

The *Laboratory of Measurement and Sensor Systems* (headed by Prof Juergen Czarske) of the *Institute of Circuits and Systems* offers a position as

Research Associate: Adaptive optical cell rotation

(Subject to personal qualification employees are remunerated according to salary group E13 TV-L)

starting as soon as possible. The position entails up to 100% of the fulltime weekly hours. The position is limited for 3 years, initially. The period of employment is governed by Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz-WissZeitVG. The position offers the chance to obtain further academic qualification (e.g. PhD / habilitation thesis).

Tasks: The position is funded by a third party project. The successful candidate will investigate adaptive optical cell rotation. The aim of the project is to use a precise cell rotation and tomographic techniques, to obtain the three dimensional refractive index distribution of a cell. Additional cell stretching will give access to analyze the correlation between the cell-stiffness and the refractive index homogeneity.

The tasks entail basic research, including simulations, data processing with Matlab/Python and experimental work. The optical setup has to be designed, characterized and calibrated to enable its application at our partner institute. Furthermore, your scope of activity involve publications in international research journals, presentations in international conferences as well as supervising Bachelor and Master Students.

For further information about the project see also:

https://tu-dresden.de/ing/elektrotechnik/iee/mst/forschung/forschungsprojekte/copy4_of_schnell-drehenden_Faserverbundrotoren?set_language=en

We offer: A diverse, ambitious research topic; an interdisciplinary team; creative possibilities; visits of international conferences and contacts to excellent partners in research and industry. Within our group, you will find profound support as well as professional training.

Requirements: University degree in electrical engineering, mechanical engineering, physics or similar studies with knowledge in optics, signal processing or fluid dynamics; ability for working autonomously and goal-driven within a team; great commitment, analytical thinking and taking joy in practical work and basic research are expected.

Applications from women are particularly welcome. The same applies to people with disabilities. Please submit your comprehensive application including the usual documents by mail to:

Prof. Juergen Czarske, TU Dresden, Fakultät Elektrotechnik und Informationstechnik,
Professur für Mess- und Sensorsystemtechnik, Helmholtzstr. 18, 01069 Dresden

or preferably via as a single pdf-document to:

grp-mst-sekretariat@msx.tu-dresden.de

Please submit copies only, as your application will not be returned to you.