Job posting

Type of position
☒ scientific
☐ administrative

Target group
☐ graduates
☒ post docs
☐ other

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

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).

For further information, please visit our website at www.leibniz-inp.de.

Position
For our research group Materials for Energy Technologies we are looking to recruit at the earliest possible date for our location in Greifswald an enthusiastic candidate for the position of

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

Fixed term contract for minimum 24 months / Full-time appointment (40 hours/week)/ Target salary: TV-L E 13

Responsibilities
YOUR FIELD OF ACTIVITY:

Ammonia is carbon-free hydrogen and a game changer for the energy transition. Within the frame of the HiPowAR project, funded by EU Horizon2020 FETPROACT-EIC-05-2019 "Emerging Paradigms and Communities - Breakthrough zero-emissions energy generation for full decarbonization", a new a new membrane reactor is being developed for the efficient energy production from ammonia by a consortium of six European partners. (https://www.hipowar.eu). At INP, a scientist position has opened to develop MIEC (Mixed Ionic Electronic Conductor) thin film membranes by a physical vapor deposition and their optimization with regard to permeation performance in the membrane reactor.
YOUR MAIN RESPONSIBILITIES WILL BE:
- Development of ceramic MIEC perovskite thin films by a combined process of magnetron sputtering and selected laser annealing;
- Study of crystallographic and microstructural properties of the thin films by a range of techniques such as XRD, Raman Spectroscopy, XPS, SEM-EDX and Profilometry;
- Application of thin films onto surface-optimised tubular porous substrates and study of oxygen permeation properties at high temperatures by means of a specially designed jig;
- Preparation and conduction of monthly meetings of project partners;
- Communication of scientific results to partners and collaboration with other INP team members as well as writing of scientific reports;
- Submission of scientific papers for peer-review and presentation of project results at international conferences.

Requirements
- PhD level in Physical Chemistry, Material Science, Nanotechnology or Materials Engineering or related fields with a background in complex metal oxides materials
- Knowledge in crystallography and XRD as well as expertise in electron microscopy
- Highly developed skills in electrochemistry and characterization of transport properties of electroceramic materials
- 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
- Very good language skills in English, both written and oral
- Peer-reviewed scientific publications and / or ability for scientific report writing

Application procedure (deadline etc.)

OUR OFFER FOR YOU:
- Compensation according to collective salary agreement of Länder (TV-L) including employer contributions to medical and dental insurance, maternity leave and retirement benefits
- Creative working environment
- State-of-the-art technical facilities
- Networking opportunities at national and international conferences and in cooperation with national and international industry partners
- Opportunities for external training
- In-house German course free of charge
- Internal laboratory tours (“What do the colleagues do?”)
- Possibility of designing and implementing own project ideas
- Flexible working hours and home-office offers
- Family Office
- 30 vacation days per year (plus: December 24 and 31)
- Staff kitchen

HOW TO APPLY
Please apply with the common documents (cover letter, CV, copies of academic degrees and letters of reference) giving the keyword „0470 Research Scientist Materials Science and Engineering“- preferably via our online application form – until 31st March 2022.

Your performance and personality matters regardless of your age, origin, gender, sexual identity, disability or ideology. We look forward to receiving your applications!

The INP wants equal participation of men and women, especially in science. There are many good reasons why it is worthwhile to promote the potential of women specifically. Qualified women candidates are explicitly called to apply. Handicapped applicants will be preferred in case of equal qualification.

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

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.