



## Advertisement W 48/17

At the University of Rostock, Faculty of Computer Science and Electrical Engineering, Institute of General Electrical Engineering, Chair of Electromagnetic Field Theory, subject to fund allocation, applications are invited for the position of a

**Junior Research Group Leader “Uncertainty Quantification in Bio-electrical Engineering”**  
(pay scheme TV-L E14, full-time, start as soon as possible, duration: 4 ½ years)

### Remit:

Management of a junior research group with a focus on numerical modelling and determining the influence of uncertainties in computer-assisted models for clinical applications

- Research:

- Numerical methods for the analysis of uncertainties and global sensitivity analysis in the field of Computational Engineering / Scientific Computing with a focus on bioelectric applications.
- Numerical models for the determination of neuronal activation and electrical field effects for bioelectrical applications in the human body and animal models (deep brain stimulation) that take into account uncertainties in the model parameters and enable robustness analyses with regard to these parameters.
- Numerical procedures for the determination of optimal stimulation parameters for clinical therapies with bioelectrical applications (deep brain stimulation, bone regeneration).

A dedicated postdoctoral staff shall carry out this research on numerical models, present results in the form of lectures and document them in the form of reports and journal publications.

### Requirements:

- excellent doctorate in Electromagnetic Field Theory, Computational Engineering, Scientific Computing or a closely related subject
- very good knowledge of Numerical Mathematics and Uncertainty Quantification
- very good programming skills in MATLAB, C and / or C ++
- excellent command of the English language, verbal as well as in writing
- high-value publication achievements in scientific journals of the above-mentioned disciplines

Desirable:

- experience in international and interdisciplinary cooperation, in particular with medicine
- experience in the management of research projects and team management
- striving for a habilitation

### We offer:

- A multi-faceted, diverse and challenging occupation in a university which is rich in tradition but at the same time innovative, modern and family-friendly being situated in a lively city at the Baltic Sea
- Integration into the CRC 1270 ‘Electrically active implants - ELAINE’ in the case of appropriate professional qualification

- The possibility of pursuing a habilitation
- Employment in accordance with the provisions of the public sector's wage agreement (TV-L)
- The remuneration will be paid in accordance with remuneration group 14 TV-L if the personal and tariff prerequisites are satisfied

### **Further information**

The position is generally suitable for part-time work. If appropriate applications are received, it is examined whether the part-time wishes can be fulfilled within the employment opportunities.

The limitation of the term of employment complies with § 2 (2) WissZeitVG.

Equal opportunity is an essential part of our human resources policy. In case of equal qualification, applications from severely disabled people or equivalent are explicitly welcome. The University of Rostock seeks to increase the proportion of women in research and teaching and particularly encourages female applicants to apply for this position. Applications from foreign scientist and people with migration background are appreciated.

We are looking forward to your application. Please send your application with the job advertisement number. Application deadline 19.07.2017.

If you apply by post please send only copies of your certificates and a self-addressed envelope with stamps, otherwise we cannot send your application back.

**Applications by email should be send as a single pdf document to [dezernat.personal@uni-rostock.de](mailto:dezernat.personal@uni-rostock.de)**

Please note that the Federal State of Mecklenburg-Vorpommern does not reimburse application and travel costs.

For further questions, please contact:

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**Application deadline: 19.07.2017**

Postal address:

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