



Universität Stuttgart

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Experimentelle
und Numerische
Untersuchungen
zur Synthese u.
Abscheidung/
Verwertung
Funktioneller
Partikel

Prof. Carsten Mehring, Ph.D.
Institut für Mechanische
Verfahrenstechnik

The Institute of Mechanical Process Engineering (IMVT) at the University of Stuttgart has an opening for a fully-funded Ph.D. position in the area of

"Numerical and Experimental Investigations on the Production and Deposition of Functional Particles"

Our institute conducts theoretical and experimental research related to the behavior and the interaction between solid, particulate and fluidic (gas/liquid) substances or material systems, as they appear in the production of high-performance, high-value materials and products, in technical applications and processing plants, and in nature.

In context of the production and usage of functional particles, the institute seeks to improve the understanding of nanoparticle production from the gas and the liquid phase, as well as film formation from particle deposition onto solid substrates including all relevant fluid-mechanical and thermodynamic phenomena. The investigations shall be performed both experimentally and by analytical/numerical means. An active collaboration with the Institute of Chemical Process Engineering at the University of Stuttgart is planned.

Your Profile

A master degree in process engineering, mechanical engineering, physics or another related discipline. Good communication skills, highly motivated, with a strong background in theoretical and experimental fluid mechanics. Experience with multiphase flows, phase-change processes, particle and population dynamics, and computational fluid dynamics are desired. Good programming skills and knowledge of particle measurement techniques are a plus. Excellent English skills and good German skills are required.

We offer

The position is fully funded for the duration of the Ph.D. studies. Salary for this position is € 3672 gross per month, based on the German TV-L, salary group E13 (100%). It is expected that the candidate actively supports education and the teaching mission of the institute.

The University of Stuttgart aims to increase the number of female employees. Qualified women are therefore especially encouraged to apply.

Handicapped applicants will be preferred if applicability and qualification are equivalent.

How to Apply

Applications with the usual documents (letter of motivation, CV, copies of degree diplomas, course transcripts from all previous institutions, list of publications, language test scores if applicable, list and contact information of references) should be sent by e-mail to carsten.mehring@imvt.uni-stuttgart.de by October 1, 2018. For additional information, please visit our institute website at www.imvt.uni-stuttgart.de or contact Prof. Carsten Mehring.