

NordAmps AB – Process Engineer

NordAmps, a semiconductor company, founded in 2017, and based in Lund, Sweden is looking for a process engineer for process development and small volume fabrication.

We develop In(Ga)As vertical nanowire transistors on Si-substrates with competitive device performance – high frequency operation enabled by optimal material properties and by the vertical topology. NordAmps technology combines the high performance of III-V materials in a scalable technology with cost effectiveness supported by silicon substrates.

The work will be carried out in collaboration with the Nanoelectronics group at the Department of Electrical and Information Technology at LTH, who has pioneered the technology through years of successful and world class research. At present, the processing takes place at the NanoLund facility, however, NordAmps aims to start process transfer within shortly to its own manufacturing facility.

Description of the position

The main responsibilities of this position is process development and low volume production of standalone transistors and millimeter wave circuits such as low noise amplifiers, mixers, power amplifiers and voltage-controlled oscillators. Experiments will be designed to improve device performance and yield of the process technology. After manufacturing, the electrical properties and especially the high frequency performance will be characterized using probed measurements. The device and circuit development will be made in close collaboration with model engineers, circuit designers and TCAD device experts.

Qualifications

- PhD or Master´s degree in Electrical engineering, Material Science, Chemistry, Chemical Engineering, Applied Physics, Engineering Physics or equivalent.
- A team player who is at the same time self-motivated and can work independently
- Direct cleanroom experience of semiconductor manufacturing/process development
 - photolithography, etching, metalorganic chemical vapor deposition (MOCVD), metallization processes
 - Experience in material characterization tools such as SEM/TEM
- Excellent communication skills
- 5+ years´ experience in a relevant field

Additional desired competence

- Knowledge of III-V materials, especially InAs/InGaAs
- Failure analysis
- Experience in relating process data to electrical high frequency device performance
- Semiconductor device characterization using probe station
- Measurements with network analyzer
- Noise characterization

Application

Please send an email with your application.

Start date: March 2023 as earliest

Location: NordAmps AB, Ideon Lund <https://nordamps.com>

Questions about the position will be answered by;

Lars Tilly, CEO NordAmps AB, lars.tilly@nordamps.com

+46 739 311 052