CALL FOR PAPERS

The Energy, Mineral and Resource-Recovery Nexus: Sustainability and Engineering

Goldschmidt 2017 (Theme 18, Session 18B)

Paris, France

August 13 – August 18, 2017

Abstract Deadline: April 1, 2017

Mineral resources are currently in the center of environmental and geopolitical debates as fossil fuels have been for decades. Recent stresses in the global markets of technology metals have brought the supply and availability of critical materials to the forefront of the sustainability debate and recent agenda. Critical materials, including but not limited to rare-earth elements, are essential components of modern technologies, including those in renewable energy (e.g. permanent magnets for wind turbines), green technologies (e.g. electric vehicles, light emitting diodes), and more traditional sectors such as chemical catalysis, metallurgy and high performance alloys. The goal of this session is to highlight the dependence of the energy technologies of the new era on critical materials and minerals, and highlight the necessity for sustainable resource development and recovery. Recent progress in our understanding of the geochemical processes in natural systems containing critical materials, new developments on their coordination chemistry (e.g. separation and extraction) and new engineering strategies for their recovery is expected to inform the design of new strategies for sustainable resource development and recovery. We seek papers that provide broader economic, environmental, social and supply-chain perspectives on critical materials and emerging energy technologies. We also seek papers giving research results on recovery from unconventional sources such as geothermal fluids. The session will set current geochemical research in context and help formulate future directions.

For information about abstract submission, please visit [https://goldschmidt.info/2017/abstracts](https://goldschmidt.info/2017/abstracts)
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