

Research & Development Scientist

General Functions and Scope:

Interface Biologics Inc. is looking for a motivated individual for a 12-month contract. This is a project in collaboration with Evonik Canada www.Evonik.com, in the business line Health Care. After the contract period, there is a possibility of extension to full-time employment. The successful candidate will use his/her skill set, education and research experience in the fields of engineering, chemistry, and polymer / biomaterial science to aid in the research and product development activities to design biomaterials for improved biocompatibility and functionality of medical devices.

Specific Responsibilities:

- Work with multidisciplinary team of scientists, engineers, and business managers to develop new or improved biomaterials for anti-thrombotic and anti-fouling medical device applications.
- Design and execute experiments in the laboratory, including synthesis, purification, and characterization of polymer formulations, preparation of test prototypes through melt or solution-based processes, and testing of physical properties and in-vitro biological performance.
- Develop new test methods, analytical techniques, or assays as required, and prepare associated protocols or SOPs.
- Prepare study and experimental plans; maintain batch records and appropriate documentation.
- Summarize data in reports and presentations and communicate to work teams, customers, or management.
- Analyze results and data trends, troubleshoot development issues, and strive for innovative solutions.
- Interface with external suppliers, vendors, contract manufacturers, and contract testing facilities.
- Support optimization, scale-up, manufacturing, and QA activities for Endexo[®] polymers; support technology development and transfer activities to implement Endexo[®] technology in customer's medical device products and associated manufacturing processes.
- Perform literature searches and follow new developments in the field to guide research objectives, product design and development, or creation of new IP.
- Effectively work with teams both on site as well as off-site through audio-visual meetings.

Qualifications:

- Masters degree in chemical or biomedical engineering, polymer chemistry, or related discipline, with experience in research and/or product development of polymeric biomaterials or devices.
- Knowledge of or experience with polymer synthesis and purification methods; experience with polyurethanes and demonstrated ability to design and innovate novel chemistries to achieve target performance requirements would be an asset.
- Knowledge of or experience with polymer and material characterization techniques (NMR, FTIR, MS, GPC, HPLC, TGA, DSC, XPS, SEM, microscopy, contact angle, tensile testing).
- Experience with polymer processing methods such as extrusion, injection molding, film casting, coating, or electrospinning would be an asset.
- Experience with biological and in-vitro test assays such as protein adhesion, cell adhesion, bacterial adhesion, cytotoxicity, blood compatibility, and biocompatibility assays would be an asset.
- Skilled at independently designing studies and efficiently executing experiments to achieve target outcomes or solve technical issues.

- Excellent analytical, critical thinking, and problem-solving skills, with the ability to assess risk, anticipate potential issues, and draw from multiple sources to propose creative solutions if needed.
- Detail-oriented, quality-focused individual with good organizational skills; able to multi-task several projects, appropriately prioritize activities, and adhere to deadlines.

Your Application

This is a great opportunity to work with engaged, committed and dedicated colleagues in an innovative and progressive environment. Please forward your application to jzuo@interfacebiologics.com. We thank you for your interest.

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