Job posting

Type of position
- [ ] scientific
- [x] administrative

Target group
- [x] graduates
- [x] post docs
- [ ] other

Title
POST DOC (F/M/D)
FOR LASER-BASED PLASMA DIAGNOSTICS

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 Plasma Chemistry and Process Technology, Renewable Energy & Bioeconomy as well as Health & Hygiene. 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
The application-oriented research activities in the Department of Plasma Diagnostics are centered on the development and application of advanced laser-based diagnostics for the characterisation of plasma-chemical processes and plasma-surface interactions. For open scientific questions in the field of EUV lithography, we are looking for the following expert to join us in an ongoing collaboration at the earliest possible date - ideally from beginning of November:

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* Fixed term contract initially for 15 months (extension for 3 more years possible)
* Full-time appointment (40 hours/week)
* Target salary according to TV-L in wage group E 13 (Gross salary range depending on professional experience, see Renumeration table 2023)

Responsibilities
- to operate and maintain a two-photon absorption laser-induced fluorescence experiment (TALIF)
- to quantify densities of atomic hydrogen in a hydrogen-containing plasma for the analysis of their loss rates on selected surfaces
- to apply laser-based spectroscopic methods such as cavity ring-down spectroscopy to extend the analysis for molecular
radicals in hydrogen-containing plasmas with impurities
- to carry out detailed studies to elucidate relevant plasma-
chemical processes and to identify key species in the plasma
Furthermore, you will:
- Work together with scientists from the institute and the project
  team of the client
- Communicate regularly project results to the project team at
  weekly meetings

Requirements
- Experimental physicist or chemist or equivalent degree with a
  completed PhD degree
- Very good knowledge in the field of laser spectroscopy for the
  sensitive detection of atoms and molecules in the gas phase
- Experience with diagnostics based on cavity enhanced
  spectroscopy
- Experience in the field of plasma spectroscopy desirable
- Confident use of tools such as Python, Matlab and Origin
- Experience in writing scientific reports and publications

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 environment with technical facilities at the highest
  level
- Experienced and professional support
- Extensive qualification measures for your personal
development
- Networking opportunities at national and international
  conferences and in cooperation with national and international
  industry partners
- Possibility to look outside the box, e.g., involvement in other
  application-oriented projects
- Internal institutional laboratory tours ("What do the colleagues
do?")
- Flexible working hours and possibility of home-office days
- In-house German course free of charge
- A working environment certified as family-friendly
- 30 vacation days per year (plus: December 24 and 31)
- Staff kitchen
Contact

HOW TO APPLY
Please apply with the common documents (cover letter, CV, copies of academic degrees and letters of reference) giving the keyword „0531 Post Doc Laser-Based Plasma Diagnostics“- preferably via our online application form - until 29th September 2023.

Your performance and personality count, 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 specifically the potential of women. Qualified female applicants are explicitly encouraged to apply. Disabled applicants will be given preferential consideration if they are equally qualified.

CONTACT:
For further information, please do not hesitate to contact Dr. Norbert Lang (tel. +49 3834 554452; e-mail: lang@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.