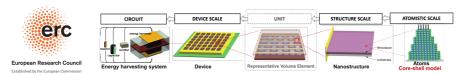


The Institute of Continuum Mechanics at Leibniz Universität Hannover invites applications for

## Postdoctoral and PhD Positions supported by ERC Starting Grant Horizon2020



**Position description:** Four postdoctoral research fellows and two PhD positions are now open for ERC Starting Grant wth focus on nano energy harvester. The project is financially supported by ERC Starting Grant from Horizon2020. Applicants considering their interests, skills and backgrounds will be placed on different tasks of the project including: machine learning for materials design; nanoscale experiments and characterization; atomistic and continuum modelling of nanomaterials, nanostructures and nano energy harvesters; sensitivity analysis and uncertainty quantification; probabilistic optimization, validation and verification.

## Prerequisites:

- Majors of academic degrees obtained in one of the following major: mechanics, applied maths, physics, mechanical engineering, computational engineering and material science
- Proficiency in English communications both written and spoken English
- Good skills in programming, preferably in FORTRAN and/or C++, matlab or python
- Knowledge in LAMMPS; knowledge in ABAQUS is useful as well
- Applicants with one or several of the following research experiences are preferred: multiscale methods, molecular dynamics, multifield modelling, computational methods for fracture, sensitivity analysis, uncertainty analysis, optimization

**Opportunities:** The positions will be based on the contract salary system in Germany (TVL).

**Research environment:** The postdocs and PhD students will be placed at the Institute of Continuum Mechanics (IKM) at Leibniz-University Hannover (LUH), one of the leading institutes in computational mechanics. The group chaired by Prof. Xiaoying Zhuang currently consists of approximately 17 Researchers (postdoc and PhD students). LUH boasts the Graduate School "Multiscale Methods for Interface Coupling" (MUSIC) that focuses on the experimental and virtual testing, modelling and scientific computing in engineering sciences.

**Applications**: Applicants interested in the positions may contact Prof. Dr. Xiaoying Zhuang, through email: <a href="mailto:zhuang@ikm.uni-hanover.de">zhuang@ikm.uni-hanover.de</a>, <a href="mailto:xiaoying.zhuang@gmail.com">xiaoying.zhuang@gmail.com</a> or by mail.



Xiaoying Zhuang Gottfried Wilhelm Leibniz Universität Hannover Institute of Continuum Mechanics Appelstr. 11 30167 Hannover Germany

The application should include a CV, transcripts of degree and a cover letter. In the cover letter, applicant may include a short research statement explaining how they understand the issues related to the project.

Closing date: February 20, 2019

The Leibniz Universität Hannover aims, in particular, to promote women within the scope of the statutory provisions and, hence, emphatically invites qualified women to apply for these positions. Severely disabled applicants will be given preferential consideration in the event of equal qualification. The University expressly welcomes applications by scientists and researchers from abroad.