Postdoctoral Research Scholar – Computational Plasma Science Group, North Carolina State University, USA

The Computational Plasma Science Group in the Nuclear Engineering Department at North Carolina State University is seeking a postdoctoral research scholar. The postdoctoral researcher will be responsible for plasma and electromagnetic modeling of high powered inductively coupled hydrogen plasmas. The computational modeling will support the development of a low temperature plasma source which produces ions for the neutral beam injectors on a DIII-D tokamak. The project will involve collaboration with experimentalists working on reduced-scale and full-scale test setups for model validation and to provide physics insights to inform key design decisions. The findings should be published in peer-reviewed journals.

The postdoctoral research scholar will work closely with Dr. Amanda Lietz and in collaboration with an experimental team including Dr. Florian Laggner and Dr. Steven Shannon. The ideal candidate should be capable of taking on a leadership role in planned research, execute the research in a timely manner, and deliver milestones.

Duties and responsibilities:

- Running physics simulations assessing and analyzing the resulting data.
- Assist in mentoring graduate students and undergraduate researchers.
- Disseminate research findings in publications and conference presentations.
- Collaboration with experimental and engineering partners for model validation and design support.
- Travel to scientific conferences and project meetings.

Required skills:

- Ability to clearly and concisely present scientific data both orally and in writing.
- Strong technical communication skills (written and oral).
- A strong publication record is highly desirable.

How to apply

Contact: Dr. Amanda M. Lietz, Department of Nuclear Engineering, North Carolina State University, USA, <u>alietz@ncsu.edu</u>.