PhD Project in the field of Printed Photonics

Within the Cluster of Excellence 3D Matter Made to Order (3DMM2O), which is supported by the DFG (German Research Foundation) as part of the Excellence Strategy, there is

1 open position for Doctoral Researchers (f/m/d)

In the group of Prof. Lemmer (Karlsruhe Institute of Technology, KIT), we are looking for a **PhD candidate for an exciting project in the field of Printed Photonics**.

Project description:

Printed photonic components are one of the research topics at Light Technology Institute. Recently, the research group has succeeded in manufacturing e.g., microlenses and Bragg mirrors by means of digital inkjet printing. This opens up **numerous research opportunities for novel sensor systems and applications in large-area optoelectronics, for instance displays and photovoltaic technologies**. To strengthen our team, we are looking for a PhD student to start as soon as possible.

Doctoral position, limited to 3 years with a chance for extension. Funding will initially be provided by a fellowship from the Carl Zeiss Foundation through the Cluster of Excellence 3DMM2O.

The Cluster of Excellence 3D Matter Made to Order (3DMM2O) combines the competencies of Karlsruhe Institute of Technology (KIT) and Heidelberg University to advance 3D Additive Manufacturing to the next level. The goal is to break current barriers of scale, precision and speed to unleash the true potential of the technology. The work is aligned alongside three interdependent Research Areas: Molecular Materials (A), Technologies (B) and Applications (C). More on the Cluster and its research on our website: www.3dmm2o.de.

Upon acceptance, the Doctoral Researchers will be part of the structured doctoral program offered by the HEiKA Graduate School on Functional Materials, which brings together Young Scientists in an interdisciplinary environment. The participating disciplines encompass chemistry, physical chemistry, physics, biophysics, biology, biomechanics, mechanical engineering, and electrical engineering.

Requirements:

Requirements for the application include a degree (MSc or equivalent) with above-average marks in in electrical engineering and information technology, materials science, process engineering, physics or related fields with excellent results. Furthermore, knowledge in the field of photonics, strong interest in experimental work (inkjet printing, optical characterization, etc.), strong analytical skills and structured, independent work styles.

Additional information about the research topics and requirements on our website. Further questions about the research projects should be directed to Uli Lemmer (uli.lemmer@kit.edu) directly.

Applications should be handed in **only** through our Application Portal. Please indicate the position you are interested in so we can make sure to evaluate your application accordingly. The following documents and data are required for your application:

- CV
- School and University (as applicable: Bsc, MSc, Doctorate) certificates
- Transcripts (BSc and MSc)
- Cover Letter
- Letter of Motivation & Abstract of Research Interest

Qualified women are strongly encouraged to apply. Disabled persons with equivalent aptitude will be favored.

Application up to:

Dec. 15th, 2022

Contact:

Prof. Uli Lemmer, uli.lemmer@kit.edu