School of Science

The Faculty of Physics, Institute of Applied Physics, is offering a position as

Research Associate

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

starting at the next possible date. As postdoc position it entails 100 % of the fulltime weekly hours and is limited to 2 years, as PhD position it entails 75 % of the fulltime weekly hours and is limited to 3 years. 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 (e.g. PhD or habilitation thesis).

Research area: Within a DFG funded research project an investigation of sulfur, oxygen, and hydrogen defects in CdTe and CdSe should be performed. The project aims at a better fundamental understanding of the chemical composition of the defects, their microscopic structure, thermal stability, electrical activity, and the formation processes.

Tasks: Determination of the electrical and optical properties of sulfur, oxygen, and hydrogen defects in CdTe and CdSe by means of capacitance transient, IR absorption, and photocurrent spectroscopy; comparison and evaluation of results from other characterisation techniques; data analysis and identification of the recombination centres; writing reports and publications.

Requirements: very good university degree (Master’s or equivalent) in physics and if applicable - an excellent PhD in physics; experience in the application of different techniques in the characterisation of semiconductors: DLTS, Minority lifetime spectroscopy, photoluminescence, FTIR; several years of profound work experience with different variants of the DLTS technique; profound knowledge of the literature in the field of defects in semiconductors; published record of research in the field of defect characterisation in semiconductors; fluent English - written and oral (basic knowledge of German language is appreciated); an integrative and cooperative personality with good communication and social skills; ability to cooperate and collaborate with different project partners; a target and solution driven work attitude.

Applications from women are particularly welcome. The same applies to people with disabilities.

Applicants should send the usual documents until 31.01.2018 (stamped arrival date of the university central mail service applies) to: TU Dresden, Bereich Mathematik und Naturwissenschaften, Fakultät Physik, Institut für Angewandte Physik, Herrn PD Dr. E.V. Lavrov, 01062 Dresden, Germany. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.