

Postdoctoral Position in Development of Active Surfaces for Biosensing Applications

We invite candidates to submit applications for a **PostDoc position** in the biointerfaces-oriented group of Professor C. Palivan, Department of Chemistry, at the **University of Basel, Switzerland**. The position is for one year, with possible prolongation up to two years.

Job description:

The project has as aim the design and development of active surfaces based on synthetic planar membranes combined with biomolecules serving as "reporting" compounds. Such active surfaces have high potential for biosensing applications in medicine, water purification or electronics. First, amphiphilic block copolymers will generate vesicles by microfluidics that will further be fused on a surface to obtain homogeneous planar membranes on solid support. Then, biomolecules will be inserted or attached and their functionality in artificial environment will be evaluated. As this will be an interdisciplinary project, the PostDoc will combine microfluidics techniques with colloidal chemistry and bio-assays serving to obtain information regarding the overall functionality and efficiency for biosensing applications.

This highly interdisciplinary project will allow you gaining valuable experience in the domain of microfluidics, colloidal chemistry, surface chemistry for medical applications and biosensing approaches. Your role will be to obtain the planar membranes on solid support, combine them with biomolecules and characterize them in various conditions to optimize the resulting membranes both before and after combination with biomolecules. More information on the topics of the groups in which you will be working can be found at https://palivan.chemie.unibas.ch/en/.

Your profile:

- you will ideally have a PhD in chemistry or material science;
- experience to combine colloidal systems with biomolecules and characterize them by physical chemistry methods is a must;
- experience with surface-oriented physical chemistry methods (AFM, SPR, QCMD) is an advantage;
- high records of publications in internationally refereed scientific journals
- proficiency in English; German is an advantage.

Application: For further information, please contact Prof. Dr. Cornelia Palivan, (<u>Cornelia.Palivan@unibas.ch</u>, phone: +41.61.2073839). Interested candidates will send by 5.03.2022: i. letter of motivation, ii. curriculum vitae, iii. names and contact details for two referees.

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