



**UNIVERSITÄT
BAYREUTH**

Within the framework of the ERC Starting Grant “VISIRday” of Prof. Markus Retsch at the school of Chemistry at the University of Bayreuth we are seeking a highly motivated

PhD student

(employment based on part-time TV-L E13)

The ERC Starting Grant is dedicated to unravel and understand passive cooling technologies and devices based on optically tuned and hierarchically structured materials.

The main task of the candidate will be to fabricate highly defined materials with specific shape, size, and composition based on a colloidal templating approach. The aim is to establish a new material class, which support surface phonon polaritons. The candidate will also work on the characterization of these new materials with the goal of predictive structure property relationships. Such colloidal building blocks may find application in novel passive cooling devices. This interdisciplinary project combines inorganic synthesis, nanophotonic characterization, and finite element modelling.

The candidate must hold a M.Sc. or equivalent qualification in chemistry, materials science, or related subjects. Knowledge about the structural and optical characterization of nanostructured materials is necessary. The candidate must be fluent in English; basic knowledge of German is welcome.

The position is limited to a three-year contract. We offer an attractive interdisciplinary research environment at one of the leading polymer and colloidal chemistry schools in Bavaria and Germany. The candidate will closely work together with other PhD students and postdocs and will be involved in the entire process of sample design, characterization and interpretation. We encourage the supervision and guidance of master- and bachelor students, in order to build personal teaching and leadership skills.

The University of Bayreuth is an equal opportunity employer and aims to increase the number of female researchers. Applications from female candidates are therefore explicitly encouraged. The University of Bayreuth was accredited as a Family Friendly University by the Hertie Foundation in 2010. Persons with disabilities will be given priority if equally qualified.

Applications including a letter of motivation, CV, and at least two persons of contact for reference letters shall be sent by 15. November 2018 via email to: markus.retsch@uni-bayreuth.de

or to:

Prof. Dr. Markus Retsch
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