Technische Universität Dresden (TUD), as a University of Excellence, is one of the leading and most dynamic research institutions in the country. Founded in 1828, today it is a globally oriented, regionally anchored top university as it focuses on the grand challenges of the 21st century. It develops innovative solutions for the world's most pressing issues. In research and academic programs, the university unites the natural and engineering sciences with the humanities, social sciences and medicine. This wide range of disciplines is a special feature, facilitating interdisciplinarity and transfer of science to society. As a modern employer, it offers attractive working conditions to all employees in teaching, research, technology and administration. The goal is to promote and develop their individual abilities while empowering everyone to reach their full potential. TUD embodies a university culture that is characterized by cosmopolitanism, mutual appreciation, thriving innovation and active participation. 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.

At the **Faculty of Mechanical Science and Engineering, Institute of Materials Science,** the **Chair of Materials Science and Nanotechnology** (Prof. Dr. G. Cuniberti) offers a position as

Research Associate and Group Leader (m/f/x)
in the field of Machine Learning approaches for Materials Discovery and Data Analysis
(subject to personal qualification, employees are remunerated according to salary group E 14 TV-L)

starting at the **next possible date** and limited for an initial period of 3 years with the option of extension to a maximum of 6 years. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position aims at obtaining further academic qualification (e.g. habilitation thesis).

The scientific activities of the Chair of Materials Science and Nanotechnology are concerned with the development of innovative strategies for novel materials and components with intrinsic complexity on the nanoscale. Biological complexity provides optimal approaches for the bottom-up design of novel materials. For more information about our activities, please visit https://www.nano.tu-dresden.de.

Tasks: scientific research work in the field of Machine Learning approaches for Materials Discovery (low-dimensional materials and structures) and Data Analysis (sensor output data) in cooperation with internal and external academic and industrial partners; participation in the acquisition of third-party funding and in the teaching activities of the chair.

Requirements: excellent university degree, preferably with a PhD degree in Natural or Engineering Sciences; extensive experience in data science, machine learning methods and programming (especially Python). We are looking for a first-class scientist with excellent verbal and written communication skills in English who wants to make a mark in science.

What we offer: We foster a collaborative spirit essential for making progress on challenging problems. We offer an international and interdisciplinary research environment of high standing and visibility. There will be many opportunities to develop your academic or professional career. We provide the opportunity to acquire teaching skills, project management skills, and team leadership skills.

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 and a letter of motivation; detailed research statement of approx. 2 pages, in which the scientific environment at the Chair of Materials Science and Nanotechnology, at TU Dresden and in the scientific and industrial landscape in Dresden is also discussed; detailed CV with complete list of publications in the form of a GoogleScholar link and at least two letters of recommendation by **January 2, 2023** (stamped arrival date of the university central mail service applies), preferably via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf document to **jobs.nano@tu-dresden.de** with the subject: "Application Materials Data, your_surname" or to: **TU Dresden, Fakultät Maschinenwesen, Institut für Werkstoffwissenschaft, Professur für Materialwissenschaft und Nanotechnik, Herrn Prof. Cuniberti, 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.

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.