



iTrap®

Job Title: Chamber Solutions Applications Engineer/Scientist

Location: US West Coast

Manager's Job title: Market Development Manager

Job Description:

Edwards iTrap is a compact, sensitive, robust ion trap mass spectrometer, used for process analysis and inline process control functions in Semiconductor process steps – particularly dry etch. We are hiring an Applications Engineer/Scientist to help in the development and commercial roll-out of the product. In addition, we may also require occasional support for our other products – Turbo Molecular Pumps and Cryo Pumps

Main Responsibilities:

- Work directly with the customer to develop, execute, and troubleshoot ion trap mass spectrometry-based solutions for process analytics and control in the semiconductor industry.
- Independently, and as part of the engineering team, conduct cutting-edge research and development in the field of ion trapping for application to the semiconductor market.
- Functions as a technical expert in quadrupole ion traps to develop, simulate, execute, and troubleshoot experiments for MS product enhancements.
- Work closely with product management to align product roadmaps with customer requirements.
- Collaborate with account teams to develop targeted clear and concise value propositions.
- Understand customers' high value problems and communicate to divisional product management to drive product roadmaps in order to maintain our technical leadership and competitive advantage.
- Contribute to the application and product management meetings in order to prioritise products and enhancements for development.
- Coordinate the regional launch of new products, develop applications plan and team to introduce new technology..
- Manage R&D to high volume manufacturing product adoption/qualification to deployment
- Contribute to strategic account planning in collaboration with the account manager and service team.
- Monitor and analyze competitor's activities.
- Participates in symposiums, technical workshops, present papers, thought leadership.

Requirements:

- An advanced degree (MS minimum, PH.D. desirable) in physics, analytical chemistry (instrumental analysis), or related fields
- Desirable: experience in mass spectrometry instrumentation design and testing
- Computer simulation for mass spectrometer systems, familiar with SIMION/COMSOL
- Knowledge of Vacuum technologies, Cryo technologies, gauges etc.
- Knowledge of electronics/signal recovery/sensor fusion, etc.
- Commercial and customer focus
- Fluent English Essential –Japanese, Korean, Chinese useful
- Knowledge of the Chemistry and Processes used across semiconductor industry
- Data analysis/numerical methods in Python/MATLAB/C++/etc.
- Design of Experiments (DOE)
- Proven Project Management skills. Creative & Strategic thinking skills.
- Excellent teamwork skills
- Excellent communication & proven English skills.
- Proven presentation skills (written/verbal)
- Problem-solving aptitude

Job Scope:

- ✓ Reports to Market Development Manager, Semi Chamber Solutions Division
- ✓ Chamber Solutions for the Semi, Display, Coating, Scientific and Diffuse sectors – Influencing Annual Revenue \$300M-> 400M → targeting doubling this in 5+ years
- ✓ Work with extended team to uncover truly high value problems at end user customers/OEMs where we can engage
- ✓ Ensure qualification position
- ✓ 'Boots on the ground' focus with heavy level of interaction with customers and internal teams
- ✓ Travel up to 50% - 80% of time at customer interface or working with the global team remotely



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