http://www.ecometals.org/partners/brgm-bureau-recherche-de-geologique-et-minieres.html

FOSSIL ORGANIC MATTER IN KUPFERSCHIEFER: FROM ORE DEPOSIT TO BIOLEACHING

POST-DOC POSITION AT GEORESSOURCES
Nancy, France
Opens from February 2015
18 month duration

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In Europe, most of the primary resources with high or moderate grade of metals, reasonable accessibility and that are easy to process are exhausted. As a consequence, primary resources still available for exploitation are more complex showing a sophisticated mineralization (e.g. polymetallic, carbon rich), or a low metal content. On the other hand, it was demonstrated that wastes from the mining and mineral processing contain residual quantities of valuable metals.
In this context, **ECOMETALS is dedicated to innovative eco-efficient biohydrometallurgy process for the recovery of strategic and rare metals.** ECOMETALS is a research project developed in the frame of the ANR MATETPRO program involving 17 French and German research teams coordinated by HZDR/Germany and BRGM/France.

The goal of the post-doc project is to study the fossil organic matter contained within the ore prior and after the biohydrometallurgy treatments.

Two major topics will be investigated:

- the nature of the organic matter in the ore and its relationship to base as well as trace metals.
- the behavior of the organic matter in the biohydrometallurgy process. While ore processing is commonly optimized for the mineral load treatment, much progress has to be made in taking into account fossil organic matter which becomes a problem as its concentration increases in the ore.

Both aspects will require organic geochemistry as well as ore deposit geology considerations. The study is focusing on the Kupferschiefer which is a world-class giant sediment hosted ore deposit located in Germany and Poland. The ore is dominated bycopper as well as lead zinc base metals. But associated trace metals (Ag, Co, Au, PGE's,…) are of great interest. New data based on samples analysis and experimentation will be acquired. Specific organic geochemistry will be available at Georessources. The work will also benefit from the scientific and technical support of the consortium. Interactions within the Ecometals partners network will be essential.

Requirements: The candidates must hold a PhD and have experience among the topics of fossil organic matter and/or ore deposit geology/geochemistry. Analytical skills are required. Mastering of written and oral English is essential, including writing of international publications.

Procedure: At first stage, send a full CV and letter of interest. After pre-selection of candidates additional information will be asked for the final selection.

Recruitement:
The post-doc will be recruited by Georessources.
Contract type: CNRS post-doctoral researcher.
Gross salary: 2500euros/month.