Lam Research Corporation
RF C&F Engineer
Full time position in Fremont, CA

Job Description

We are searching for a talented computational RF and plasma engineer with a strong background in computational physics and engineering to join our team. As a key team member, you will support product design guidance through computational modeling of physical phenomena in plasma processing reactors involving highly selective etch processes. This is a perfect role for candidates who love to work on real-world applied research in low temperature plasma modeling on state-of-the-art challenges in semiconductor fabrication. Your work will have a direct impact on plasma chamber and process design for current and future technology nodes.

Essential Functions and Skills/Abilities

- Knowledge of plasma physics, semiconductor process technology, design, and manufacturing
- Provide product design guidance through computational modeling and simulation of multi-physics phenomena involving plasma, RF, electromagnetics, flow, heat, and chemistry
- Expertise in plasma modeling and platforms (HPEM / nonPDPsim / Vizglow / ACE+), problem setup, optimization, troubleshooting for both ICP and CCP systems
- Expertise in FVM / FEM platforms (openFOAM / ACE+ / Fluent, Comsol, Maxwell/HFSS) for flow, chemistry, thermal, structural, electromagnetics and related meshing techniques
- Familiarity with molecular dynamics (LAMMPS) and interatomic potential development
- Proficiency in modeling & simulation, computational sciences, numerical methods and optimization
- Experience in programming with Fortran/ C/ C++, Python, Matlab, and related SW tools/compilers
- Work in cross-functional environment with strong problem solving, communication, and presentation skills
- High energy, independent, self-motivated, quick study with flexible nature
- Ability to quickly learn and master new software tools is desirable
- Contribute to engineering design, process, hardware, and software testing to solve product issues and interface in complex cross-functional teams.

Requirements

MS/PhD Physics/Chemistry/ Engineering – Chemical, Electrical, Mechanical, or related field
Demonstrated experience or background in
- Plasma science & technology
- Computational sciences, plasma physics, electromagnetics, transport phenomena
- Design of experiments
- Programming and numerical methods

New College Graduates / Postdoc / prior industry or academic experience
Ability to work in cross-functional teams and interface with experimentalists, design and software engineers

Competencies

- Agility, Communication, Critical Thinking, Innovation and Strategy, Ownership & accountability, Problem Solving, Teamwork

Interested candidates can apply here