Membrane Process & Controls, Inc.

Job Description

Job title: Junior Food Scientist - Research and Development

Work Location: Edgar, WI – Main Office

Division/Department: Research and Development

Reports to: Engineering Manager

■ **Full-time**	■ **Exempt**
☐ **Part-time**	☐ **Nonexempt**

Essential Duties and Responsibilities:

Membrane Process & Controls, Inc. (MP&C) is seeking a motivated Junior Food Scientist to join our Research & Development team. This is a hands-on position, and will work in MP&C's R&D Center, supporting product trials, process development, testing, and data analysis for customers in the food, dairy, and beverage industries.

The Junior Food Scientist will work closely with food scientists, process engineers, laboratory personnel, and customers to evaluate products and develop effective membrane filtration and processing solutions. This is an excellent opportunity for an early-career professional who enjoys hands-on laboratory and pilot-plant work and wants to build experience in food science and process technology.

Laboratory and Pilot-Plant Operations

- Assist with laboratory testing, pilot trials, product evaluations, proof-of-concept testing, and process-development projects.
- Prepare product samples, ingredients, processing equipment, and testing materials.
- Operate laboratory- and pilot-scale food-processing and membrane-filtration equipment.
- Clean, sanitize, inspect, and maintain laboratory and pilot equipment according to established procedures.
- Maintain an organized laboratory environment and monitor supplies, samples, ingredients, and testing materials.

Testing, Monitoring, and Documentation

- Collect samples and perform analytical testing throughout product trials, including measurements of pH, Brix, and total solids.
- Monitor process parameters and accurately document process conditions, observations, test results, and other trial data.
- Analyze trial data and assist in preparing technical reports, project summaries, and customer recommendations.

Process and Product Development

- Support the development and optimization of membrane-filtration processes, including microfiltration, ultrafiltration, nanofiltration, and reverse osmosis.
- Assist with product formulation, process troubleshooting, scale-up activities, and process improvement.
- Research new ingredients, technologies, processes, and relevant industry trends.

Customer and Cross-Functional Support

- Collaborate with customers, vendors, engineers, and internal departments on research and development projects.
- Assist with customer demonstrations and product trials conducted at MP&C's R&D Center.

Safety, Quality, and Confidentiality

- Follow all food-safety, sanitation, quality-control, and workplace-safety requirements.
- Protect confidential customer, product, formulation, and process information.
- Perform other related duties as assigned.

MP&C's Research and Development Center currently includes the following pieces of Equipment and Capabilities:

- Filtration
  - Micro-Filtration (2.0µm - 0.05µm)
  - Ultra-Filtration (0.1µm - 0.005µm)
  - Nano-Filtration (0.003µm – 0.0009µm)
  - Reverse Osmosis (<0.0001µm)
  - HP Reverse Osmosis (up to 1,500psi)

- Process Utilities
  - Polished Process Water
  - Steam
  - Glycol
  - Hot Water
  - Chilled Water
  - CIP

- Other Process Equipment
  - Tanks (Heated, Cooled & Agitated)
  - Spray Dryer
  - Clarifier
  - Pre-Filtration

- Amenities
  - Drive-In Freezer/Cooler
  - Conference Room
  - Process Lab

Education and/or Work Experience Requirements:

- Bachelor's degree in Food Science, Dairy Science, Chemistry, Biology, Chemical Engineering, Bioprocess Engineering, or a related field.
- Zero to three years of related laboratory, food-processing, product-development, or manufacturing experience.
- Internship, cooperative education, university research, or pilot-plant experience is preferred.
- Familiarity with food-processing principles, sanitation practices, and laboratory testing methods.
- Experience with dairy, beverage, protein, ingredient, or membrane-filtration applications is beneficial but not required.
- Strong analytical, problem-solving, organizational, and documentation skills.
- Ability to follow detailed procedures while adapting to changing trial conditions.
- Strong written and verbal communication skills.
- Proficiency with Microsoft Office, particularly Excel, Word, and PowerPoint.
- Ability to work independently and collaboratively in a cross-functional environment.
- Willingness to learn new equipment, testing methods, and process technologies.

Physical Requirements:

- Ability to work in laboratory, pilot-plant, office, and manufacturing environments.
- Ability to stand and walk for extended periods during product trials.
- Ability to lift and move up to 50 pounds with or without reasonable accommodation.
- Ability to safely handle food products, ingredients, cleaning chemicals, and laboratory materials.
- Ability to wear required personal protective equipment.
- Willingness to work occasional extended or adjusted hours based on trial schedules.
- Limited travel may be required for customer trials, equipment testing, training, or industry events.

Travel Requirements:

50%

Other duties:

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties or responsibilities that are required of the employee for this job. Duties, responsibilities, and activities may change at any time with or without notice.

Print Employee Name:

Employee signature: **Date:**