

The University of Koblenz is the youngest university in Germany – while also preserving a long-standing academic tradition. A multitude of transdisciplinary research projects spanning several institutions concentrated on a compact campus favourably affects our university routine. As the interdisciplinary university in the north of Rhineland-Palatinate with more than 9,400 students, we live the knowledge – transformation – innovation triad in our four profile areas “Education”, “Computer Science”, “Culture and its Mediation” as well as “Material and Environment”. We provide and conduct state-of-the-art teacher-training studies for all school types and maintain the transfer of our research results to civic society and regional businesses in a resilient and sustainable way. Join an aspiring university community and aid in advancing our further growth!



We are looking for the following person to join the Institute for Integrated Natural Sciences, Physics Department as soon as possible

research associate with doctorate opportunity (m/f/d)

The position is 50 % half-time (currently 19.5 hours/week) and is temporary for three years. The temporary employment is based on the regulations of the Act on Temporary Employment Contracts in Academia (WissZeitVG). The teaching obligation is 2 semester hours per week. The opportunity for a doctorate is offered and strongly supported.

Responsibilities:

- Participate in research projects within the Material Physics group, focusing on experimental polymer physics at the intersection of biology and medicine.
- Use fluorescence correlation spectroscopy to study the release kinetics and tissue specificity of nanoparticulate drug carriers, with an emphasis on natural substances for cancer therapy and their transport and release in the digestive tract and bloodstream.
- Conduct dynamic measurements using light scattering, and perform structural and spectroscopic analyses using atomic force and scanning electron microscopy, UV-VIS spectroscopy, and high-performance liquid chromatography, etc.
- Maintain and develop a custom-built fluorescence correlation spectrometer.
- Compile and present research findings in reports and project meetings.
- Engage in scientific exchange with colleagues and attend conferences.
- Participation in teaching (experimental physics) in various physics degree programs.
- Assist in examinations and supervise thesis projects.

Qualifications:

- A successfully completed university degree (except for a bachelor's degree) in physics or a related subject at a university or comparable higher education institution.
- Strong theoretical and preferably, practical knowledge in optics and/or spectroscopy, especially fluorescence spectroscopy, dynamic light scattering, and confocal microscopy.
- Proficiency in hands-on experimentation.
- Knowledge in polymer science, biophysics, medical physics, and/or chemistry is advantageous.

- Familiarity with LabVIEW, MATLAB, and/or Python is beneficial.
- Ability to work independently, with strong communication and teamwork skills, and a willingness to explore new research areas.
- Proficient English communication skills, both written and verbal, with strong organizational abilities.
- Proficiency in German is advantageous

What we offer:

- Integration into a research-active, well-networked environment with good infrastructure.
- A stimulating and varied range of responsibilities within a collegial team that values open communication
- Remuneration according to pay group 13 TV-L.
- Usual social benefits in the general public sector according to TV-L (annual special payment, pension scheme (VBL)).
- Compatibility of family and work, flexible working hours
- Varied sports program with health-promoting offers.
- Extensive opportunities for further education and training.

The University of Koblenz welcomes applications from all age groups, regardless of gender identity, disability, ethnic or cultural background, religion, ideology or sexual orientation. We aim to increase the proportion of women and are therefore particularly interested in applications from women. In the event of underrepresentation, women with equivalent aptitude and qualifications will be given preferential consideration. Severely handicapped persons will be given preferential consideration if their professional and personal qualifications are otherwise equal.

For further information, please contact Prof. Dr. Silke Rathgeber (e-mail: rathgeber@uni-koblenz.de, phone: 0261 287 2345).

Please, send your informative documents **by 15.12.2024**, quoting the **reference number 145/2024, exclusively by e-mail in one PDF file** to: bewerbung@uni-koblenz.de.

Please, refrain from sending in application photos. We do not send confirmations of receipt. At the end of the procedure, the application documents will be destroyed in compliance with data protection regulations.