



**Post-doc position 24 months**  
**International mobility**  
**University of Mons – UMONS**



Within the frame of a **Marie Curie action** of the European Union, the University of Mons - UMONS is seeking for highly motivated post-doctoral researchers for interdisciplinary projects. Within this frame, the laboratories *Chemistry of Novel Materials* and *Mechanobiology and Soft Matter* and are joining their forces to develop a cross-disciplinary research project on **novel DNA-templated materials for modulating cell mechanotransduction processes**. The fellowship is a prestigious EU funding scheme which supports mobility, career development and training in Europe and beyond. The fellowship offers a 12-24 months' highly competitive salary and research/training funds.

### **Applicants**

- any nationality, no age restriction, fluent in English
- must hold a PhD in chemistry, physical chemistry, or biochemistry at the call deadline (Feb. 2022)
- cannot have resided or carried out her/his main activity in Belgium for more than 12 months in the three years before the call deadline

### **Research project and research groups**

The aim of this multidisciplinary project is to design novel types of stimuli-responsive DNA-based materials (surfaces and/or hydrogels) to interrogate mechanotransduction pathways in living cells. The project will be co-supervised by Profs Mathieu Surin and Sylvain Gabriele. M. Surin's research deals with the design and characterization of bioinspired (nano)materials, such as DNA-templated supramolecular assemblies and sequence-defined macromolecules, with a particular emphasis on recognition, chirality, self-assembly, and cooperativity. S. Gabriele's research aims at understanding how physico-chemical properties of the cell microenvironment regulate cellular functions through mechanotransduction pathways, with a particular interest for cell migration, differentiation and neuronal networks.

### **Websites:**

Mathieu Surin : <http://morris.umons.ac.be/bio-inspired-chemistry>

Sylvain Gabriele : <http://www.umons.ac.be/influx/sgabriele>

### **Key publications from supervisors**

M. Surin et al. *Chemistry Open* 2020, 9, 480 (doi.org/10.1002/open.202000013)

M. Surin, *Nature Chemistry* 2021, 13, 817 (<https://doi.org/10.1038/s41557-021-00774-3>)

D. Mohammed et al. *Front. in Bioeng. Biotechnol.* 2019 (<https://doi.org/10.3389/fbioe.2019.00162>)

D. Mohammed et al. *Nature Physics* 2019, 15 858-866 (<https://doi.org/10.1038/s41567-019-0543-3>)

M. Leclercq et al. *ChemNanoMat* 2019, 5, 703 (doi.org/10.1002/cnma.201900022)

M. Luciano et al. *Nature Physics* 2021, in press (doi: 10.1038/s41567-021-01374-1)

### **How to apply ?**

Expression of interest must be submitted to Mathieu Surin ([mathieu.surin@umons.ac.be](mailto:mathieu.surin@umons.ac.be)) and Sylvain Gabriele ([sylvain.gabriele@umons.ac.be](mailto:sylvain.gabriele@umons.ac.be)) by Friday 31 December 2021. The email must include in a single pdf file:

- a full CV in English, including a full list of publications (max. two pages)
- names and emails of two academic referees
- a tentative research proposal (max. 4 pages with figures and references)
- a scanned copy of the PhD degree certificate
- a statement confirming that the candidate meets the eligibility criteria (described above)