



Online Workshop

Mineral resources in hydrothermal mineral systems

17-21 May 2021

Program of the workshop*

Monday, May 17, 2021 – 9.00-12.00 + 13.00-15.00 (CET)

Welcome and introduction

Session 1: Hydrothermal systems in various geological settings and their mineral resources with special reference to their critical raw materials: mineralogy, petrology, geochemistry

res. prof. Ferenc Molnár -GTK



Ferenc Molnár has been graduated and received PhD in Geology at the Eötvös Loránd University, Budapest. His research interest is focused on mineralogy, petrology, geochemistry, and geochronology of magmatic and hydrothermal mineral systems. Since 2011, he has been a research professor in ore geology at the Geological Survey of Finland. During the workshop, he will discuss sources of hydrothermal fluids and metals, lithological, geochemical and structural control of their transportation and deposition and footprints of ore deposition with special focus on porphyry-epithermal, volcanogenic massive sulphide and orogenic gold mineral deposits.

Tuesday, May 18, 2021 – 9.00 – 12.00 + 13.00-15.00 (CET)

Session 2: Geophysical signatures of hydrothermal systems and their mineral deposits.

Karell Fredrik -GTK



Fredrik Karell graduated and received his PhD in Geology and Mineralogy from Åbo Akademi University. Research interests are related to integration and interpretation of geological and geophysical data. To understand the link between geology and geophysics a comprehensive understanding of the physical properties of rocks are essential. The topic for the workshop will tackle mainly petrophysical aspects to get an overview of geophysical signatures of hydrothermal systems and their mineral deposits.

Session 1

Session 2



Wednesday and Thursday, May 19-20, 2021 – 9.00 – 12.00 + 13.00-15.00 (CET)

Session 3: Mineral prospectivity mapping techniques in hydrothermal systems. Data mining and spatial modelling methods of computerised mineral prospectivity assessment.

Senior Scientist Johanna Torppa - GTK



Johanna Torppa graduated and gained her Ph.D. in Astronomy at the University of Helsinki Department of Physics, Finland. She has been working at the Geological Survey of Finland (GTK) since 2009 in, e.g., mineral exploration, peat inventory and biogeochemistry related projects. Her expertise is in applying analytical and numerical modelling methods to data from different sources and integration of these data. During the workshop, she will discuss and demonstrate the use of mineral prospectivity mapping tools in GIS.

Friday, May 21, 2021 – Time to be arranged on the base of the number of presenting participants

Session 4: Case studies presented by the workshop participants.

Moderator: res. prof. Molnàr Ferenc -GTK

**We reserve the right to make minor changes in the program.*

Session 4

Session 3