

## **FINAL SEMINAR Sustainable exploration for orthomagmatic (critical) raw materials in the EU: Charting the road to the green energy transition (SEMCRET)**

9:00-16:00, 13 May 2025, **Tellus Backstage**, University of Oulu, Finland (EEST time)

- 8:30-9:00 Registration (Tellus entrance)
- Opening** **Pertti Sarala (University of Oulu, Deputy director of Oulu Mining School)**
- 9:00-9:05 Dimitrios Biliouris (European Commission, project adviser) (remote), Opening remarks
- 9:05-9:10 Saija Luukkanen (University of Oulu, Director of Oulu Mining School), Opening remarks
- 9:10-9:20 Shenghong Yang (University of Oulu, coordinator of SEMCRET), Overview of the SEMCRET project
- Mineral system modelling (I) Moderator: Ville Virtanen (CNRS)**
- 9:20-9:40 Giada Iacono (CNRS), The mineral system approach applied to magmatic Ni–Cu–PGE sulfide deposits of the Central Lapland Greenstone Belt
- 9:40-10:00 Catherine Booth (Imperial College of London), The role of porous flow processes in the development of igneous layering
- 10:00-10:20 Wolfgang Maier (Cardiff University) (remote), Magmatic ore deposit in rifting and the Akanvaara intrusion
- 10:20-10:40 **Coffee break**
- Mineral system modelling (II) and regional exploration targeting Moderator: Vojtěch Wertich (Czech Geological Survey)**
- 10:40-11:00 Lukas Ackerman (Czech Geological Survey), Magmatic sulfide ore deposits in orogenic belts, Ransko
- 11:00-11:20 Ana Jesus (University of Lisbon), Magmatic oxide ore deposits in orogenic belts, Beja
- 11:20-11:40 Malcolm Aranha (University of Oulu), Regional modelling of Critical Raw Material prospectivity across three mineral districts
- 11:40-12:00 Charmee Kalubowila (University of Oulu), Mineral exploration using high resolution targeting till dataset, opportunities and challenges
- 12:00-13:00 **Lunch break** (Lipasto or Julinia, normal dish)
- Geophysical, geochemical exploration methods development Moderator: Kari Moisio (University of Oulu)**
- 13:00-13:20 Isla Fernandez (GAIA Exploration), Geophysical exploration in magmatic deposits: multimethod approach
- 13:20-13:40 Gianluca Fiandaca (University of Milan), 3D Airborne EM modelling: closing the gap with galvanic induced polarization and with geology
- 13:40-14:00 Elena Kozlovskaya (University of Oulu), Advanced modelling of passive seismic and FTMG for mineral exploration
- 14:00-14:20 Solveig Pospiech (HZDR), Pertti Sarala (University of Oulu), Elements in plants and soil: Low-impact surficial geochemical exploration for mineral deposits
- 14:20-14:30 Patricia Puchhammer (Technical University of Vienna), Contributions to outlier detection and interpretation for spatial data
- 14:30-14:40 Blažena Wertichová (Czech Geological Survey), Mineral potential and resource mapping of orthomagmatic deposits applying UNFC tool
- 14:40-15:00 **Coffee break**
- Social awareness of raw materials Moderator: Lasse Peltonen (University of Eastern Finland)**
- 15:00-15:45 Tuija Mononen, Tuija Jartti, Kyle Bhar (University of Eastern Finland), Social awareness, acceptance, and attitudes of exploration and mining
- Panel discussion Moderator: Ana Jesus (University of Lisbon)**
- 15:45-16:15 Potential application of SEMCRET output in exploration industry in future. Shenghong Yang (University of Oulu), Kirsi Luolavirta (Geopool), Juho Haverinen (Magnus Minerals), Andrea Viezzoli (Aarhus geophysics), Gianluca Fiandaca (University of Milan), Ville Virtanen (CNRS)
- 16:15-16:20 Shenghong Yang (University of Oulu), Closing remarks

# Linnanmaa campus map, University of Oulu, (address: Pentti Kaiteran katu 1 Linnanmaa, Oulu)

