FULL-TIME ACADEMIC POSITION IN GEOSCIENCES

FACULTY OF SCIENCES

Reference: 2018/A001
Application deadline: January, 25th 2018
Start date: 01/10/2018

Job description

The Department ‘Geosciences, Environment & Society’ (DGES) of the Université Libre de Bruxelles (ULB) (http://www.ulb.ac.be/facs/sciences/dges/index.html) invites applications for a full-time faculty position in Geochemistry of extreme environments starting October 1st, 2018. The selected candidate is expected to develop a research of excellence and contribute to the teaching programme in the Bachelor and Master in Geology, and possibly the Master in Environmental Sciences.

Within DGES, the Institute of Geosciences (IGEOS) is articulated around 3 research groups: G-Time (http://gtime.ulb.ac.be/), Biogeosys (http://www.biogeomod.net/) and Glaciology (http://dev.ulb.ac.be/glaciol/index.htm). Together, they encompass a wide range of expertise in analysing, monitoring and modelling geological processes on Earth and the Solar System, biogeochemical cycles and cryosphere dynamics and their interactions with the Climate.

The successful candidate will join the ‘Laboratoire G-Time’, which has a long-track record of excellence in isotope geochemistry. He/she is expected to contribute to the synergy with the members of the G-Time research group and collaborate to the development of interdisciplinary research initiatives with the other two research groups at the Institute of Geosciences.

In terms of facilities, ULB (and the nearby Vrije Universiteit Brussels - especially the BIGE ULB/VUB joint venture analytical platform) offers easy access to a wide range of modern, cutting-edge analytical platforms, technical and computational resources.

The successful candidate will be invited to apply for a grant from the European Research Council (ERC) and for any sources of outside funding (FNRS, Europe, Regional funds, etc...), to develop her/his research. The ULB Research Department will assist with applications.

The Department has the ambition of developing a strong interdisciplinary research devoted to the geochemistry of extreme environments, with a strong focus on hydrothermal systems. More specifically, we seek candidates who use field-based observations, analytical, techniques (such as electron microscopy, X-ray diffraction and/or mass spectrometry, ...), experimental and/or theoretical approaches to characterize geochemical conditions in extreme environments such as volcanic systems, terrestrial and marine hydrothermal settings, ore deposits, the deep subsurface, the oceanic crust or cold seeps. A multidisciplinary approach is expected within the collaborative framework of the IGEOS by contributing to research programs dealing with the complex interplay between extreme geochemical conditions and life.
The selected candidate will take part in teaching activities in the Bachelor and Master programs by ensuring both basic courses in Earth Sciences and by developing new high-level courses in the above-mentioned areas. The goal is to design an innovative teaching program related to fluid-rock interaction processes in extreme environments on Earth. More precisely, the candidate will mainly dedicate his/her courses to a better understanding of the hydrothermal processes and systems through a geochemical approach, using theoretical and analytical tools, but she/he could also contribute to courses dedicated to earth materials, ore deposits, geothermal exploration and conceptual modelling. The willingness and abilities to contribute to geosciences/geology field courses would be seen as an important asset. The teaching will progressively increase her/his teaching activities to reach a level comparable to that of colleagues within the Faculty (about 120 hours/year). For candidates not fluent in French, a temporary period of teaching in English may be granted during 3 years.

**Area of Research:**

Geochemistry of extreme environments (in the field of hydrothermal fluid studies)

**Educational and scientific goals:**

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**Courses covered at the time of recruitment:**

- Bachelor level (3rd year of Bachelor): Mineralogy (2019-20).
- Bachelor level (3nd year of Bachelor): Crystallochemistry / Crystallography (2020-21).
- Master level: One Master level course in the research area of the applicant (2018-19).
- Contributions to geology field courses organized at the Bachelor and/or Master levels.

**Note:** Teaching duties may be reviewed periodically and are subject to modification over time.
Qualifications required

PhD Degree (with doctoral thesis) in Science - in the field of Geology / Earth Sciences.

Skills required

- Significant postdoctoral experience: A stay abroad of a minimum of one full academic year or, alternatively, a maximum of 4 academic stays adding up to a minimum of 12 months in an academic institution other than the one in which the graduate studies were undertaken is mandatory.
- Excellent independent & international scientific track record.
- Exchange periods outside of the applicants’ home institution (during or after their PhD) will be taken into consideration when evaluating applications.
- For non-French speaking natives, a learning period will be granted, but candidates must be capable of teaching in French (level C1 is required) at the end of the third year following their appointment.
- The applicant must hold a PhD degree in Geological Sciences. The vacant position is intended for candidates with a well-established expertise in geochemistry of extreme environments. It is expected that the successful candidate will develop a cutting-edge, innovative and interdisciplinary research devoted to the geochemical studies of extreme environments focusing on hydrothermal fluids, at the interface between lithosphere, hydrosphere and biosphere. We are looking for dynamic and motivated applicants that have also demonstrated an ability to teach and mentor and are committed to teaching excellence.

Interested?

For more information, please contact Prof. Tison, Jean-Louis (telephone: +32 2 650.22.25 - E-mail: jtison@ulb.ac.be).

Applications must be sent by e-mail to the rectorate of the Université Libre de Bruxelles (recteur@ulb.ac.be) and to the faculty deanship (Annick.gerlache@ulb.ac.be).

They must include the following:
- an application letter
- a Curriculum vitae including a list of publications (a template can be downloaded at http://www.ulb.ac.be/tools/CV-type.rtf)
- any relevant documents showing 4 years of research experience
- a 7,000-character report (4 pages) presenting the applicant’s research activities and a research project, including how these will integrate into ULB’s research teams
- a teaching dossier including a maximum 7,000-character report (4 pages) on the applicant’s previous teaching activities and a teaching project for the first five years in this position; these must be relevant to the faculty and to the teaching profiles for the programmes to which the applicant is to contribute
- a note on the applicant’s international achievements and projects (no more than 4 pages)
- the names and e-mail addresses of five references (with equal gender representation) who may be contacted by those in charge of evaluating applications. These references should not have conflicts of interest.

By sending in their application, applicants acknowledge they have read and understood the additional information and the regulations relevant to research staff, available at the following address http://www.ulb.ac.be/emploi/academique.html.
n° de vacance : 2018/A001
Domaine : Sciences
Discipline : Géologie
Poste(s) au cadre : 17-B-PRO-001 (F) (1.00 ETP) – SAP 41733010
Références CoA : 23/10/2017 pt. III.03
Rattachement Enseignement : Service Enseignement Sciences géologiques (FO030)
Rattachement Recherche : Géochimie : traçage isotopique, minéral et élémentaire (G-TIME – FZ030)

EURAXESS SPECIFIC INFORMATION

Main Research Field : Environmental Sciences
Sub Research Field : Earth Sciences
Required educational level : PhD Degree in Environmental Sciences - Sub-Field in Earth Science
Required Languages :
   Français : good
   English : good
Type of contract : temporary
Hours per week : 38
Required Research Experiences : in Earth Science (16.1.)
Researcher profile : Experienced researcher - R3 (4 - 10 years) or More experienced researcher (> 10 years)
Additional requirements: PhD degree in the field of Geology, See Description of Scientific and Pedagogical Objectives for detailed requirements, with a Postdoctoral experience of minimum one year