JOB DESCRIPTION

Position: Senior Polymer Chemist
Department: Research & Development
Reports To: Senior Director of Research & Development
Status: Salaried
Level: Exempt

POSITION SUMMARY:

The Senior Polymer Chemist is primarily responsible for polymer synthesis, new product development, raw material evaluation, product formulation, product improvement, testing, interpretation of results and reporting of findings under the supervision of Research Director to support company innovation initiative for next generation technologies in medical device coating applications.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

- Design and synthesis of new polymers for use in advanced coatings that meet performance specifications based on a fundamental understanding of polymer structure/property relationship, including design and synthesis of novel polymers and functionalization of polymers.
- Rational design of polymer architectures to achieve targeted properties; characterization of polymer microstructure.
- Document hazard analyses for new raw materials and chemical processes.
- Collaborate on projects to develop polymerization processes, identify any impurities building up over time, determine the root cause of chemistry-related issues that arise, and clearly communicate results to the team.
- Partner with external consultants, vendors, and other team members in developing the technology, to scale-up catalyst components, and analyze process streams.
- Evaluation of external materials technologies and lead technology transfer for in-licensed technologies.
- Ability to lead technical efforts to troubleshoot issues that may arise in process development and scale-up. Ability to investigate a problem, formulate plan to find a solution, and execute on appropriate time schedule.
- Characterization of macroscopic properties, including thermal, rheological, and mechanical.
- Correlation of polymer structure with observed properties.
- Collaborate with a multi-faceted, global team in the development of novel coating systems for key markets.
- Work with multiple functions within the organization to drive novel coating systems to commercialization.
- Develop intellectual property protection for key innovations.

QUALIFICATIONS & REQUIREMENTS:

- PhD in Organic/Polymer Chemistry, Polymer Science, or Materials Science.
- A minimum of three (3) years prior industrial experience, including experience with the synthesis of acrylics or polyurethanes, and/or functionalization of polysaccharides.
- Independent thinker and self-motivated to generate new ideas.
- Excellent level of analytical and laboratory skills. Experience developing robust analytical methods and implementing sampling and measuring protocols to characterize polymers and evaluate reaction results, including GPC and IR and UV-Vis spectroscopy.
- Excellent written and verbal communication skills related to research results.
- In depth knowledge of polymer structure-property relations, effects of polymer microstructure on thermal, mechanical and rheological properties and demonstrated capability to modify polymer structure to achieve end performance
- Knowledge of ionic polymerization, free-radical polymerization and production processes
- Strong understanding of chemical process hazards.
- Ability to manage multiple tasks in a fast-paced environment.
- Demonstrated ability to lead and influence peers. Ensure all interactions are consistent with company values and treats others with dignity and respect.