



Within a joint appointment scheme, the University Bourgogne Franche-Comté (UBFC, [www.ubfc.fr](http://www.ubfc.fr)) is recruiting a high reputation senior researcher in the field of geomicrobiology of sedimentary systems, specifically in the laboratory Biogeosciences (<http://biogeosciences.u-bourgogne.fr/en/>), hosted by Université de Bourgogne, and located in Dijon (France). This position is supported by the French “Investissements d’Avenir” program, project ISITE-BFC.

We encourage applications of well-established scientists investigating this field of research owning a PhD degree, leading a prestigious research group in another university or in a research organization, demonstrating an outstanding record of publications and the proven ability to manage a research program involving a large group of researchers.

During a period of three years, the successful applicant will be offered a joint appointment position to be negotiated with his home institution. During this period, she/he will manage a 600 k€ grant (including her/his joint appointment salary and research, accommodation and travel budget) for a period of three years. The salary will be negotiated on the basis of scientific reputation and experience. It integrates a benefit package including retirement, health insurance, annual and sick leave. During the same period, the successful candidate will be committed to spend at least 2 months per year to coach and manage a research group in the above-mentioned laboratory. More specifically, during this period, she/he will be also committed to coach every year at least one researcher of the above-mentioned laboratory to apply for an European Research Council (ERC) grant. At mid-term of the three years period, a go/no go evaluation will assess the effectiveness of the joint appointment.

UBFC is an equal opportunity employer.

#### ***About the hosting research team***

The Biogeosciences Research Unit is a research community currently comprising more than 100 members, including full-time researchers from the CNRS (French National Centre for Scientific Research), Assistant Professors and Professors from the University of Burgundy and from the EPHE (Ecole Pratique de Hautes Etudes), post-doctoral fellows, doctoral students and technical staff. Biogeosciences is a multi- and inter-disciplinary research unit dedicated to the study of biosphere/geosphere interactions and to evolutionary biology. The major

scientific questions addressed are: How do biological processes interact with geological, environmental and climatic processes? What are the relevant spatial and temporal scales at which these processes operate? These questions are studied with a wide array of extant and fossil organisms and at levels of biological integration ranging from the individual to the entire biosphere. The laboratory is built around five interacting research teams whose scientific activities are deeply anchored into the fields of sedimentology, microbiology, environmental sciences, climatology, palaeontology and evolutionary ecology/biology.

### ***Targeted profile***

Microbialite ecosystems have existed for billions of years and can provide insight in the past functioning of our planet. Specifically, these model ecosystems can provide information pertaining the main natural mechanisms controlling carbon dioxide levels in the atmosphere as well as insight in major structural and ecological processes in modern and past ecosystems. Moreover, microbialites deposits are characteristic reservoirs of multiple recent oil discoveries (e.g., subsalt reservoirs) revealing their global scale and economic importance. Finally, microbialite research plays a pivotal role in the emerging field of astrobiology. The coaching project shall be highly ambitious and shall target the unprecedented integration of interdisciplinary information at increasing spatial and temporal scales. The experience and expertise of an international coach shall provide the opportunity to set up a long-term scientific group with a top expertise in the large and competitive field of geobiology. Specifically, the coach shall provide streamlines to increase the impact potential of recent recruitments in the hosting team. Indeed, several researchers within the Biogeosciences Research Unit conduct research on fossil and modern microbialites with a broad focus on sedimentology, (bio)geochemistry, microbiology, molecular biology, geomicrobiology, and mineralogy. Their main objectives are: (1) to refine the understanding of microbial mat and microbialite formation in modern sedimentary environments, using analogical and natural models; (2) to better understand the physical and biological factors involved in their preservation; (3) to highlight the importance of microbial structures over geological times (e.g. fossilization processes, geochemical cycles, ...)

**Key words :** Ecophysiology of photo- and chemolithoautotrophic bacteria, exopolymeric substances, and microbial biofilms; Geomicrobiology of sedimentary systems; Microbe-mineral interactions in microbial mats; Biogeochemistry of carbonates and specific elements; Quorum sensing (microbial communication); Atmospheric biogeochemistry; Astrobiology.

Please follow this link [International Coach Fellowship](#) to download the application form to be filled and returned by email to [isite@ubfc.fr](mailto:isite@ubfc.fr), before .