

Senior Scientist I: Chemistry

Company Overview

Amplified Sciences is a clinical-stage startup diagnostics company focused on best-in-class early detection to mitigate the risks of debilitating diseases, including lethal cancers and organ loss. Amplified Sciences has R&D operations in Purdue Research Park, research alliances in San Francisco and Boston, a CLIA-regulated laboratory for translating assays to the market, and collaborations with multiple clinicians at several sites nationwide. The company is developing a portfolio of diagnostic assays for the early detection of disease based upon ultra-sensitive chemical reporter technology for surface-enhanced Raman Spectroscopy (SERS) that enables biomolecular sensing in challenging bodily fluids. The company has an integrated automated optical spectrometer suitable for translation to the clinical testing laboratory. This platform is operational with novel and existing clinical biomarkers, and the versatile clinical platform is scalable to point-of-care applications.

If you are ready for the challenges of a life science startup whose mission is to revolutionize debilitating disease detection, join us on our journey.

Senior Scientist-Chemistry

The Senior Scientists at Amplified Sciences, Inc. are at the forefront of the company's research and development, solving challenging problems for our diagnostic products to deliver solutions for unmet medical needs. The Senior Scientist-Chemistry position engages in various technical and scientific activities requiring the person to be self-reliant, resourceful, and dedicated to solving challenging problems across the research and development pipeline. The person in this position will bring technical expertise for modern chemistry approaches to an interdisciplinary team using proprietary dyes, nanomaterials, and optical spectroscopies for novel biomarker assays. A successful candidate will continually develop skill sets in synthetic organic chemistry, bioconjugation chemistry, nanomaterials, and surface chemistry analyses to establish the person as an emerging expert in clinical diagnostics platform technologies. This up-to-date scientific knowledge will be crucial in regularly providing reliable, valuable advice to the research and product development team.

The successful candidate will have strong theoretical and practical experience in one or more of these areas.

SYNTHETIC ORGANIC CHEMISTRY: extensive hands-on experience with multiple chemical and functional group transformations on scales from exploratory to pilot-scale production. Experience with dye chemistry, non-covalent small molecule interactions with nanomaterials, and multiple chemical purification methods suitable for producing commercial materials.

ANALYTICAL SURFACE CHEMISTRY: a working knowledge of modern optical spectroscopic methods to analyze surface chemistry; analytical instrumentation design and fabrication.



BIOCONJUGATION CHEMISTRY: design and optimize reagents for cross-coupling synthetic dye materials with various biomacromolecules and surfaces for analytical and diagnostic assay platforms.

The focus will include creating and commercializing materials and protocols for binding assays, ligand immobilization, enzyme assays, and preparing reagents, membranes, and other biosensor surfaces suitable for clinical applications.

Responsibilities:

- Provide scientific leadership within assay platform projects.
- Promote and maintain the highest levels of excellence in platform chemistry, with a personal commitment to continuously improve skills.
- Define and take ownership of project chemistry strategy and define overall strategies for production.
- Communicate project chemistry strategy with product development teams and all key stakeholders.
- Work with urgency and use timely decision-making to ensure the focus and delivery of key objectives.
- Work across disciplines to address chemistry and cross-disciplinary challenges in a team-based environment.
- Lead and/or contribute to cross-site functional goals within chemistry discovery, development, and production.
- Foster collaborations with other corporate and academic partners
- In partnership with the Director of Technology and the Chief Scientific Officer, define technology development tasks, objectives, resources, and budgets for the research development team.
- Assist in the definition and development of grant and contract proposals.
- Contribute to the strategic planning of chemical patent protection.
- Contribute to company peer-reviewed publications and attend and present at relevant industry conferences.
- Demonstrate the highest levels of health and safety, personal integrity, and ethics.

Key requirements:

- A PhD in Organic Chemistry or related areas using synthetic chemistry with > 3 years postgraduate experience or MS degree with 7 years + of industrial experience.
- Expert knowledge of organic chemistry, and physical organic design principles, including the influence of physicochemical properties



- Be a 'hands-on' person who welcomes challenges, works independently or as part of a team, and can communicate effectively at all levels.
- Strong understanding of the related scientific disciplines pertinent to clinical diagnostics
- Experience of collaboration and influencing multi-disciplinary teams.
- Good awareness of the latest innovations and technology in chemical sensing technologies and related areas
- Excellent communication skills, both verbal and written
- Recognize chemistry challenges and be able to enthuse others to pursue and deliver innovative solutions.
- A motivation for success will be a relentless pursuit to deliver the best outcomes for technology platforms and associated products.
- The ability to thrive with increasing levels of responsibility.
- Strong record of publication in peer-reviewed journals and patents

Job location:

- Work will be performed in West Lafayette, Indiana
- Start date is negotiable but the position is available for immediate employment
- Remote work is possible when performing work outside of laboratory duties.

Send inquiries and your resume to Daniel A. Sheik, PhD, dan.sheik@amplifiedsci.com.