



The Department of Nanobiotechnology, Institute of Biologically inspired materials is currently seeking a

## Postdoctoral Research Associate

(Reference code: 126)

Extent of employment: 40 Hours per Week  
Duration of employment: 01<sup>st</sup> of January 2017 to 31<sup>st</sup> of December 2022

Gross monthly salary and pay grade in terms of collective agreement for university staff (payable 14 times per year): B1 lit. b, € 3.590,70

### Responsibilities

- You will work in a postdoctoral position (university assistant) on exciting topics combining colloidal science and microbiology. The immediate project concerns the study of the colloidal forces that drive bacterial aggregation and early stage biofilm formation, primarily at oil interfaces. Familiarity with existing microbiology and colloidal techniques such as bacterial culture, optical microscopy and wettability measurements is a must for this research. However, a main part of the work is to apply and to develop new techniques to study the colloidal interactions of microbes with interfaces, in particular liquid interfaces, which relate to the wettability of single cells, as well as nanoparticle and polymer interactions with biofilms. Our lab has e.g. developed holographic and freeze-fracture electron microscopy to study colloidal properties and interactions, and you are expected to appropriately apply those to bacterial surface attachment and movement
- You are additionally expected to write research proposals to further expand this area within the institute
- The applicant is expected to co-supervise master and PhD students. You are also required to manage part of the institute and department infrastructure within your areas of expertise
- Assisting in teaching (up to 3h/week)
- The language at the work place is English, which is also possible for teaching assignments

### Required skills and qualifications

- The applicant must have a completed PhD within the area of proposed work, e.g. Microbiology / Biomaterials / Food science (biotechnology) / Colloidal science (Physics)
- A broad familiarity with the techniques you are expected to use
- The applicant is therefore required to have a strong background in (micro)biology/biotechnology with a good understanding of colloidal science/physics. Candidates that can document this combination are strongly preferred
- Good command of scientific writing in English

### Desirable skills and qualifications

- Applicants who have already worked on colloidal interactions of biological systems are of special interest
- Experience with optical and electron microscopy, cryo-preparation techniques, biofilm characterization pendant drop, contact angle and/or microfluidics is desired
- Experience of working in a multi-disciplinary laboratory and in multi-disciplinary research projects is of interest, since the position requires interaction with diverse disciplines within and outside the institute
- Experience in supervision or a suitable personality for supervision of master and PhD students is important
- Documented experience of high level scientific writing is a big plus
- Good presentation skills are expected

- The adaptable ability to co-manage projects is important
- High level of German language skills and good cultural adaptability are advantages
- On the personal level social competence, an open and inclusive personality, independent thinking and attitude are all useful qualities

Applications can be submitted until: 25<sup>th</sup> of November 2016

University of Natural Resources and Life Sciences Vienna seeks to increase the number of its female faculty and staff members. Therefore qualified women are strongly encouraged to apply. In case of equal qualification, female candidates will be given preference unless reasons specific to an individual male candidate tilt the balance in his favour.

Please send your job application to Personnel department, University of Natural Resources and Life Sciences, 1190 Vienna, Peter-Jordan-Straße 70; E-Mail: [kerstin.buchmueller@boku.ac.at](mailto:kerstin.buchmueller@boku.ac.at). (**Reference code: 126**)

We regret that we cannot reimburse applicants travel and lodging expenses incurred as part of the selection and hiring process.

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