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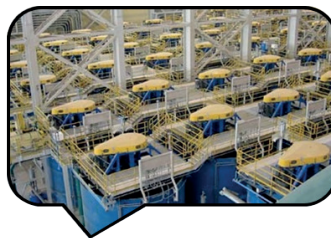
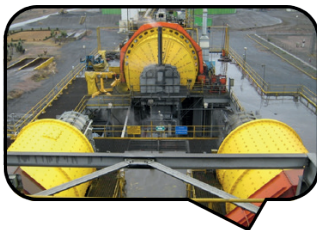
**MINERAL PROCESSING TECHNIQUES FOR  
UNLOCKING PRIMARY LOW GRADE  
COMPLEX ORES VALUE**

**6 - 7 JUNE 2017  
NANCY - FRANCE**





# MINPRO



## MINERAL PROCESSING TECHNIQUES FOR UNLOCKING PRIMARY LOW GRADE COMPLEX ORES VALUE

### SPECIFIC CHALLENGE

European raw materials reserves are becoming more complex, lower grade and their mineralogical composition is likely to vary with time. Hence, innovating processing and refining technologies have a key role in boosting the recovery of valuable minerals while minimising processing costs. This match-making event aims at discussing current and emerging challenges faced by European mineral processing industries around three major topics.

### SCOPE OF TOPICS

#### Innovative equipment

The beneficiation of low grade deposits requires processing of huge amounts of rock. Beyond high performance requirements, such energy consuming processes are a challenge in terms of energy management. The topic "Innovative equipment" will cover advances in new comminution and separation processes development.

#### Process modelling

Low grade and complex ore mining is a near-future perspective for a large number of operations with ore feed grade and mineralogy varying along time. The main challenge nowadays is to achieve valuable mineral liberation and separation while limiting energy consuming processing steps. This topic aims at presenting mineralogical characterization as a key controlling parameter for process simulation in the aim of unlocking strategic metals and new deposits.

#### Hydrometallurgy

Present challenge is to develop adaptive processes enabling valuable metal extraction from deposits with poor mineralogical continuity. Unlike pyrometallurgy, hydrometallurgy represents a real benefit to low grade and varying ore treatment. Its limited environmental impact and controlled by-product generation help implementation of this process in sensitive environment.

# CONFERENCE AGENDA

Tuesday, 6th of June	
11:00	Registration
12:00	Networking lunch
13:00	Opening plenary ceremony: MinPro challenges L. Filippov (GeoRessources-Université de Lorraine)
	<b>INNOVATIVE EQUIPMENT</b>
13:15	Ultra-fine grinding versus energy costs U. Peuker (Freiberg University)
13:35	Case study: High-voltage pulses treatment for low-grade skarn ore comminution K. Bru (BRGM)
13:45	Discussion
14:00	Enhanced fine and coarse particles flotation performance D. Fornasiero (University of South Australia)
14:20	Case study: Process improvement in ArcelorMittal's Bosnia operation M. Gotelip (ArcelorMittal)
14:30	Discussion
	<b>PROCESS MODELLING</b>
14:50	Automated mineralogy for process modeling and refinement of processing results T. Wallmach (Eramet)
15:10	Case study: Geometallurgical approach for economic evaluation Q. Dehaine (University of Exeter - Université de Lorraine)
15:20	Discussion
	<b>HYDROMETALLURGY</b>
15:30	Tools for hydrometallurgical processes modelling S. Bourg (CEA)
15:50	Case study: Contribution of circuit configuration modelling in increasing a solvent plant capacity J. Thiry (Areva)
16:00	Discussion
	Afternoon tea
16:45	Wrap-up & Networking
19:00	Evening reception Brasserie Flo Excelsior
Wednesday, 7th of June	
8:30	Registration
8:45	Project pitches (5' by participant)
	Morning tea
10:30	Match-making
11:30	Wrap-up and closure ceremony P. Mutzenhardt, President and F. Villiéras, Vice-President (Université de Lorraine)
12:00	Networking lunch