

## **About Applied Biomimetic (AB)**

Applied Biomimetic Inc. ([www.appliedbiomimetic.com](http://www.appliedbiomimetic.com))

Applied Biomimetic is a leader in the convergence of polymer and protein membrane technology. We have developed a high-performance membrane platform for water, life science, industrial biotech, food, and dairy separation applications.

Nature's ability to separate chemical elements at the molecular level with the use of highly specialized proteins in the channels of cell walls was the subject of [a 2003 Nobel Prize in Chemistry](#). AB has developed advanced capabilities in the expression, purification, and production scale-up of porins from biological sources methods. When these proteins are embedded it into a robust polymer structure, this achieves a unique membrane performance profile.

Our core technology is based on new chemistry and manufacturing methods to achieve highly permeable membrane material with narrow molecular size exclusion cut-off. By adding an active protein layer, the membranes will separate constituents at the ion level.

AB is focusing on the development of a wide range of applications for its patented technology. The aim is to provide disruptive solutions for the water treatment, health, food, and other industries enabling these industries to enhance their products, reduce costs, and save energy. The membranes are designed to withstand challenging and sometimes harsh environment in various industrial applications.

The company started-up its own manufacturing facility in 2019 to produce an ultrafiltration product that was originally developed in 2016 as a support substrate for a biomimetic membrane but has been successfully supplied in the food, dairy and industrial bio-tech markets. The UF element product is currently in use at several sites in a live production environment in the US, Europe and Asia Pacific, and it helps customer achieve high efficiency molecular separation in these "high value" fluid streams.

## **About the Role**

As part of its expansion, AB is adding a Senior Scientist – Polymer based in Gaithersburg. This is an opportunity to join a growing organization and build a team.

## **Work Location**

AB's main office is located in Gaithersburg, Maryland. This position is in the Gaithersburg office

**Job Title: Senior Scientist - Polymer**

**Department/Job ID: Research and Development**

**Reports To: CTO**

**Direct Reports (if any): Technicians, Scientists**

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**Job Overview:** The Senior Scientist is a member of the R&D team responsible for management of polymer synthesis and research efforts on polymers and block copolymers in the Polymer group of the R&D Department. The Senior Scientist, as one of the leaders in the R&D team, oversees the operation of the polymer laboratory, drives execution of company research plans, and plays a critical role in the implementation of corporate strategy and culture.

**Role: Research and Development**

- Plan and execute research and development projects in polymer synthesis and characterization in accordance with the company research plans
- Work in conjunction and collaborate with Membrane and Protein R&D groups in research efforts into Biomimetic Membranes
- Manage and train the Polymer R&D team; ensure structure and composition of the team are aligned with research objectives
- Develop and enforce policies, standards and procedures for the polymer R&D activities; manage project plans for designated R&D activities
- Ensure appropriate resourcing of staff and equipment for the execution of research and development activities
- Ensure safe handling of hazardous materials and safety procedures in the lab
- Develop strategic relationships with partners (academics, research institutes, etc.) to permit collaborative development activities and to leverage outside resources to further company's research and development goals
- Manage all research and development activities through AB's Phase-Gate process in coordination with Product Management team
- Manage the evaluation of suppliers and alternative raw materials; support procurement activities as needed

**Role: IP Support**

- Support creation of comprehensive IP strategy in the field of polymer and copolymer synthesis and applications to ensure a competitive advantage for the company
- Research and implement appropriate testing methodology to support polymer related IP activities

**Role: Business Support**

- Follow academic and commercial activities in the marketplace for polymer and copolymer technology
- Ensure participation in technical conferences and publication in recognized journals
- Hold the polymer team accountable and enforce AB values and strategy

Other responsibilities as assigned by management

**Requirements:**

- At least two years of experience managing a research and development team in the polymer industry, preferably in life sciences
- Experience in collaborative research efforts and building research teams
- Experience managing teams of employees including hourly and salaried workforce
- Proficiency in polymer and block copolymer synthesis and polymer characterization, as well as characterization techniques including but not limited to HPLC, GPC, SEM, TEM, FTIR, UV-VIS, surface characterization.

**Additional Qualifications:**

- Advanced degree in chemistry, PhD preferred
- Experienced with structured research and development activities using a Phase-Gate or similar methodology
- Effective communicator in both verbal and written forms
- Driven to succeed with a drive to implement new technologies in challenging markets
- Critical thinker
- An excellent listener and communicator with an approachable style; interpersonally engaging at all levels so as to build a rapport with people in all parts of the organization
- Eligible to work in U.S