Johannes Gutenberg University Mainz (JGU) is one of the largest universities in Germany. Thanks to its location in the Rhine-Main science region, the university can unfold to its full potential and showcase its innovative power and dynamism. Its status as a comprehensive university allows for multidisciplinary learning and teaching and has great potential for internationally renowned, interdisciplinary research. Almost all of its institutes are located on a single campus close to the Mainz city center – creating a lively academic culture for researchers, teaching staff, and students from every continent.

# Chemistry Department of Johannes Gutenberg University Mainz

# PhD student

[part-time] (50 %)

The Czodrowski Lab (www.czodrowskilab.org) is part of the Department of Chemistry which contains state-of-the-art analytical and experimental techniques in combination with cutting-edge data science methods. We apply wet lab and dry lab technologies to tackle highly relevant biological questions.

The PhD student will be embedded in these highly motivated groups. Primarily, the PhD student will be supervised by Paul Czodrowski. the project will be conducted in close colaboration with the Barthels and Kersten Lab at the Institute of Pharmaceutical and Biomedical Sciences (IPBS)

#### Your tasks:

- In-depth analysis of crystal structures with RNA complexed to enzyme
- pKa calculations on RNA-modifying enzymes
- Structure-based evaluation of protein crystal structures toward putative protonation effects
- Theoretical investigations of cysteines that can be covalently attacked in enzymes

## Your profile:

In addition to the general requirements according to public services law, applicants must meet the recruitment requirements stipulated in § 57 of the *Hochschulgesetz* of Rhineland-Palatinate.

- Master degree university degree successfully completed in chemistry, pharmacy, computer science or related fields
- Extensive knowledge in Python
- Sound background in structure-based drug design

## What we have to offer:

- Jobticket, optional for the entire Rhine-Main area
- Extensive human resources development offer
- Flexible working time arrangements

The position is paid according to 50 % EG 13 TV-L and to be filled on Apr-01 2023. The position is temporary limited to a period of three years.

JGU is diverse and welcomes qualified applications from people with varied backgrounds.

We aim to increase the number of women in the field of research and teaching and therefore encourage female researchers to apply.

Candidates with severe disabilities and appropriate qualifications will be given priority.

Please send your complete application (Motivation letter, CV, references) as one pdf file (stating the "[Application]" in the eMail subject) by Jan-15-2023 at the latest to: <a href="mailto:czodpaul@uni-mainz.de">czodpaul@uni-mainz.de</a>

For questions and further information please contact Paul Czodrowski by e-mail: <a href="mailto:czodpaul@uni-mainz.de">czodpaul@uni-mainz.de</a>.

<u>Data protection</u>, information

