Faculty of Mechanical Science and Engineering

At the Institute of Process Engineering and Environmental Technology the Process Systems Engineering Group offers, subject to the availability of resources, a position as 

**Research Associate**

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

with the earliest begin on **September 1, 2021**. The position is within the research projects eModule – “Modelling, Automation, Integration and Optimization of modular Electrolysis-Plants” and KEEN – “AI incubator labs in the process industry” and limited in its duration until March 31, 2023. The period of employment is governed by the Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG). The position offers the chance to obtain further academic qualification.

**Tasks:**

- data analysis and application of selected AI algorithms to specific problems from the process industry as well as the evaluation of the suitability and performance of AI methods;
- support in data-driven and hybrid modelling of process units within a water electrolysis plant as well as conducting simulation studies.

**Requirements:**

- above-average university degree in one of the following fields: process engineering, computer science, chemical engineering, regenerative energy systems, hydrogen energy systems, hydrogen technologies or related;
- enthusiasm for new challenges in the field of machine learning as well as modularization and digitalization in the process industry and especially for application in the field of green hydrogen;
- independent, goal- and solution-oriented way of working;
- fluent English and German, both written and spoken;
- experience in the application of ML methods, modelling and simulation of production processes is advantageous.

You enjoy facing challenges and want to the world of the next years and decades in the context of the renewable energy. You are a creative mind for whom there are no limits. Then the team of the Process Systems Engineering group offers you just the right opportunity. With us, you can contribute in a creative way to a thriving and dynamic interdisciplinary research environment and actively shape the future of the process industry.

Further information on Working Group Process Systems Engineering can be found on [https://tu-dresden.de/ing/maschinenwesen/ifvu/svt](https://tu-dresden.de/ing/maschinenwesen/ifvu/svt).

Applications from women are particularly welcome. The same applies to people with disabilities. Please submit your comprehensive application including the usual documents by **June 30, 2021** (stamped arrival date of the university central mail service applies) by mail to: TU Dresden, Fakultät Maschinenwesen, Institut für Verfahrenstechnik und Umwelttechnik, Arbeitsgruppe Systemverfahrenstechnik, Process-To-Order-Lab, z. Hd. Frau Kirstie Kantemir, Helmholtzstr. 10, 01069 Dresden, or via the TU Dresden SecureMail Portal [https://securemail.tu-dresden.de](https://securemail.tu-dresden.de) by sending it as a single pdf-document to kirstie.kantemir@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](https://tu-dresden.de/karriere/datenschutzhinweis)