

Job Description: Sr. Graphene Research Scientist

About Graphene Frontiers:

- Graphene Frontiers is a startup company spun out of the University of Pennsylvania Center for Technology Transfer and the UPStart program. Our goal is to become the world leader in CVD (thin film) graphene product development and commercialization and be recognized as the premier for-profit employer for graphene researchers
- Headquartered in Philadelphia, PA, Graphene Frontiers was formed around a patent-pending process for the growth of large area, high quality, single and few-layer CVD graphene and has been awarded NSF grants for research and commercialization

About this position:

- Graphene Frontier's Senior Graphene Research Scientist will be a critical member of the GF Leadership Team. Activities for the position are related to the leadership of technical projects for the scale-up and commercialization of Graphene Frontiers processes, but a successful candidate will be expected to support all areas of a rapidly growing business, including hiring, investor relations, marketing, and production. Specific responsibilities include, but are not limited to:
 - Development and commercialization of new graphene technologies and product concepts
 - Working with CEO to ensure alignment and delivery of technical goals, strategies and coordination of appropriate resources
 - Translating business goals and IP strategy to identify potential projects, developing and refining project ideas, and writing and defending grant applications
 - Collaborating with key customers and partners
 - Developing project plans, technical approaches, timelines, deliverables and IP strategy for assigned projects
 - Documenting experimental work and ensuring the timely filing of invention disclosures and patent applications
 - Monitoring technical literature to develop strong understanding of relevant competitors, cutting-edge research findings, external technologies and leveraging this knowledge for internal strategy development; earning a reputation as a thought leader within the graphene research community

Requirements:

- Ph.D. in Physics, Chemistry, Chemical Engineering, Polymer Science/Engineering, Material Science or related field –or– BS/MS with R&D experience
- Knowledge of semiconductor tooling and processes, including (but not limited to) Sputtering, Evaporation, LPCVD, Photolithography, RIE, Thin-film metrology and characterization including SEM
- Working knowledge and hands-on experience of thin film deposition, processing equipment, and characterization. Experience with the operation of various analytical technologies (such as Mid-IR, NIR, Raman, UV-Vis, AFM, electron microscopy) and their operating/data collection systems
- Demonstrated track record of technical success, technical knowledge, publications and patents. Excellent understanding of commercialization processes and good business acumen

Desired:

- Experience or passion for working in an early-stage startup environment
- Proactive and self-directed style, and comfort working with uncertainty and ambiguity
- Experience or familiarity with grant writing and SBIR program; prior experience as SBIR Phase I/II Principal Investigator preferred
- Experience working with Chemical Vapor Deposition equipment. Experience with continuous production (roll-to-roll or other) CVD process or equipment design strongly desired
- Experience in electronics, displays (OLED, touch screens, paper thin, e-reader, other), thin film thermal management

Graphene Frontiers is an Equal Opportunity Employer