POSITION: NANOFABRICATION SCIENTIST/ENGINEER

December 2022

Applied Nanotools Inc. (ANT) is a leading nanofabrication and sensors company specializing in X-ray optics and integrated photonics. The company offers NanoSOI, a photonic integrated circuit (PIC) fabrication service based on electron beam lithography technology, offering patterning of high-resolution devices on silicon, silicon nitride, and other substrates. The service is offered worldwide to researchers and industry for quick turnaround high-resolution devices. These devices are used in product development and research in telecommunications, sensing, computing, and other areas.

Summary of Position:

Applied Nanotools Inc. is seeking candidates for a full-time Nanofabrication Scientist/Engineer position. The chosen candidate will plan and execute cleanroom fabrication activities, define custom project requirements with clients, and carry out R&D to improve the NanoSOI photonics fabrication service. The candidate will also characterize chip-based devices for quality control and troubleshooting purposes.

The requirements of the position are:

- B.Sc., M.Sc., or Ph.D. degree in Engineering, Physics, or equivalent.
- Minimum 2 years of experience in a cleanroom or semiconductor/MEMS manufacturing environment, which may include industry and/or academic experience.
- Hands-on experience with micro/nanofabrication processes such as lithography, wet and plasma etching, and thin film deposition (sputtering, evaporation, PECVD).
- Familiarity with characterization equipment such as scanning electron microscope (SEM), ellipsometry, optical, and contact profilometry.
- Skilled with CAD/layout preparation tools such as L-Edit, KLayout, Cadence, or equivalent.
- Excellent verbal and written communication skills.
- Must be able to work independently and as part of a team.

Assets include:

- Familiarity with photonic simulation techniques such as FDTD and FEM
- Experience in photonic integrated circuit device testing, characterization, and analysis

Interested applicants may forward a cover letter and CV to: careers@appliednt.com and include “Nanofabrication Engineer” in the e-mail subject.

Position open until filled