

JOB DESCRIPTION

A full-time academic position is available in the field of biochemistry within the Department of Biology of the Faculty of Sciences at the University of Mons (BELGIUM), to be filled no earlier than **February 1, 2027**. The successful candidate will initially be appointed to a three-year fixed-term contract, potentially renewable for two additional years, and will be responsible for establishing and leading a new experimental laboratory within the Department of Biology. A permanent appointment may be granted during or at the end of this period, in accordance with UMONS regulations.

The position involves teaching, research, and service to the university community and society. Biochemistry, understood in the broadest sense (theoretical biochemistry, the study of structure–function relationships in macromolecules), is one of the pillars of biological sciences education at UMONS, providing the essential foundations for understanding biological phenomena. Teaching activities will focus primarily on general biochemistry, structural and functional biology, and theoretical enzymology, while research activities will prioritize biocatalysis in the broad sense (both fundamental and applied).

TEACHING ACTIVITIES

The teaching responsibilities to be assumed correspond, at this stage, to those currently assigned to Prof. R. Wattiez, who will assist with the transition and provide support until his retirement (no earlier than the end of 2029). This teaching load may change depending on curriculum modifications and teaching assignments decided by the Department of Biology Council.

As a general guide, the teaching load will include:

- US-B2-SCBIOL-002-M, US-B2-SCCHIM-002-M: General Biochemistry (30 hours, lab 30 hours) – Bachelor of Biological Sciences (Mons), Bachelor of Chemical Sciences (Mons).
- US-B3-SCBIOL-002-M, US-B3-SCCHIM-002-M: Metabolic Biochemistry (30 hours, lab 30 hours) – Bachelor of Biological Sciences (Mons), Bachelor of Chemical Sciences (Mons).
- S-BIOG-057: Structural and Functional Proteomics (30 hours) – Master's in Biomedical Sciences (Advanced Track, Faculty of Medicine, Pharmacy, and Biomedical Sciences), Master's in Biochemistry and Molecular and Cellular Biology, Master's in Organismal Biology and Ecology (Faculty of Sciences, Mons)

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- S-CHIM-053: Macromolecular Biochemistry (15 hours) – Master's in Chemical Sciences (Faculty of Sciences, Mons).
- S-CHIM-076: Co- and Post-Translational Modifications of Proteins (15 hours) – Master's in Chemical Sciences, Advanced Track (Faculty of Sciences, Mons).
- S-BIOG-078: Integrated Biology (Genomics, Proteomics, Metabonomics) (15 hours) – Master's in Biomedical Sciences (Advanced Track, Faculty of Medicine, Pharmacy, and Biomedical Sciences) and Master's in Biochemistry and Molecular and Cellular Biology (Advanced Track, Faculty of Sciences, Mons).
- S-BIOG-080: Biotechnology of Biological Polymers (15 hours) – Master's in Biochemistry and Molecular and Cellular Biology, Advanced Track (Faculty of Sciences, Mons).
- S-BIOG-561: Analytical Methods Applied to Living Organisms – Master's in Biochemistry and Molecular and Cellular Biology (Faculty of Sciences, Mons).

This arrangement will allow the future incumbent to devote a full time to launching and structuring their research group, as well as to establishing research projects on a European scale for at least the first three years. Starting in the first year, the successful candidate will nevertheless be asked to propose one or two Master's 1 courses (in English) in their area of specialization (e.g., biocatalysis, enzymology, or related fields), to enrich the Faculty's international curriculum.

The hours indicated above correspond to time spent with students; the total teaching load may reach a maximum of 250 hours, including laboratory sessions. Except in a few cases, these sessions will be supervised by other members of the teaching team, while the successful candidate will be responsible for coordinating activities and supervising projects and Master's theses.

RESEARCH ACTIVITIES

The successful candidate will establish a new experimental research laboratory in fundamental and applied biochemistry, with a strong focus on biocatalysis, in line with European priorities in sustainable chemistry, biotechnology, and environmental biology. The goal is to position this laboratory as a leading international player through the development of biocatalysts and enzymatic processes that address the challenges of environmental transition, the circular economy, and the production of high-value-added molecules.

The anticipated scientific project will combine experimental approaches and computational methods for the study, engineering, and optimization of enzymes, integrating advanced enzyme kinetics, molecular biology, synthetic biology, and the analysis of structure-activity relationships at the macromolecular level. Possible research topics include, in particular: a detailed understanding of enzymes, the creation of new

catalytic functions, and the integration of computational and AI approaches to link sequence, structure, and activity (for example, for enzyme design, reactivity prediction, or the analysis of reaction pathways); the discovery and expansion of new enzymatic reactivities; the development of continuous-flow (chemo)enzymatic cascades; and the development of biocatalysts for the formation of C–C and N–N bonds or "new-to-nature" reactions.

The successful candidate will be encouraged to join European biocatalysis networks, participate in Marie Skłodowska-Curie Actions and FEBS/ESAB initiatives, coordinate or participate in collaborative projects (Horizon Europe, MSCA Doctoral Networks, academia–industry partnerships), and contribute to training the next generation of researchers in biocatalysis. This dynamic of international cooperation will serve as a key driver for enhancing the visibility and competitiveness of the research group and UMONS in this rapidly growing strategic field.

