Post-doctoral Research Scholar – Active laser spectroscopy, Ruhr University Bochum, Germany

The <u>Plasma Interface Physics Lab</u> at Ruhr University Bochum is seeking an early career scientist to work on the development of active spectroscopy of low temperature plasmas. This includes the design and setup as well as the maintenance of laser systems for detection of reactive species.

The position is integrated into the <u>Collaborative Research Centre (CRC) 1316</u> "Transient atmospheric plasmas – from plasmas to liquids to solids" and is under the supervision of <u>Prof. Dr. Judith Golda</u> (PIP lab lead) and will be based at the Department of Physics and Astronomy in Bochum, Germany.

Key responsibilities:

- Investigation of non-equilibrium plasmas by use of various diagnostic techniques. In particular, collisional interactions between the various constituents of the plasma and the gas as well as the interaction with surfaces should be studied.
- The tasks include detailed analysis of the data and development of physical models for their interpretation.
- Close collaboration with the project team and colleagues within the group as well as with other colleagues within the CRC1316 and external collaboration partners is expected.
- The results will be published in international scientific journals and presented on national and international conferences and meetings.
- You are expected to participate in teaching activities and to lead research projects as well as thesis projects.

Your profile:

- A successful PhD in plasma physics and experience with active and passive spectroscopy methods is required.
- Experience with laser diagnostics (e.g. absorption spectroscopy, (TA)LIF, E-FISH, CRDS, ...) and laser maintenance (e.g. Nd:YAG, dye, ...) as well as optical setup handling is desired.
- Scientific research ability demonstrated by peer-reviewed publications and presentations at international conferences.

The position is initially limited to 2 years with the possibility of prolongation.

Please send a cover letter, CV and reprints of 3 representative publications to

Alicia Gonzalez

Ruhr University Bochum, Germany

alicia.gonzalezfontela@rub.de