The first cohort of the **Research Training Group GRK 2868 D³ - Data-driven Design of Resilient Metamaterials** funded by the German Research Foundation will start in October 2023. Our vision is to develop and apply a data-driven approach to cross-scale materials discovery and design, in particular, goal-oriented, inverse design procedures based on process-structure-property linkages are of interest. The exploration aims at the mechanical performance as well as at the sustainability of the new metamaterials. The scientific challenges are tackled by an interdisciplinary team that involves experts in computational mechanics, data and computer science, materials science, mechanical engineering, mathematics, and physics. **D³** offers a competence- and publication-oriented qualification concept with co-supervision and international mentoring following a stringent schedule. It is the objective of **D³** to educate experts in digitization, who are highly demanded in research and industry. **D³** will provide a creative, motivating, and collaborative research environment with equal opportunities. Academic and business careers are actively supported by career development measures including at least one international research stay. For TUD Dresden University of Technology 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.

D³ offers several positions as

Research Associate / PhD student (m/f/x)
(subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

starting **October 1, 2023**. The individual position is limited until September 30, 2027 and aims at obtaining further academic qualification (usually PhD). The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

Tasks: The successful candidates perform scientific research in one of ten PhD projects and participate actively in the qualification program and general scientific activities of D³. With a single application you can apply for maximum three projects, which should be mentioned explicitly in the submitted documents. Brief descriptions of the attractive and interdisciplinary projects are available via www.tud.de/ing/dcube.

Requirements: excellent university degree in mechanical/civil engineering, materials science and engineering, data or computer science, mathematics or physics. It is expected that applicants are fluent in English, ideally documented in terms of a B2 English language certificate.

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 detailed application (including **scientific curriculum vitae**, a **letter of motivation**, a **letter of recommendation**, **transcripts of records** from the last two degrees with detailed grade summaries and your **final thesis)** by **August 11, 2023** (stamped arrival date of the university central mail service applies), preferably via the TUD SecureMail Portal https://securemail.tu-dresden.de by sending it as a single PDF file to **DCube@tu-dresden.de** or to: **TU Dresden, Fakultät Maschinenwesen, Institut für Festkörpermechanik, Professur für Numerische und Experimentelle Festkörpermechanik, Herrn Prof. Markus Kästner, Helmholtzstr. 10, 01069 Dresden, Germany.** Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.