria on July 23-24, 2026**

**DAY-2 (July 24)**

**Technical Session-III**

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| 10:00-10:20   | Numerical modelling of the long-term behaviour of weathered granular soil structures and rock masses under mechanical and hydro-chemical conditions<br>Prof. Erich Bauer, Graz University of Technology, Austria  |
| 10:20-10:40   | Sediments Tell the Story: Environmental Evolution of Wigry Lake Since the Last Ice Age<br>Dr. Anna Kostka, AGH University of Krakow, Poland   |
| 10:40-11:00   | Methodological Sensitivity of End-of-Life Allocation in Life Cycle Assessment: Implications for Circular Resource Management and Decarbonisation<br>Dr. Viktoria Mannheim, University of Debrecen, Hungary  |
| 11:00-11:20   | <b>Refreshment Break</b><br><b>Group Photo</b>  |
| 11:20-11:40   | A Digital Twin Framework for Closed-Loop Water Management<br>Dr. Gialelis Ioannis, University of Patras, Greece   |
| 11:40-12:00   | Identification of the mother body of a two-dimensional uniform vortex<br>Prof. Giorgio Riccardi, University of Campania Luigi Vanvitelli, Italy   |
| 12:00-12:20   | Application of the DDM Method for Fabrication of Low-Critical-Material Electrodes for Alkaline Water Electrolysis<br>Dr. Elitsa Petkucheva, Institute of Electrochemistry and Energy Systems, Bulgaria  |
| 12:20-12:40   | Mineralogy of the Historic Mining District of Butte, Montana<br>Mr. Daniel-Evanich, Bay Area Mineralogists, USA   |
| 12:40-13:00   | Hydrocarbon Prospectivity within Interval "A" of the Villeta Formation in the Putumayo Foreland Basin<br>Dr. Revil André, CNRS, France  |
| 13:00-14:00   | <b>Lunch @ Restaurant</b>   |
|               | <b>Technical Session IV</b>   |
| 14:00-14:20   | Grid-Scale Regional Risk Assessment Using Multi-Source Data: Integrating PMF, health risk assessment, and spatialized emission inventories, and in multi-source composite heavy metal soil pollution<br>Prof. Mei lei, Chinese Academy of Sciences, China       |
| 14:20-14:40   | Application of Machine Learning Techniques in Mineral Resource Estimation: A Case Study with Iron Ore Deposit<br>Prof. Sheo Shankar Rai, Indian Institute of Technology, India  |
| 14:40-15:00   | The Silent Drain: How Governance Makes or Breaks JV Value Before the Financials Show It<br>Dr. Cornelia Oana Toropoc, OMV, Austria  |
| 15:00-15:20   | Differential core-to-periphery emplacement of mafic magma in an Archean Complex and its implications: An example from Southern Granulite Terrain, India<br>Prof. Mrinal Kanti Mukherjee, Indian Institute Of Technology (Indian School Of Mines) Dhanbad, India |
| 15:20-15:40   | From a Depression Cone to the "Olkusz Lake District": A Preliminary Assessment of Environmental Changes Following the Closure of Zn-Pb Ore Mining in the Olkusz Region (Poland)<br>Dr. Anna Kostka, AGH University of Krakow, Poland                            |
| 15:40-16:00   | Smart Adaptive Heating Control for Overheating Mitigation in Nordic Commercial Buildings<br>Prof. Amirmohammad Behzadi, KTH Royal Institute of Technology, Sweden   |
| 16:00 - 16:20 | Application of Recycled Concrete Aggregates for the Construction of Asphalt Mixtures for Road Pavements: Sustainable Waste Management and Circular Economy<br>Prof. Juan Gabriel Bastidas-Martínez, Nueva Granara Military University, Colombia                 |
| 16:20 - 16:40 | Greenhouse Gas Emissions from Petroleum Production in Guyana (2019-2030): Implications for the Country's Net Carbon Sink Status<br>Prof. Paulette Bynoe, University of Guyana, Guyana   |

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| <b>16:40 - 17:00</b>  | <b>Slot Available</b>     |
| <b>17:00 -17:20</b>   | <b>Slot Available</b>     |
|   | <b>Day-2 Concludes</b>    |
|   | <b>Pannel Discussions</b> |
|   | <b>Closing Remarks</b>    |
| <b>This is a tentative progarm. Subject to changes.To book you slot, please contact Dr. Jack Harrison at <a href="mailto:jackharrison@unitedforum.uk">jackharrison@unitedforum.uk</a></b> |                           |