

Computational Plasma Physicist

Applied Materials, Inc.

Requires in-depth knowledge and experience in computational plasma physics, plasma chemistry, or related areas. Additional knowledge of plasma materials processing and computational methods is valuable but not essential. Uses best practices and technical knowledge to improve products and processes for semiconductor manufacturing.

Key Responsibilities

1. Develop, modify and test Particle-in-Cell (PIC), fluid and hybrid plasma modeling codes, and feature scale modeling code as needed.
2. Perform plasma physics and/or plasma chemistry modeling of plasma chambers to provide better understanding of plasma behavior during concept & feasibility, design and development of plasma processing systems.
3. Perform feature scale modeling for etch, deposition and/or selective removal processes.
4. Perform engineering analysis. Recommend design modifications to improve plasma behavior to address technical/business needs.
5. Apply internal and/or external codes to address plasma related problems as needed.
6. Work in a team environment. Present modeling results and recommendations to product development team.
7. Provide technical expertise in plasma physics and/or plasma chemistry as valuable resource.

Leadership

- Acts as a plasma physics resource for colleagues with less experience.

Problem Solving

- Solves complex plasma problems; judiciously interprets results; provides recommendation based on analysis.

Interpersonal Skills

- Explains difficult information; works in a team environment.

Education: Masters or PhD; 0 – 3 Years of relevant experience

Contact:

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