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)

Introdu	ction			
13:00	Welcome and opening remarks by Marcin Sadowski – 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 Mate	rials		
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')				
Topic 1: Mineral mapping				
09:05	Assisted processing of geological data with Deep Learning	Antoine Bouziat		
05.05	technologies: levers to optimize mineral exploration workflows?	Antonic 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 microsized 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		
11:25	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		
	Topic 2: Software			
11:40	Integrated 3D Modelling of Variable Magnetic Remanence Fields	Michael Morse		
	Topic 3: Geophysics			
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		
Topic 4: Mineral assessment				
12:10	Assessment of Critical Raw Materials content in Phosphate mineralizations: an objective of the FRAME project	Sophie Decrée		

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		
Topic 5: Sustainability				
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				
13:00 - Closure of the symposium				