

Vacancy Notice 180/2018

The Otto-von-Guericke-
University Magdeburg seeks
to fill the following vacancy:

Postgraduate training fellowship leading to the award of a PhD in Marie S.–Curie Project UCOM, Cavitation in Soft Materials

Department for Soft Matter within the Faculty of Natural Sciences
Otto-von-Guericke-University Magdeburg

Salary Scale:	Date commencing:	Fixed term until:	Contract status:
Marie Curie Flat Rates	01.03.2019	36 months	Marie Curie Fellowship 100%

The position is in the newly established Marie S. Curie innovative training network “UCOM: Cavitation in Soft Materials” and will focus on the dynamics of bubbles and softmatter for medical applications such as non-thermal ablation, wound healing, or cancer therapy. The project will start September 2018.

During the 3 year PhD the candidate will study the fluid and elastomechanics of oscillating bubbles in a tissue mimicking material. The aim is to understand and utilize these bubbles for medical therapy. Thus besides idealized experiments with single and few bubbles, part of the research will be conducted with a medical device company. Still the aim is on the understanding rather than optimization for specific purposes.

The main responsibilities are:

- Study the strain and stress fields in tissue mimicking materials through imaging techniques and compare with models
- Setup experiments for elastographic high-speed imaging and tomographic PIV
- Participate at the activities of the Innovative Training Network (MSC/ITN)
- Secondment and collaboration with a German based medical technology partner

Requirements for the position:

- A candidate is sought that is highly motivated, reliable and able to work independently
- The successful candidate will have an MSc or equivalent degree (or be currently working towards one) in physics, electrical or mechanical engineering or a related field
- Excellent experimental and good programming skills
- Interest in fluid mechanics, biomedical questions, image processing and 3d image reconstruction to name a few
- Experience with pulsed lasers, acoustics, or tomography is highly desirable, but not a requirement.
- Good communication skills (written and orally) are essential



Otto-von-Guericke-Universität Magdeburg
Faculty of Natural Sciences
Prof. Claus-Dieter Ohl
Postfach 4120, 39016 Magdeburg (Germany)

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- The candidate must also fulfil the eligibility requirements:
 - no PhD
 - Master Degree or equivalent (at date of recruitment)
 - less than 4 years research experience (less than 4 years since they received the degree that gave them access to doctoral studies)
 - not lived or worked in the country of their host institution for more than 12 months in the last 3 years
 - no restriction on nationality

Job Details:

- Fixed-term contract about 36 months
- Full-time (40 hours per week)
- full social security coverage

For further information about the position, please contact Prof. Ohl at: +49 391/67-58936, or per E-Mail (claus-dieter.ohl@ovgu.de).

Applications from disabled persons will be given priority in the case of equal suitability, ability and professional expertise. The Otto von Guericke University aims to increase the proportion of women researchers within the university and specifically encourages women to apply.

According to the new “Federal Data Protection Act” and the “General Data Protection Regulation”, an applicant has to agree that the transferred data is stored and processed, but only for the purpose for which it has been transferred. Please agree to the Federal Data Protection Act as well as the General Data Protection Regulation by mail or post. You can revoke your consent at any time. Thank you.

Applicants should include a CV, a brief statement of research experience and interests, academic achievements and names of two referees. Please send your application electronically as a **single pdf file** quoting reference number 180/2018 by **October 31st, 2018 (date of receipt of application)** to the address below:



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