

Mineral Exploration Symposium 2020
17-18 September 2020

To be moderated by :

Caroline Le Turdu (*Schlumberger*) and Jean-Jacques Biteau (*Total Professor Associate*)

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	George Apostolopoulos
13:40	The Development of Reference Sites for Mineral Exploration under Tec-Soc-Env Conditions - H2020 INFACT project	Michaela Kesselring
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	Yihe Xu
14:10	Innovative Exploration Concepts and Technologies - H2020 NEXT Project	Vesa Nykänen
14:25	Increasing exploration efficiency with SOLSA Expert System - H2020 SOLSA project	Monique Le Guen
Session 2: ERA-NET Cofund on Raw Materials (ERA-MIN 2)		
14:40	Advanced Magnetic Full Tensor Gradiometer - AMTEG project	Matthias Meyer
14:55	LIGHTS (Lightweight Integrated Ground and Airborne Hyperspectral Topological Solution) project	Antoine Petrelli
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	Carlos García Piña
16:05	Seismic Imaging Schemes for Mineral Exploration: The SIT4ME view	Ramon Carbonell
16:20	A game changing exploration technology for underwater environments - H2020 UNEXMIN and EIT UNEXUP projects	Márcio Pinto
16:35	Evaluating the correlation between ground information and satellite spectral data by geostatistical tools - COP-Piles project	Roberto Bruno
Session 4: European Geological Surveys Research Area (GeoERA) – Raw Materials		

16:50	Mineral Prospectivity Mapping for energy critical elements in Europe: the Cell Based Association approach - FRAME project	Guillaume Bertrand
17:05	Interactive Q&A: Sessions 3 & 4, and conclusion	
17:25	Wrap-up of the day by Véronique Woulé Ebongué – EASME, European Commission	
17:30 - Closure of the clustering event		

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')				
<i>Topic 1: Mineral mapping</i>				
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		
<i>Topic 2: Software</i>				
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		
<i>Topic 3: Geophysics</i>				
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		
11:25	Integrated Studies Intrigue to Mineral Prospectivity. Applicability to Kikombo, Dodoma, Tanzania	Godfrey Mwendenusu		
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		

<i>Topic 2: Software</i>		
11:40	Integrated 3D Modelling of Variable Magnetic Remanence Fields	Michael Morse
<i>Topic 3: Geophysics</i>		
11:45	Developments in airborne geophysics, with particular reference to European and EU-funded projects	Tim Archer
11:50	Target generations using constrained 3D gravity inversion and innovative in-mine-surface seismic surveys, Neves-Corvo, Portugal	Joao Carvalho
11:55	A tailored workflow for advanced high-resolution seismic imaging of mineral exploration targets	Stefan Buske
12:00	Technology watch of airborne mineral exploration methods	Stephane Ruiz-Coupeau
12:05	Drones: The New Normal in Geophysical Mapping	Ronald Bell
<i>Topic 4: Mineral assessment</i>		
12:10	Assessment of Critical Raw Materials content in Phosphate mineralizations: an objective of the FRAME project	Sophie Decréé
12:15	Raman Spectroscopy as a tool for identification and valorisation assessment of critical raw materials: Graphite case	Marta Alonso Fernández
12:20	Multisensor drill core logging integrating XRF and SWIR sensors to support machine learning	Pedro Simoes Mendes
<i>Topic 5: Sustainability</i>		
12:25	A European Perspective on Evolving Standards for Public Reporting on Mineral Exploration Results	Edmund Sides
12:30	Interactive Q&A: Session 2, panel discussion and conclusion	
12:55	Wrap-up of the day and closing remarks by Véronique Woulé Ebongué – EASME, European Commission	
<i>13:00 - Closure of the symposium</i>		