Combine your scientific interest and technical skills in the field of electrical engineering to create new knowledge for the socially and scientifically relevant areas of information, energy and bioeconomy. We offer you all of this at the Central Institute of Engineering, Electronics and Analytics - Electronic Systems (ZEA-2) with modelling, designing and developing the most innovative system solutions for science and society.

We are looking to recruit

**Mixed-Signal IC Engineers**

**Your Job:**
Our team is engaged in the BMBF funded project 'NEUROTEC II'. Within this project, we work on the IC development for demonstrating the memristor-based realization of neuromorphic computational paradigms. These paradigms include, amongst others, Computing-In-Memory, Artificial Neural Networks, Content Addressable Memories and Spiking Neural Networks. Thus, your specific challenge will be to develop the conceptual and design approaches fulfilling the different memristor circuit requirements for CMOS-memristor co-integration based on CMOS building blocks. Are you an experienced mixed-signal IC engineer and are interested to work on emerging technologies? Then we might be looking just for you!

Specific tasks are:
- Develop concepts to co-integrate CMOS circuits with memristors, using the full strength of full-custom analog and digital circuits in modern CMOS nodes (28 nm and below)
- Understand and align requirements with project partners for memristor integration
- Implement circuits in a modern CMOS technology using the Cadence development flow
- Accompany the verification of the co-integration
- Writing on scientific publications and participation at conference presentations
- Work together in an international and interdisciplinary group

The job will be advertised until the position has been successfully filled. You should therefore submit your application as soon as possible. We look forward to receiving your application via our **Online-Recruitment-System**!

**Questions about the vacancy?**
Get in touch with us by using our **contact form**.
Please note that for technical reasons we cannot accept applications via email.
www.fz-juelich.de
**Your Profile:**
- University degree (Master), preferably with doctorate (PhD), in electrical engineering, physics or similar fields
- Experience with integrated CMOS circuit design, especially full-custom circuits
- Experience with digital circuit description (VHDL or Verilog)
- Ability to monitor the complete design development, including works of others
- Good English capabilities and preferably good knowledge of German

Please apply for the position even if you do not have all the required skills and knowledge.

**Our Offer:**
We work on the very latest issues that impact our society and are offering you the chance to actively help in shaping the change! We support you in your work with:
- A large research campus with green spaces, offering the best possible means for networking with colleagues and pursuing sports alongside work
- Comprehensive training courses and individual opportunities for personal and professional further development
- Extensive company health management
- Ideal conditions for balancing work and private life, as well as a family-friendly corporate policy
- Full-time position with the option of slightly reduced working hours and 30 days of annual leave
- Targeted services for international employees, e.g. through our International Advisory Service

We offer you an exciting and varied role in an international and interdisciplinary working environment. The position is initially for a fixed term of 2 years, with possible long-term prospects. Salary and social benefits in conformity with the provisions of the Collective Agreement for the Civil Service (TVöD).

Forschungszentrum Jülich promotes equal opportunities and diversity in its employment relations. We also welcome applications from disabled persons.