The laboratory's development must be integrated into UMONS's research ecosystem and, in particular, into the Department of Biology, which includes notably the Zoology Laboratory, the Proteomics and Microbiology Laboratory, the Marine Biology and Biomimicry Laboratory, the Cell Biology Laboratory, the Ecology of Interactions and Global Change Laboratory, and the Digital Ecology Laboratory. Given the targeted research areas, close interaction with the Department of Chemistry is expected, as well as collaboration with the Materia Nova research center, and particularly its biotechnology unit for more applied aspects.

Starting in the 2028–2029 academic year, a full-time research assistant or technician may be assigned to support the lab. The candidate will also be able to draw on brand-new research infrastructure that will be made available within the new BSM building.

SERVICE TO THE COMMUNITY

As a member of the academic staff, the selected candidate will actively participate in the institutional operations of the Department of Biology, the Institute for Biosciences Research, and the Faculty of Sciences. This participation will include, among other things, serving on committees and panels, and taking part in science-outreach activities and socio-economic development initiatives.

REQUIRED PROFILE AND SKILLS

- Hold a Ph.D. in the sciences or in a field closely related to the planned research activities.
- Have proven international research experience and a track record of high-level publications in fields related to biocatalysis, biochemistry, or related disciplines.
- Demonstrate strong integration into the international scientific community (networks, collaborations,

projects, invitations). Experience with European programs such as Marie Curie or ERC grants is an asset.

- Be able to teach in French or English in the relevant fields (general biochemistry, enzymology, theoretical chemistry/physical chemistry).
- If not already proficient at the time of appointment, commit to achieving a level of French sufficient for teaching within a maximum of three years.
- Demonstrate excellent teaching skills and a strong interest in innovation in university education.
- Previous experience in teaching and/or supervising students is an asset.

APPLICATION PROCEDURE

Applications, specifying the position for which the candidate is applying, by mail to the Rector of the University of Mons, Place du Parc 20, 7000 Mons, and by email to secretariat.ca@umons.ac.be, **before 11th october 2026**. Applications must include the following documents:

- **A cover letter.**
- **A curriculum vitae, including an academic summary.**
- **Copies of diplomas and certificates.**
- **A research appendix, comprising: a description of past and ongoing research (max. 3 pages, including figures and references); and a research plan, including the strategy for integration within UMONS (max. 6 pages, including figures and references).**
- **A list of publications with a summary and justification of the five publications deemed most representative (max. 2 pages), together with PDF copies of these five most representative publications and of the ten most recent publications.**
- **A teaching appendix, comprising: a description of teaching and/or outreach experience (max. 2 pages); and a personal reflection on teaching structural and functional biochemistry (max. 2 pages).**
- **The names and contact information of three scientists whom the committee may contact for a confidential evaluation.**
- **A description of contributions to the community (max. 2 pages).**

Any requests for information may be directed to the Dean of the Faculty of Sciences (doyen.fs@umons.ac.be), **Prof. Ruddy Wattiez (ruddy.wattiez@umons.ac.be)**, and Prof. David GILLAN, Chair of the Department of Biology (david.gillan@umons.ac.be).

Applications that do not fully meet the requirements outlined in the complete job description may not be considered.

MONS CITY (Belgium)

Looking for a beautiful and welcoming place to call home? Discover Mons, a charming Belgian city full of history and character. Its cobbled streets, elegant old buildings, and picturesque squares make it a lovely place to explore. At its heart, the magnificent Grand-Place, surrounded by historic façades and inviting cafés, provides the perfect setting to meet friends or enjoy a sunny afternoon. Above the rooftops, the impressive belfry gives the city its distinctive skyline.

Named European Capital of Culture in 2015, Mons celebrates its artistic spirit and cultural heritage. It is a place where you can imagine not just visiting, but building a new life.

But Mons is more than a beautiful city: it is also a lively place to live. Its university community, museums, and cultural events bring people together and create opportunities to meet others. With green spaces to relax in and a city centre that is enjoyable to explore on foot, Mons combines the charm of a historic town with the energy of a university city. Whether you come for work, study, or a fresh start, Mons could soon feel like home!



The University of MONS : UMONS

Looking for a place where your ideas can grow and your work can make a difference? **Join the University of Mons (UMONS)**, a Belgian university that brings together research, innovation, and international collaboration. With ten research institutes connecting expertise across disciplines, UMONS offers a stimulating environment to develop ambitious projects and contribute to scientific progress.[W](#)

Innovation is at the heart of this environment. Through its close links with the **Initialis Science Park**, UMONS brings academic researchers, technology companies, and research centres together to turn ideas into practical applications. Research centres such as **Materia Nova**, specialising in innovative materials, sustainable polymers, and advanced surfaces, connect fundamental science with industrial development, creating opportunities to contribute to more sustainable technologies.

Working at UMONS also means joining a wider European academic community. As a founding member of **EUNICE, the European University for Customised Education**, UMONS belongs to an alliance of ten universities across Europe. Through shared educational activities and research initiatives, this alliance creates opportunities to exchange expertise, build international connections, and explore new perspectives across borders.

Whether you are beginning your career or bringing years of experience, come to UMONS to share your curiosity, develop your ideas, and contribute to projects that matter.

Build your future at UMONS!





New infrastructure and new lab

