

ERAMET-CENTRAL SUPELEC-GEOPS-Université Paris Sud-Université Paris Saclay, France



Postdoc fellowship

Signal and Image processing, Classification and interpretation of data from an on-line-on-mine-real time drill core scanner system

Context

This project is part of the SOLSA project (www.solসা-mining.eu) financed by the EU (2016-2020) (H2020 Raw Material program). The goal of SOLSA is developing an innovative expert system comprising drilling and on-line-on-mine-real-time drill core analyses for more efficient exploration, mining and processing. Nine academic and industrial partners from four countries (France, The Netherlands, Italy, Lithuania) are involved.

The analytical system comprises a fast scanning system (RGB camera-profilometer-hyperspectral cameras)

Your tasks :

- contribution to the instrumental design of the scanner expert system
 - Classification and Interpretation of spectral signals of each instrument (based on existing mineral libraries and mineral spectra obtained from conventional laboratory analyses).
 - Creation of a dataset in interaction with the international Crystallographic Open Database (COD) and mineralogist-crystallographers who perform conventional laboratory analyses.
 - interact with a research group for signal and image processing for mineral classification and identification.
 - work at the interface between academia, industrial research and private companies.
- Duration : 24 months
 - Salary: about 2600 €/month (*with access to the French medical insurance*)
 - Starting in October 2016.
 - Location:
Laboratoire des signaux et systèmes (LSS), Centrale-SUPELEC, Université Paris Saclay, 3 rue Joliot Curie, 91192 Gif sur Yvette, France

Your profile

You are a scientist/engineer (F/M) with recommendation, you just finished your PhD

Your research domain is related to

- Signal and Image Processing, Applied Mathematics, Computation and Simulation
- Classification, Pattern recognition, Perception, Cognition and Interaction
- Algorithmic, Programming, Software and Architecture
- Networks, Systems and Services, Distributed Computing
- Digital Earth

You are fluent in English and/or French languages, you like to communicate in an international transdisciplinary consortium.

Application : *Please send your CV and cover letter to*

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- *Prof. A. Mohammad Djafari,
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