Day 1- Clustering event: 17 September (13:00 – 17:30)

Introduction

13:00 Welcome and opening remarks by Arnoldas Milukas – EASME, European Commission
13:05 “Introduction to the EU challenges on mineral exploration and its importance for the society” by Gerardo Herrera – DG GROW, European Commission
13:15 “Mineral exploration in the Horizon programme” by Jonas Hedberg – EASME, European Commission

Session 1: Societal challenge 5 – Raw Materials

13:25 Exploration of the Gerolekas bauxite mining site using passive geophysical methods - H2020 Smart Exploration project
13:40 The Development of Reference Sites for Mineral Exploration under Tec-Soc-Env Conditions - H2020 INFACT project
13:55 Seismic imaging at a mineral-deposit scale using high-frequency surface waves (0.5–24 Hz) in ambient noise wavefield - H2020 PACIFIC project
14:10 Innovative Exploration Concepts and Technologies - H2020 NEXT Project
14:25 Increasing exploration efficiency with SOLSA Expert System - H2020 SOLSA project

Session 2: ERA-NET Cofund on Raw Materials (ERA-MIN 2)

14:40 Advanced Magnetic Full Tensor Gradiometer - AMTEG project
14:55 LIGHTS (Lightweight Integrated Ground and Airborne Hyperspectral Topological Solution) project

15:05 Interactive Q&A: Sessions 1 & 2

15:30- Coffee break

Session 3: European Institute of Innovation and Technology (EIT) Raw Materials

15:50 ANCORELOG (Analytical Core Logging System) project
16:05 Seismic Imaging Schemes for Mineral Exploration: The SIT4ME view
16:20 A game changing exploration technology for underwater environments - H2020 UNEXMIN and EIT UNEXUP projects
16:35 Evaluating the correlation between ground information and satellite spectral data by geostatistical tools - COP-Piles project

Session 4: European Geological Surveys Research Area (GeoERA) – Raw Materials
Day 2 - Open call event: 18 September (09:00 – 13:00)

Introduction
09:00 Welcome and opening remarks by Marcin Sadowski – EASME, European Commission

Session 1: Oral presentations (‘15 min e-talks’)

Topic 1: Mineral mapping
09:05 Assisted processing of geological data with Deep Learning technologies: levers to optimize mineral exploration workflows? Antoine Bouziat
09:20 Semi-automated rapid targeting of potential mineral deposits in an Alpine setting: the hard rock aggregates example Lukas Nibourel

Topic 2: Software
09:35 Progress towards the development of a sulfide targeting tool for mineral exploration under cover Simon Richards
09:50 A numerical toolbox to calculate the seismic properties of micro-sized isotropic and anisotropic minerals Mohsen Bazargan

Topic 3: Geophysics
10:05 Exploration capabilities of airborne broadband natural electromagnetic fields measurements Alexander Prikhodko
10:20 BEM, Broadband Electromagnetic Smart Method, phenomenology, theory, applications Ali Bostani
10:35 Interactive Q&A: Session 1 and panel discussion

11:00 - Coffee break

Session 2: Poster presentations (‘rapid fire talks’)

Topic 1: Mineral mapping
11:20 Prospectivity mapping of critical raw material at the continental scale - a part of the FRAME project Martiya Sadeghi
11:30 Screening critical raw materials from exploration to (post)beneficiation using LIBS: first glance at project LIBS-SCReeN Sophie Verheyden
11:35 Comparing sulfide trace elements and sulfur isotopes of Au-only and atypical orogenic mineralization from northern Finland Mikael Vasilopoulos
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<tr>
<th>Time</th>
<th>Topic 2: Software</th>
<th>Presenter</th>
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<tr>
<td>11:40</td>
<td>Integrated 3D Modelling of Variable Magnetic Remanence Fields</td>
<td>Michael Morse</td>
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<td><strong>Topic 3: Geophysics</strong></td>
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<td>11:45</td>
<td>Developments in airborne geophysics, with particular reference to European and EU-funded projects</td>
<td>Tim Archer</td>
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<td>11:50</td>
<td>Target generations using constrained 3D gravity inversion and innovative in-mine-surface seismic surveys, Neves-Corvo, Portugal</td>
<td>Joao Carvalho</td>
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<td>11:55</td>
<td>A tailored workflow for advanced high-resolution seismic imaging of mineral exploration targets</td>
<td>Stefan Buske</td>
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<td>12:00</td>
<td>Technology watch of airborne mineral exploration methods</td>
<td>Stephane Ruiz-Coupeau</td>
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<td>12:05</td>
<td>Drones: The New Normal in Geophysical Mapping</td>
<td>Ronald Bell</td>
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<td><strong>Topic 4: Mineral assessment</strong></td>
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<td>12:10</td>
<td>Assessment of Critical Raw Materials content in Phosphate mineralizations: an objective of the FRAME project</td>
<td>Sophie Decrée</td>
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<td>12:15</td>
<td>Raman Spectroscopy as a tool for identification and valorisation assessment of critical raw materials: Graphite case</td>
<td>Marta Alonso Fernández</td>
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<td>12:20</td>
<td>Multisensor drill core logging integrating XRF and SWIR sensors to support machine learning</td>
<td>Pedro Simoes Mendes</td>
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<td><strong>Topic 5: Sustainability</strong></td>
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<td>12:25</td>
<td>A European Perspective on Evolving Standards for Public Reporting on Mineral Exploration Results</td>
<td>Edmund Sides</td>
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<td>12:30</td>
<td>Interactive Q&amp;A: Session 2, panel discussion and conclusion</td>
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<td>12:55</td>
<td>Wrap-up of the day and closing remarks by Véronique Woulé Eboungué – EASME, European Commission</td>
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*13:00 - Closure of the symposium*