

PhD position available (2 years)

Topic: Photodynamic Inactivation of Biofilms

Many bacterial species embed themselves in extracellular polymeric substances and water to form biofilms. This strategy protects the microorganisms from both, the immune system and antimicrobial strategies. As a result, bacterial biofilms are very difficult to treat and trouble health providers world-wide.

Photodynamic Inactivation is based on the light-induced and photosensitizer-mediated overproduction of reactive oxygen to kill microorganisms even if organized in biofilms.

The **aim** of the study is to test novel photoactive compounds in their efficiency to destroy biofilms. The project is funded by an industrial partner. Therefore the candidate will acquire experience in scientific work at the interface between academic and industrial research in the interdisciplinary field biophysics. The salary for the two-year contract (possible extension to three years) will be based on the standards of the Austrian Science Fund (<https://www.fwf.ac.at/en/research-funding/personnel-costs/>).



Applicants should be highly motivated individuals holding a Master degree in (Molecular) Biology, Microbiology, Biophysics or related disciplines with experience in microbial cell culture ideally of biofilms. The candidates should have the ability to work independently and in collaboration with others, and have excellent oral and written communication skills in English.

Applications should include (i) a letter of motivation including a summary of the applicant's past research accomplishments (1 page) (ii) a CV and (iii) a list of publications and congress participations.

Contact and further information:

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