

# PhD Candidate: Intermediates in N<sub>2</sub> Reduction Reaction

Fritz-Haber Institute in Berlin (Germany) and Radboud University in Nijmegen (Netherlands)

Application deadline: 15 September 2024

## Project

The project will be focused on helium tagging ion spectroscopy of intermediates in nitrogen reduction reaction (NRR). Finding new favorable conditions for NRR is a hot topic in catalysis. Homogeneous systems serve as models to unravel the details of all reaction steps. The project will aim to use a new helium-tagging ion spectroscopy instrument connected with an IR free-electron laser to study intermediates in NRR. You will learn advanced mass spectrometry- and spectroscopy techniques. The project will also include participating on instrumental development and it will run within the associated research group of Prof. Roithova at Fritz Haber Institute. For relevant literature, see e.g., *Acc. Chem. Res.* **2016**, *49*, 223; *J. Am. Chem. Soc.* **2024**, *146*, 5480.

## You should have

- master's degree in physical chemistry;
- curiosity to learn new experimental approaches and work with demanding experimental setups;
- ability to work in a multidisciplinary environment;
- good communication skills in English.

## Conditions

- the standard PhD contract within the Max Planck Society
- 2/3 position at the TVöD E13 level
- No teaching obligations

## Are you interested?

Send your application to [jana.roithova@ru.nl](mailto:jana.roithova@ru.nl). It must include (and be limited to) the following attachment(s):

- Motivation letter (max. 1 page)
- Summary of the paper published at <https://onlinelibrary.wiley.com/doi/full/10.1002/anie.202319270> (open access). Summarize the problem the paper addresses, the methodology used, and the results in your own words. Max. 2 pages.
- CV including the names of two references

**Applications that do not contain all three documents will not be considered.**