The B CUBE (https://tu-dresden.de/cmcb/bcube) and its partner institutions, the Biotechnology Center (BIOTEC) and the Center for Regenerative Therapies (CRTD), are equipped with state-of-the-art facilities for Molecular Bioscience research (https://tu-dresden.de/cmcb/bcube/forschungstechnologie/technologieplattform). They are part of a rich and collaborative environment that includes the Faculty of Mathematics and Natural Sciences, the Faculty of Medicine, the Max-Planck-Institute of Molecular Cell Biology and Genetics (MPI-CBG), and the Leibniz Institute for Polymer Research (IPF). For TUD diversity is an essential feature and a quality criterion of an excellent university. Accordingly, we welcome all applicants who would like to commit themselves, their achievements and productivity to the success of the whole institution.

The B CUBE - Center for Molecular Bioengineering, an Institute of the Center for Molecular and Cellular Bioengineering (CMCB), at the Chair of Biomimetic Materials (Prof. Dr. Nils Kröger, https://tu-dresden.de/cmcb/bcube/forschungsgruppen/kroeger) offers a position as

**Research Associate / PhD student / Postdoc (m/f/x)**

(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **as soon as possible.** The position is initially limited for 2 years (Postdoc) and comprises 100% of the fulltime weekly hours or 3 years (PhD student) and comprises 65% of the fulltime weekly hours with the possibility of extension. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

**Tasks:** The biological formation of functional 3D mineral structures (biominerals) is a widespread biological phenomenon and a highly active, interdisciplinary research field. To date, it is poorly understood which genes are involved in the morphogenesis of complex-structured biominerals and how the encoded proteins guide this process. Diatoms, a large group of photosynthetic microalgae, are excellent model organisms to address these fundamental questions. They biosynthesize silica-based cell walls that are intricately patterned from the scale of nanometers to hundreds of micrometers, are readily amenable to genetic manipulation, and their lipid-bilayered organelle for silica biogenesis can be isolated. The successful applicant will use state-of-the-art biochemical, molecular genetic and cell biological tools to unravel the mechanisms by which diatoms are able to generate species-specifically patterned, 3D biosilica architectures. Furthermore, teaching activities for the chair in accordance with DAVOHS (https://www.revosax.sachsen.de/vorschrift/12146-Saechsische-Dienstaufgabenverordnung-an-Hochschulen) are expected.

**Requirements:** University degree (MSc.), if applicable PhD in biochemistry, molecular genetics, molecular cell biology, or related fields. Applicants with strong research experience in protein biochemistry will be preferred. Prior experience in genome engineering or mass spectrometry is advantageous but not required. Strong writing skills with a proven track record of successful research are essential. Excellent communication skills in English are indispensable, as this is the colloquial language at the research center.

TUD strives to employ more women in academia and research. We therefore expressly encourage women to apply. The University is a certified family-friendly university and offers a Dual Career Service. We welcome applications from candidates with disabilities. If multiple candidates prove to be equally qualified, those with disabilities or with equivalent status pursuant to the German Social Code IX (SGB IX) will receive priority for employment.

Please submit your comprehensive application including the usual documents by **January 13, 2023** (stamped arrival date of the university central mail service applies) to: **TU Dresden, B CUBE, Prof. Dr. Nils Kröger, Tatzberg 41, 01307 Dresden, Germany** or/preferably via the TU Dresden SecureMail
Portal https://securemail.tu-dresden.de by sending it as a single pdf-document to sandra.rother1@tu-dresden.de. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

**Reference to data protection:** Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis.