Job posting

Type of position
- ☑ scientific
- ☐ administrative

Target group
- ☑ graduates
- ☑ post docs
- ☐ other

Title
RESEARCH SCIENTIST / SENIOR SCIENTIST MATERIALS SCIENCE AND ENGINEERING (M/F/D)

Institution
RESEARCH AND DEVELOPMENT FROM IDEA TO PROTOTYPE

Our institute ranks among the largest and most modern institutions in the field of low-temperature plasmas worldwide. In an international working environment, we conduct socially relevant research within our core areas Materials & Energy and Environment & Health. Currently the INP employs about 200 scientists and staff at three locations (Greifswald, Rostock and Karlsburg).

Position
The INP is seeking to hire within the MET - Materials for Energy Technologies Research Group – subject to the future commitments of funds – starting September 1st 2020 an enthusiastic candidate for the position of

RESEARCH SCIENTIST / SENIOR SCIENTIST MATERIALS SCIENCE AND ENGINEER-ING (M/F/D)

Fixed-term contract for 48 months / Full-time appointment (40 hours/week) / Target salary: TV-L (pay scale area East) E13

Responsibilities
The primary objective of this position will be the development of new manufacturing routes for deposition of perovskite ceramic thin films for oxygen separation membranes, within the frame of HiPowAR – an EU project within Horizon2020 FETPROACT-EIC-05-2019 "Emerging Paradigms and Communities" - Breakthrough zero-emissions energy generation for full decarbonization. In HiPowAR, the INP and partners from Germany, Sweden, Italy and Czech Republic will develop a new membrane reactor for energy generation from ammonia as a new carbon-free energy carrier. The integration of mixed ion electron conducting (MIEC) thin membranes will enable higher efficiencies in ammonia conversion as compared to combustion or steam generation.

The main responsibility of the project work is on development of ceramic MIEC thin film and optimization of magnetron sputtering and subsequent laser annealing processes for thin film activation. Process optimization is accompanied by investigation of crystallographic and microstructural properties of the perovskite thin films as well as investigation into oxygen
permeation properties.

**Requirements**

- PhD level in Material Science, Nanotechnology, Materials Engineering or Solid State Chemistry or related fields with a background in ion and mixed conducting complex metal oxides such as perovskite
- Excellent knowledge in crystallography and characterization of structural properties by X-ray (XRD) is essential
- Expertise in electron diffraction and transmission electron microscopy is preferred
- Highly developed analytical skills in electrochemistry and characterization of transport properties of electroceramic materials and good knowledge in energy technologies
- Ability to work systematically and solution orientated with a high research competence
- Capability to work and communicate constructively within a team setting and meeting tight deadlines are necessary
- Excellent language skills in English, both written and oral
- Documented academic and project development skills are required, as well as the ability and ambition to write scientific publications and project reports.

**Application procedure (deadline etc.)**

OUR OFFER FOR YOU:

- Compensation according to collective salary agreement of Länder (TVL, pay scale East) including employer contributions to medical and dental insurance, maternity leave and retirement benefits
- Creative working environment
- State-of-the-art technical facilities
- Opportunities for professional development (e.g. project management, acquisition of third-party funding)
- Networking opportunities at national and international conferences and in cooperation with national and international industry partners
- Possibility of designing and implementing own project ideas
- In-house German course free of charge
- Flexible working hours and home-office offers
- 30 vacation days per year (plus: December 24 and 31)
- Sports courses in our institute rooms

HOW TO APPLY
Please apply with the common documents (cover letter, CV, copies of academic degrees and letters of reference) giving the keyword „0348 Research Scientist Materials Science and Engineering“ - preferably via our online application form - until June 30th 2020.
Your performance and personality matters regardless of your age, origin, gender, sexual identity, disability or ideology. We look forward to receiving your applications!

Contact

For further information, please do not hesitate to contact Dr. Angela Kruth (e-mail: angela.kruth@inp-greifswald.de, phone: +49 (0)3834 554 3860).

Please send your applications to*:

Leibniz-Institute for Plasma Science and Technology (INP)
Mrs Gabriele Lembke
Human Resources Department
Felix-Hausdorff-Str. 2
17489 Greifswald
E-Mail: bewu@inp-greifswald.de

* Unfortunately, we cannot refund any expenses associated with the application or job interview due to budgetary regulations.