

The Institute for Integrated Natural Sciences, Department of Physics, University Koblenz-Landau, Campus Koblenz, is inviting applications for a

Doctoral Position (0,75 EGr. 13 TV-L)

in Material Science/Polymer Engineering

which is subject to the German law on fixed-term contracts in science (WissZeitVG). The position is for a fixed period until August 31st, 2022 and is to be filled at the earliest possible date. The successful candidates will work in the <u>Material Physics Group</u> of the University Koblenz-Landau. A subsequent fixed-term employment is possible.

Topic

Larger sized bone defects pose great challenges to surgeons, because the normal surrogate material used today do not provide sufficient capacity for regeneration. Additive manufacturing allows for a high measure of individual adjustments to implants for a perfect fit. A functionalized, plasticising polyaminosaccharide is being developed that can be processed by Fused Deposition Modeling, which will be applied as a resorbing, non-load-bearing bone implant. The transnational project is conducted in an interdisciplinary project team comprising competences ranging from polymer synthesis and functionalization (Université Haut-Alsace), compounding, filament production and characterization (Universität Koblenz-Landau), medical additive manufacturing (Fachhochschule Nordwestschweiz) to biocompatibility investigations (Hochschule Furtwangen).

Requirements:

The successful candidate requires a master degree in Polymer Engineering, Chemical Engineering, Material Science or similar fields. Proven theoretical and practical experience in polymer characterization in particular mechanical characterization and/or thermoplast processing (in particular extrusion, compounding), good English communication skills, the ability to work in an interdisciplinary team and the willingness to travel to the partners sites are mandatory. Additional knowledge in additive manufacturing, medical applications of polymer materials and/or polymer additives is beneficial.

Very strong problem-solving skills, willingness to learn, ability to work independently, experience in writing publications and good presentation skills are essential.

It is the policy of the University Koblenz-Landau to increase the percentage of female employees. If equally qualified, preference will be given to female applicants in fields where they are underrepresented. Disabled candidates are given priority, if equally qualified. International candidates are highly encouraged to apply.

Applications should include a letter of motivation, complete curriculum vitae with a list of publications and presentations, certificates etc.. Application, quoting the **reference number Ko 71/2019**, should be send before **January 2th**, **2020** by e-mail in a single PDF-file to <u>bewerbung-K21@uni-koblenz.de</u>. Late applications can be considered until the position is filled. Please contact Prof. Dr. Silke Rathgeber (phone: +49 (0)261/287-2353 or e-mail: rathgeber@uni-koblenz.de) for further information.

We do not send a confirmation of receipt. In accordance to the protection of data privacy all documents will be destroyed after the application procedure.

www.uni-ko-ld.de/karriere