

Fakultät für Physik und Erdsystemwissenschaften **Peter-Debye-Institut für Physik der weichen Materie** Prof. Dr. Ralf Seidel

Universität Leipzig, Fakultät für Physik und Erdsystemwissenschaften, 04103 Leipzig

PhD position (65% E 13 TV-L) in

"Silicified DNA-nanostructures as versatile tool for the self-assembly of conducting nanomaterials"

Ref: RTG2767-A9

The Molecular Biophysics group at the Faculty of Physics and Earth System Sciences at Leipzig University is currently offering a position for a PhD student under the supervision of Prof. Dr. Ralf Seidel starting **April 1, 2025**.

The position is part of the DFG-funded Research Training Group 2767 "Supracolloidal Structures: From Materials to Optical and Electronic Devices" of TU Dresden. Aim of this graduate school is to train a team of PhD students to design, fabricate and apply materials for a new generation of optical and electronic devices. Both the student training as well as the research are run in a close interdisciplinary collaboration between the participating PhD students and their groups.

The objective of the project is to use 3-dimensional DNA nanostructure templates to synthesize and arrange metallic and semiconducting materials to form electronic nanodevices with designed properties. To overcome current challenges in the DNA-based assembly process nanoscale silicification shall be applied in order to achieve higher self-assembly yields as well as new type of devices.

We are seeking for a highly motivated PhD applicant with an excellent university degree (Master of Science or diploma) in physics, chemistry or related subjects as well as an interest in biochemistry and interdisciplinary research. Excellent communication skills in English are mandatory.

The successful candidate will perform cutting edge experiments in the area of DNA nanotechnology, material synthesis and analysis and receive the corresponding training in mastering a diverse range of techniques.

Salaries will be according to DFG standards.

Your application (in English only) must include: a motivation letter, your CV with publication list, copy of degree certificate, and transcript of grades (i.e. the official list of coursework including your grades). Please include also a link to your Master's or diploma thesis.

Complete applications should be submitted preferably via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf document quoting the reference number RTG2767-A9 (see above) in the subject header to recruiting.cfaed@tu-dresden.de or by mail to: TU Dresden, cfaed, z. Hd. Frau Tatjana Sereda-Neuber, Helmholtzstr. 10, 01069 Dresden, Germany. The closing date for applications is March 7, 2025. Please note that with your application you consent that your application is handled by the RTG2767 at TU Dresden.

More information about the Molecular Biophysics group and the Research Training Group 2767 can be found at:

https://home.uni-leipzig.de/mbp/ https://grk2767.tu-dresden.de/about-us