

# Postdoc Position in Photothermal Catalysis (m,f,x), for 2 years, 39.83 hours per week, TVL E13

Online seit 17.10.2024 | 2024-10-17-895220 | Wissenschaftliche:r Mitarbeiter:in

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## Stellenbeschreibung

The Chair of technical chemistry at the Faculty of Chemistry and Biochemistry is looking for a

### Postdoc Position in Photothermal Catalysis (m,f,x), for 2 years, 39.83 hours per week, TVL E13

We combine our knowledge in physical chemistry and engineering to study complex multiphase (solid/gas/liquid) catalytic reaction systems stimulated by (solar) light or electrical energy. Moreover, we integrate thermal energy or other stimuli to synergistically improve catalytic performances. Reactions of interest include water oxidation, production of oxidizing chemicals, hydrogen generation, selective alcohol oxidation, oxidative decarboxylation of carboxylic acids and purification of (industrial) waste streams using metal oxides and carbon based compounds.

Development of fundamental insights into common structural motifs/catalytically active centers, facet-specific activities and reaction mechanisms in heterogeneously catalyzed liquid-phase oxidation.

#### Your tasks:

- Publish high-quality papers in peer-reviewed journals.
- Disseminate research through talks at international workshops and conferences.
- Organize and actively participate in research group seminars.
- Be involved in the supervision of graduate students.
- Contribute to fostering a collegial, inclusive, and respectful working environment where everyone is treated fairly, with dignity and respect.

# Anforderungsprofil & Qualifikationen

## Your profile:

- You have a PhD in (industrial) chemistry, chemical engineering, materials chemistry, nanotechnology or similar; with a strong affinity for photothermal catalysis, materials synthesis and vibrational spectroscopy.
- You have solid knowledge and experience in nanomaterial functionalisation, semiconductor characterisation, gas or liquid phase catalysis and product analysis, and reactor development.
- You (preferably) have work experience in synthesis and characterisation of perovskites and spinels and oxidation catalysis.
- You are willing to be trained in complementary research activities (e.g. photoelectron spectroscopy, high pressure equipment, Kelvin probe...).
- You are an enthusiastic and highly motivated researcher, precise and reliable.
- You are independent, proactive and have a well-structured working style.
- You have a creative mindset and excellent analytical and communication skills.
- You are a good team player and enjoy working in an interdisciplinary and international environment.
- You have a good command of written and spoken English.
- You have an affinity for training and supervising students working on the same line of research.

## Our offerings:

- Challenging and varied tasks with a high degree of personal responsibility
- team-oriented collaboration in a committed, international and appreciative team
- a dynamic environment
- a modern, well-equipped workplace
- fair and flexible working hours

## Additional information:

At the request of the applicant (m,f,x), the staff council may be involved in selection interviews. <https://www.wpr.ruhr-uni-bochum.de/>

The load of teaching will be calculated according to § 3 of Lehrverpflichtungsverordnung (state of North Rhine-Westphalia).

German language courses are offered by the University Language Center (ZfA) in the field of German as a Foreign Language (DaF).

<https://www.daf.ruhr-uni-bochum.de/sbgk/index.html.en>

You can find information about TVL at: <https://oeffentlicher-dienst.info/>

**The Ruhr-Universität Bochum is one of Germany's leading research universities, addressing the whole range of academic disciplines. A highly dynamic setting enables researchers and students to work across the traditional boundaries of academic subjects and faculties. To create knowledge networks within and beyond the university is RUB's declared aim.**

The Ruhr-Universität Bochum stands for diversity and equal opportunities. For this reason, we favour a working environment composed of heterogeneous teams, and seek to promote the careers of individuals who are underrepresented in our respective professional areas. The Ruhr-Universität Bochum expressly requests job applications from women. In areas in which they are underrepresented they will be given preference in the case of equivalent qualifications with male candidates. Applications from individuals with disabilities are most welcome.

**Contact details for your application:**

Prof. Dr. Bastian Mei, Phone: +49234 32 28754

Travel expenses for interviews cannot be refunded.

For information on the collection of personal data in the application process see:

<https://www.ruhr-uni-bochum.de/en/information-collection-personal-data-application-process>.

We are looking forward to receiving your **application with the specification ANR: 3904 until 28.10.2024, send by e-mail to the following address: [lrc@techem.rub.de](mailto:lrc@techem.rub.de)**

**Please get in touch with the contact person named above if you would like to use an alternative application channel.**

## **Vorteile für Mitarbeitende**

- Sport- und Freizeitangebote
- Weiterbildungsmöglichkeiten
- Vergünstigtes Jobticket
- Arbeitsplatz in lebendiger Metropolregion

## Stellenmerkmale

Beschäftigungsart	Wissenschaftliche:r Mitarbeiter:in
Beschäftigungsumfang	Vollzeit (befristet)
Home Office	Nein
Bewerbungslink	<a href="https://jobs.ruhr-uni-bochum.de/jobposting/c85e5e6699751f6d346bbbb14a9042d976ea510a?ref=stellenwerk">https://jobs.ruhr-uni-bochum.de/jobposting/c85e5e6699751f6d346bbbb14a9042d976ea510a?ref=stellenwerk</a>

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## Kontaktdaten

Firma/Hochschule	Ruhr-Universität Bochum
Anschrift	Universitätsstraße 150 44801 Bochum
Kontakt	Prof. Dr. Bastian Mei
Telefon	 +49234328754
E-Mail	
Webseite	<a href="https://uni.ruhr-uni-bochum.de/de/stellenangebote">https://uni.ruhr-uni-bochum.de/de/stellenangebote</a>