



## Senior Scientist I: Chemistry

### Company overview

Amplified Sciences is a startup life science diagnostics company focused on accurately detecting and pre-empting the risks of debilitating diseases, including lethal cancers and organ loss with R&D operations in Purdue Research Park and research alliances in San Francisco and Boston. The company is developing a portfolio of diagnostic assays for early detection of disease. An ultra-sensitive molecular sensing technology licensed from Purdue tech transfer operates with novel test-strips that combine with portable instrumentation to form a highly versatile clinical assay platform that can scale to point of care.

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

### Senior Scientist-Chemistry

The Senior Scientists at Amplified Sciences, LLC are at the forefront of the company research and development, solving challenging problems for our diagnostic products that will deliver solutions to meet unmet medical needs. The Senior Scientist-Chemistry position involves a variety of scientific activities and requires the person to be self-reliant, resourceful and dedicated to solving tough problems across the research and development pipeline. The person will bring technical expertise and modern chemistry approaches to an interdisciplinary team using proprietary dyes, nanomaterials and optical spectroscopies for novel biomarker assays. A combination of skill sets in synthetic organic chemistry, bioconjugation chemistry, nanomaterials, and surface chemistry analyses will be continually developed to establish the person as an emerging expert in the field of clinical diagnostics platform technologies. This up-to-date scientific knowledge will be important in providing reliable, valuable advice to the research and product development team on a regular basis.

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

**SYNTHETIC ORGANIC CHEMISTRY:** extensive hands-on experience with multiple types of chemical and functional group transformations on scales from exploratory to pilot-scale production. Experience with dye chemistry and non-covalent small molecule interactions with nanomaterials.

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

**BIOCONJUGATION CHEMISTRY:** design and optimization of reagents for cross-coupling of synthetic dye materials with a variety of biomacromolecules and surfaces for analytical and diagnostic assay platform.

Focus will include creation and commercial development of materials and protocols for binding assays, immobilization of ligands, enzyme assays, and the preparation of 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 the platform chemistry, with personal commitment to continuously improve skills
- Define and take ownership of project chemistry strategy and define overall strategies for production
- Clearly 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 collaboration with the Director of R&D and CSO, 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 company peer-reviewed publications, 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, 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
- An individual with a relentless pursuit to deliver the best outcomes for technology platforms and the associated products.
- The ability to thrive with increasing levels of responsibility
- Strong record of publication in peer-reviewed journal and patents

**Job location:**

- Work will be performed in West Lafayette, Indiana
- Remote work is possible when performing work outside of lab duties