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 Process Engineering and Environmental Technology**, the **Process Systems Engineering Group** offers a position as

**Research Associate (m/f/x)**

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

starting at the **earliest possible date**. The position is within the research project RUBENS – „Rapid and Unique Business Transformation by Extended Sensing for Next Generation Process Sites” and is initially limited until March 3, 2025. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The project is carried out in close cooperation with the industrial partners **LANXESS Deutschland GmbH** (plant operator) as well as **KROHNE Innovation GmbH** (manufacturer of measuring equipment) and **SAMSON AG** (manufacturer of control valve technology). The position offers the chance to obtain further academic qualification (e.g. PhD).

**Tasks:** Develop and investigate solution approaches for the monitoring and optimization of process plants based on the NAMUR Open Architecture (NOA), esp.
- conducting workshops with industry partners for requirements analysis
- analysis of E&C technology of industrial partners regarding information-rich data streams
- prototypical implementation of a software for monitoring and optimization of process plants based on data from the open NOA channel
- coordination of research results with our industrial partners and publication at international conferences and in recognized scientific journals
- occasionally on-site work at the plant or at the sites of the industry partners.

**Requirements:**
- above-average university degree in the field of control systems engineering, information systems engineering, process informatics or related fields
- very good knowledge in the field of automation architectures and control engineering
- very good programming skills in common languages
- independent, goal- and solution-oriented way of working
- interdisciplinary and team-oriented thinking
- confident command of the English and German languages, both written and spoken.

Are you enthusiastic about research and development work for digitalization in the process industry? Do you like to learn something new every day? Then the team of the Process Systems Engineering group offers you just the right opportunities. Our international team of process engineers,
automation engineers, information systems engineers and data scientists is working on solutions for the future of the process industry. Further information on the Process Systems Engineering Group can be found on: https://tu-dresden.de/ing/maschinenwesen/ifvu/svt.

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 November 30, 2022 (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 with the title “RUBENS_Application_2, <your name>” to doris.allstaedt2@tu-dresden.de or to: TU Dresden, Fakultät Maschinenwesen, Institut für Verfahrenstechnik und Umwelttechnik, Arbeitsgruppe Systemverfahrenstechnik, z. Hd. Frau Doris Allstaedt, 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.