

Post-Doctoral Research Fellow

Computational Low Temperature Plasmas University of Michigan

A post-doctoral research fellow (PDRF) position in computational low temperature plasmas (LTPs) is available in the research group of Prof. Mark J. Kushner at the University of Michigan, Ann Arbor, MI USA. The position entails development and application of computer models for low temperature plasmas, plasma chemistry and plasma surface interactions; and nano-scale modeling of surface evolution. The PDRF will work on several projects, with examples being:

- Atmospheric pressure plasma transport, plasma chemistry and sources
- Atmospheric pressure plasmas interacting with complex surfaces, liquids and biological materials
- Low pressure plasma transport and chemistry in inductively coupled, microwave and capacitively coupled plasmas
- Plasma surface interactions for materials process
- Profile evolution for microelectronics fabrication

The PDRF should have the following skill-sets:

- Expertise in the fundamental processes of LTPs, plasma chemistry and plasma surface interactions
- Expertise in developing and maintaining parallel computer models for LTPs using high level languages including Fortran
- Excellent oral and written communication skills
- Ability and desire to supervise graduate students; and interact with research colleagues in academia, national laboratories and industry.

More information about the research group is at: <http://uigelz.eecs.umich.edu>

The initial appointment period is 1 year with reappointment subject to performance and availability of funds.

Applicants should send a cover letter (including date applicant is available), CV and reprints of representative publications to Prof.Kushner (mjkush@umich.edu).

16 October 2019