







With around 17,000 students and 3,800 employees, the **Technische Universität Braunschweig** is one of Germany's leading institutes of technology. It stands for strategic and performance-oriented thinking and acting, relevant research, committed teaching, and the successful transfer of knowledge and technologies to the economy and society. We consistently advocate for family friendliness and equal opportunities.

Our research focuses are mobility, **engineering for health**, metrology, and city of the future. Strong **engineering and natural sciences** are our core disciplines. These are closely interconnected with economics, social and educational sciences and humanities.

Our campus is located in the midst of one of the most researchintensive regions in Europe. We work successfully together with over 20 research institutions in our neighborhood as we do with our international partner universities.

To the earliest convenient date, the Institute for Particle Technology is looking for a

Doctoral Candidate (m/f/d) in the field of reconstitution and testing of dried RNA-LNP systems (EG 13 TV-L, part-time)

The position is to be filled on a fixed-term basis for a period of three years. The placement will be at the Institute for Particle Technology in its division for Pharma and Bioparticle Technology at its location in the Center of Pharmaceutical Engineering (PVZ) in Braunschweig.



The Institute for Particle Technology investigates the production, handling, formulation and processing of particulate solids as well as the determination of the underlying physical and chemical relationships. An important interdisciplinary application of the research work is the field of pharmaceutical process engineering. Here, the division of Pharma and Bioparticle Technology focuses on process engineering in the production of solid dosage forms, enabling technologies for poorly water-soluble and sensitive drugs such as RNA as well as on individualization. The advertised position is located in the Center of Pharmaceutical Engineering (PVZ) and thus benefits from the pleasant and modern working atmosphere as well as the advanced and extensive infrastructure for the research in this project.

Make a Difference

- You will conduct independent research on the topic of "Reconstitution and testing of dried RNA-Liquid-Nanoparticle (LNP) systems". These play an increasingly important role in nanoencapsulation of RNA as therapeutic agents, The Focus of the consortium is to analyse th stability of LNPs more stable with respect to storage and transportation.
- You will work in an multidisciplinary network of a controlled and a coordinated, multi-centred graduate school programme of the state of Lower Saxony given by the universities of Braunschweig, Hannover and Göttingen.
- You research topics from the literature and evaluate them systematically.
- You apply for and work on the specific research project.
- You plan experiments independently and carry them out precisely and conscientiously.
- You publish research results and actively participate in national and international conferences.
- You will support university teaching (such as preparation and implementation of courses and supervision of student work).

Your Qualifications

- You have a degree (Master's or equivalent) in Biotechnology, Pharmaceutical Engineering, Process Engineering, Pharmaceutics, or a comparable programme and a profound understanding and enthusiasm for biotechnological work and analysis of biopharmaceuticals.
- You have very good knowledge of the English and preferably also German language as well as strong communication skills.
- You are highly motivated by your great interest in research and enthusiastic about scientific and technical topics.
- You have experience in biotechnology or pharmaceutical engineering/technology.
- You are flexible, can perform under pressure and work well in a team.
- You are aiming for a doctorate.

We offer

- Work on a fundamental research topic that also spreads into applied science with relevance for industrial and societal applications.
- An inspiring work environment as part of the university community.
- A vibrant campus life in an international atmosphere with lots of intercultural offers and international cooperations.
- Payment in accordance with the collective agreement TV-L (a special payment at the end of the year as well as a supplementary benefit in the form of a company pension, comparable to a company pension in the private sector) including 30 days' vacation per year.
- Flexible working and part-time options and a family-friendly university culture, awarded the "Familyfriendly university" audit since 2007
- Special continuing education programs for young scientists, a postdoc program, as well as other offerings from the Central Personnel Development Department and sports activities.

Further notes

We welcome applicants of all nationalities. At the same time, we encourage people with severe disabilities to apply. Applications from severely disabled persons will be given preference if they are equally qualified. Please attach a form of evidence of your handicap to your application. We are also working on the fulfilment of the Central Equality Plan based on the Lower Saxony Equal Rights Act (*Niedersächsisches Gleichberechtigungsgesetz*—NGG) and strive to reduce under-representation in all areas and positions as defined by the NGG. Therefore, applications from woman are particularly welcome in this case.

The personal data will be stored for the purpose of processing the application. By submitting your application, you agree that your data may be stored and processed electronically for application purposes in compliance with the provisions of data protection law. Further information on data protection can be found in our data protection regulations at https://www.tu-braunschweig.de/datenschutzerklaerung-bewerbungen. Application costs cannot be reimbursed.

Questions and Answers

For more information, please email or call Prof. Dr. Holger Ziehr at h.ziehr@tu-braunschweig.de.

Deadline for applications is 07.01.2025

Are you interested? Please send your application with the keyword *"RNApp – Reconstitution"* preferably via email to <u>h.ziehr@tu-braunschweig.de</u>.