

Plasma Modeling Position, Lam Research

Short Description:

Lam is looking for a computational plasma scientist to employ cutting edge methods to model and simulate our complex plasma reactor systems and to provide innovative solutions to our design challenges.

Job Responsibilities:

- Formulate models of plasma reactor systems for wafer fabrication
- Work with process and hardware design engineers to model and simulate Multiphysics problems involving plasmas, heat and mass transfer, electromagnetics in the reactor level as well as wafer level
- Find root-causes, optimize process and hardware design with the aid of a combination of simulation and modeling tools
- Simplify complex phenomena into solvable models that capture the essence of the physics
- Take the initiative to address the limitations in full scale plasma simulation when needed, and adopt numerical methods that speed up/augment the physics based models
- Communicate findings to a larger multidisciplinary audience
- Provide innovative, impactful and scalable solutions to hardware and process challenges with the aid of simulations
- Put in place modeling and simulation methods and guidelines for plasmas to reduce throughput time and increase modeling impact

Minimum Qualifications:

Graduate studies in Electrical or Mechanical Engineering with focus on computational plasmas

- MS with 4+ years' experience
- PhD with 0+ years' experience

Skills:

- Plasma simulations on commercial packages and plasma codes
- EM simulations on commercial packages
- Experience with particle formulation of plasmas
- Expertise in fluid formulation of plasmas
- Exposure to Multiphysics modeling
- Coding in Python

Contact:

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