

Process Scientist/Engineer, Photonic Integrated Circuits - Santa Barbara, CA

About QPICs

QPICs Inc. is advancing the frontier of photonic devices and systems — smaller, lighter, and more power-efficient. As opto-electronics transforms, photonic integrated circuits (PICs) are being adopted across quantum computing and sensing, communications, LIDAR, and AR/VR. QPICs is a fast-turn PIC foundry built to meet this moment: we deliver devices in weeks rather than months; we work across a wide and growing range of photonics materials beyond CMOS-compatible limits; and we scale with our customers, from rapid prototyping to volume production.

The Role

QPICs Inc. is seeking a motivated Scientist/Engineer to support the development and implementation of new fast-turn fabrication processes for photonic integrated circuits (PICs). This role is ideal for a candidate who is 'hands-on' and enjoys building devices, and who has experience in integrated photonics, nanofabrication, process characterization, and data-driven problem solving. Working closely with experienced team members, the successful candidate will contribute to process experiments, metrology, documentation, and continuous improvement efforts across one or more PIC platforms, including silicon nitride and emerging electro-optic materials.

Core Responsibilities

- Support development and optimization of fabrication processes for photonic integrated circuits through structured experiments, data collection, and process documentation.
- Perform or assist with cleanroom process steps, wafer inspections, and metrology activities such as SEM, profilometry, ellipsometry, or optical characterization.
- Analyze experimental results, identify trends, and contribute to troubleshooting process and device-performance issues.
- Help maintain process records, run travelers, specifications, and other documentation needed for reproducibility and quality.
- Collaborate with engineers and scientists across fabrication, device design, and testing to support project execution and learning across the development cycle.
- Contribute to development of process monitors, test structures, and baseline characterization methods for PIC platforms and PDK-related work.
- Learn and apply safe, organized, and detail-oriented practices in a cleanroom and R&D environment.

Desired Qualifications

- B.S., M.S., or Ph.D. in physics, electrical engineering, materials science, chemistry, or a related discipline.

- Academic, internship, or experience in nanofabrication, photonics, semiconductor processing, or related cleanroom work is essential. 3 years or more experience in PIC fabrication and understanding photonic waveguide specific features such as sidewall roughness and verticality, proximity effects in lithography, and factors driving loss in waveguides is highly valued.
- Foundational experience of fabrication processes such as lithography, etch, deposition, and metrology is necessary.
- Competence with simulation tools along with design and metrology of test structures.
- Experience with data analysis tools, laboratory notebooks, technical documentation, or experimental design.
- Strong curiosity, attention to detail, good communication skills, and willingness to work collaboratively in a fast-moving startup setting. A strong interest in learning by doing.
- Ability to take direction, learn quickly, and grow into increasing technical responsibility over time.

Why Join QPICs

Join this entrepreneurial project on the ground floor! You will have a visible impact at an early-stage company working at the frontier of photonics. Please submit a resume and a cover letter indicating your enthusiasm for the role, your understanding of the challenges, and how your experiences contribute to success in this role.

Immigration Status: US Citizen or US Permanent Resident

Salary Range: \$120,000 - \$160,000, plus equity incentives

Benefits: Group medical insurance; dental, vision, and other benefits are expected to be added as the team grows.

Work Location: Santa Barbara, CA

Work Arrangement: On-site

Website: www.qpics.com

Contact: Chris Myatt, CEO, chris.myatt@qpics.com, (303) 359-5527

QPICs Inc. is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status, or any other characteristic protected by applicable federal, state, or local law.