Process Engineer – Graphenea

Location: Donostia-San Sebastián, Spain

Employment Type: Full-time in person

Department: Graphenea Semiconductor - Fab

About Graphenea

Graphenea is a leading graphene company dedicated to shaping the future of electronics through advanced nanomaterials and semiconductor technologies. Founded in 2010, we operate a graphene foundry that manufactures and supplies high-quality graphene-based wafers, materials, and devices.

Graphenea focuses on delivering reliable, scalable graphene solutions that accelerate innovation. By combining proprietary chemical-vapor-deposition (CVD) processes, precision transfer techniques, and full-wafer fabrication services, we enable customers to bring graphene-enabled products to market faster.

We are looking for a **Process Engineer** to join our Semiconductor team and play a key role in developing, optimizing, and scaling up our graphene wafer fabrication processes.

Key Responsibilities

- Develop, implement, and optimize semiconductor fabrication processes involving graphene and related materials
- Operate, maintain, and troubleshoot semiconductor processing equipment (CVD, ALD, lithography, etching, deposition, etc.)
- Design, develop, and maintain process recipes, process control strategies, and in-line metrology measurements to ensure process stability and reproducibility
- Collaborate with Yield & Integration, Production, and Quality teams to ensure consistent yield and performance
- Document processes, standard operating procedures (SOPs), and experimental results
- Support customer projects and technology activities

Requirements

- Bachelor's, Master's, or PhD in Engineering, Materials Science, Physics, Chemistry, Electrical, or a related field
- Experience in semiconductor or microfabrication environments (cleanroom experience required)
- Hands-on knowledge of thin film deposition, lithography, etching, or material characterization techniques
- Strong analytical and problem-solving skills, with experience applying methodologies such as Design of Experiments (DoE), Statistical Process Control (SPC), and Root Cause Analysis (RCA) for process optimization and troubleshooting
- Experience with programming in Python or similar languages for data acquisition, analysis, and process automation
- Ability to work collaboratively in a multidisciplinary, fast-paced environment
- Good written and verbal communication skills in English
- Candidates must hold a valid EU work permit

What We Offer

- Opportunity to work at the forefront of graphene and semiconductor innovation
- A collaborative, international, and technology-driven workplace
- Professional development opportunities and training
- Competitive compensation and benefits

Join us in shaping the future of electronics with graphene.

To apply, send your CV and a brief cover letter to **jobs@graphenea.com** with the subject line *Process Engineer – Graphenea Semiconductor*.