

# PhD position - Multidimensional characterisation of bionanoparticles (m/f/d)

Technische Fakultät, Erlangen, 3950 €, Vollzeit, Befristete Anstellung: 36 Monate, Bewerbungsschluss: 15.11.2024

## Your Workplace

The CAARE project is a European Doctoral Networks project and is based at the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU), Technical Faculty at the Institute of Particle Technology. The project's goal is to characterize and recover bionanoparticles for use in vaccine development and gene therapy. As part of the network, 14 doctoral candidates will be trained at seven European institutions and will benefit from close collaboration with renowned industry and research partners.

## Benefits: We Have a Lot To Offer

- 30 days annual leave at five working days per week with additional free days on December 24 and 31

## Your Tasks

- Characterization of bionanoparticles (e.g., AAV gene therapy vectors, VLPs) using multidimensional characterization techniques
- Conducting experiments with analytical ultracentrifugation, complemented by nanoparticle tracking analysis and dynamic light scattering
- Experimental characterization combined with modelling tools such as Brownian dynamics or bead modelling to predict transport properties
- Use Modelling tools to validate experimental results and provide operating parameters for continuous flow ultracentrifuges
- Documenting and presenting research findings

## Your Profile

- Completed scientific higher education (Master's/Diploma) at a recognized university in (Bio)Chemical Engineering, Biotechnology, Biophysics, or a related field
- Ideally, research experience in one or more of the following areas: Chemical Engineering, Biochemical Engineering, Mathematical Modeling, Bioprocessing, Biophysics
- High motivation and enjoyment in working in an international, interdisciplinary environment

## Additional Information

The mobility rule for European Doctoral Networks applies: Researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organization (Germany)

for more than twelve months in the three years immediately before the start of employment.

Please attach a letter of motivation, a CV, and the contact information (including email addresses) of two academic references to your application.

### **Interessiert?**

Die vollständige Stellenausschreibung sowie alle Infos zum Bewerbungsverfahren finden Sie hier:

