



JOB DESCRIPTION: Process Development Scientist

Tunistrong Technologies Inc. | Cornwall, Prince Edward Island, Canada

Overview & Position Details

Position Title	Process Development Scientist
Work Location	Cornwall, PEI: This is an on-site position
Employment Type	2 year full-time contract with 6 month probationary period. This role may be extended beyond the initial 2 year term.
Salary & Benefits	\$65,000 - \$80,000 depending on experience.
Target Start Date	Jan 1, 2027; Flexible

About Tunistrong Technologies

Tunistrong Technologies Inc. is a pioneering Canadian clean-technology and biomaterials company headquartered in Cornwall, Prince Edward Island. We specialize in transforming invasive marine tunicates into high-value, sustainable nanocellulose solutions.

Our flagship innovation, Tunicate Cellulose Nanocrystals (T-CNC), known as "Nature's Rebar™", is a high-strength, high-aspect ratio form of nanocellulose, which provides exceptional strength and rheology benefits in various applications. Tunistrong's proprietary sustainable extraction processes enable eco-friendly,

high-performance reinforcement across a wide range of applications, including structural composites, adhesives, protective coatings, advanced paints, and low-carbon concrete formulations. Driven by environmental stewardship and commercial excellence, we are building a greener future through marine-derived innovation.

Position Summary

The Process Development Scientist plays a pivotal role in accelerating Tunistrong's growth. This position is designed to lead key technical or operational initiatives, with a key focus on optimizing and streamlining Tunistrong's nanocellulose extraction process. In addition to these operational goals, it is expected that the successful candidate will also be involved with the application development team. This will involve ensuring that the optimized production process continues to produce products that meet the required specifications for key applications. This position will also involve some hands-on application-specific R&D projects. The successful candidate will bring a strong technical background, hands-on expertise, an entrepreneurial drive, and a commitment to advancing sustainable biomaterials technology.

Key Responsibilities & Duties

Core Accountabilities

- Drive key operational and technical goals aligned with optimizing Tunistrong's pilot-scale production process.
- Oversee day-to-day execution of R&D tasks within specified timeframes and budget guidelines.
- Establish clear metrics for measuring output quality, efficiency, and resource utilization.

Project Execution

- Develop and execute workplans in support of product development, laboratory analysis, processing, and application development.
- Troubleshoot technical bottlenecks, evaluate alternatives or enhancements, and implement scalable solutions.
- Document and provide internal presentations on research findings, standard operating procedures (SOPs), and operational performance logs.

Collaboration & Stakeholder Engagement

- Work closely with the operations team and technical development team, reporting directly to management.
- Communicate technical insights and progress updates effectively to internal management and external partners.

Quality, Health & Safety Standards

- Adhere to environmental, health, and safety (EHS) regulations across all facilities and field operations.
- Ensure all materials, testing, and documentation adhere to strict Quality Assurance/Quality Control (QA/QC) benchmarks.

Qualifications & Requirements

Education & Experience

- Bachelor's degree or Master's degree in Chemistry, Chemical Engineering, Biomaterials, Biotechnology, or a related field.
- 2–5+ years of hands-on professional experience in an R&D laboratory, chemical processing, or manufacturing environment (inclusive of academic laboratory research).
- Proven track record of executing technical projects from design through implementation.

Technical Skills & Competencies

- Strong understanding of bio-based materials, nanomaterials, chemical processing, or formulation science.
- Proficiency in standard analytical techniques, lab equipment, and scientific data processing software.
- Familiarity with process optimization, scale-up protocols, or quality compliance systems is a plus.

Core Soft Skills

- **Problem-Solving:** Analytical mindset with demonstrated ability to troubleshoot complex, real-world technical challenges.
- **Entrepreneurial Mindset:** Adaptable, self-motivated, and comfortable navigating a fast-paced clean-tech growth culture, where your priorities may change month-to-month as new data, processes, and stakeholder relationships are developed.
- **Teamwork & Communication:** Excellent written and verbal communication skills, with a collaborative approach to projects.

Preferred Qualifications

- Master's or Ph.D. in Biomaterials, Chemical Engineering, or Chemistry.
- Experience with nanocellulose, process optimization, or chemical engineering.
- Direct background working within sustainable materials commercialization.
- Knowledge of intellectual property (IP) protection strategies and patent documentation.

What We Offer

- **Competitive Compensation:** Market-competitive salary tailored to experience and qualifications.
- **Health & Wellness Benefits:** Comprehensive health, dental, and vision coverage package.

- **Impactful Innovation:** Direct contribution to groundbreaking eco-friendly solutions that mitigate invasive species, reduce plastic waste, and lower carbon footprints.
- **Professional Growth:** Opportunities for leadership development, continuous learning, and career advancement in a scaling clean-tech enterprise.

How to Apply

Interested candidates are invited to submit their resume and a concise cover letter highlighting relevant achievements and interest in Tunistrong Technologies.

- **Email Applications:** Submit to keith@tunistrong.com
- **Online Portal:** Visit www.tunistrong.com/careers
- **Hiring Manager:** Keith Gourlay
- **Application Deadline:** Nov. 15, 2026

Tunistrong Technologies Inc. is an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees.