At the Faculty of Mechanical Science and Engineering, Institute of Process Engineering and Environmental Technology, the Process Systems Engineering Group offers a project position as Research Associate (m/f/x) 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 limited until November 30, 2025. The period of employment is governed by § 2 (2) 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).

Tasks: Develop and investigate solution approaches for the monitoring and optimization of process plants based on cutting edge automation architectures and communication technology like the Advance Physical Layer (APL) and the NAMUR Open Architecture (NOA), esp.
- conducting workshops with industry partners for requirements analysis
- potential analysis for smart measurement and control technology based on APL and NOA
- prototypical implementation of a software for monitoring and optimization of smart equipment and process plants applying APL and NOA
- 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 industry the industry partners.

Requirements:
- above-average university degree in the field of control systems engineering, automation engineering, process engineering 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 **July 27, 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 with the title “RUBENS_Application_2, [your name]” to doris.allstaedt@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.