

Semiconductor Metrology

Application Specialist/Developer

INTRODUCTION

Nearfield Instruments (NFI) brings together the most creative minds in science and technology to develop a revolutionary high throughput atomic force microscopy system enabling atom-scale resolution 3D metrology at industry-level throughput, based on three pillars:

- Unrivaled measurement speed;
- Parallelization capability;
- Advanced measurement modes.

At NFI, we design, develop, integrate, market and service these advanced metrology machines, which enable our customers - the world's leading chipmakers – to increase the production yields, and thus, functionality of their microchips, which in turn leads to smaller, more powerful consumer electronics. We aim to develop leading edge metrology systems, to be installed at the customer site, within specifications, on time, with quality exceeding the customer's expectations.

WHAT WILL YOU BE DOING?

As a Metrology Application Specialist/Developer you will be involved in advancing our metrology product development which enables and improves the customer's process control capability in semiconductor device production. You will drive product development, manage customer relationship in terms of application development and fab fabrication processes.

You will also be involved in the research and development (R&D) of the next generation metrology applications. Together with your colleagues you will analyze and predict customer needs, translate these to system requirements, create conceptual designs and perform experimental measurements to demonstrate key aspects, and realize and experimentally characterize full instrument prototypes. For this you will apply your experience and knowledge about the metrology applications, Fab production process and process control. You are also able to translate the customer needs in metrology to recipes for AFM measurement.

You will be trusted to recommend design changes or substitution of materials when appropriate. You will also advise users of appropriate actions to correct malfunctions and may recommend changes in user procedures.

Moreover, you will be in close/regular contact with the customer. You'll answer questions and assist them in a professional manner. In order to excel at this, you need to be customer-oriented and have excellent problem analysis skills. Your power of persuasion is strong, you demonstrate good communication skills and you possess natural leadership qualities.

In this role you will travel for about 20 percent of your time. You will report directly to the CTO.

WHAT DO WE REQUIRE OF YOU?

The Metrology Application Specialist/Developer we seek ideally has at least 5 years of experience as Application Engineer in a working environment which, in terms of complexity, is in line with that of

NFI. Experience in the field of semiconductor equipment is required. Furthermore, you need to recognize yourself in the profile as described below.

You have:

- A Masters/PhD in Physics or Engineering, with an emphasis on metrology and process control;
- A wide experience in metrology and imaging;
- Experience in Overlay, CD, Alignment and defect metrology;
- You have extensive knowledge in Memory and Logic production and process control;
- Knowledge of how to build nanoscale instruments such as AFM or SPM and the physics behind the working of such instruments is a plus;
- Prepared written technical reports on an independent basis;
- Experience in measurement analysis;
- Experience working in a multi-disciplinary engineering environment, with suppliers and co-developers, to ensure timely realization of competitive, high precision, complex components and assemblies;
- Be a demonstrated “team player” with strong interpersonal skills and a quality orientation;
- Be able to quickly acquire technical knowledge from documentation and on-the-job training, and be capable of thoroughly investigating technical issues (analytically and hands-on in a lab or cleanroom environment);
- Strong written and oral communication skills and a commitment to achieving results on time;
- You have a good command of the English language, both written and spoken.

HAS THIS VACANCY AROUSED YOUR INTEREST?

Then please feel free to apply on this vacancy! Nearfield Instruments offers an exciting, fast-paced working environment where you will be able to shape the system and the company.

For further questions don't hesitate to contact us.

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