



## **SENIOR RESEARCH ASSOCIATE – FERMENTATION SCIENCES**

Columbia, Maryland

**Department:** Fermentation Sciences  
**Reports To:** Associate Director – Fermentation Sciences  
**FLSA Status:** Exempt

### **Company:**

Martek Biosciences Corporation (NASDAQ: MATK), a local biotech company, is a leader in the innovation and development of DHA omega-3 products that promote health and wellness through every stage of life. The company's flagship products are life'sDHA™, a sustainable and vegetarian source of the omega-3 fatty acid DHA (docosahexaenoic acid) for use in foods, beverages, infant formula, and supplements; and life'sARA™, an omega-6 fatty acid produced from fungus. ARA (arachidonic acid) is the primary omega-6 fatty acid in the brain and is important for proper infant brain development and physical growth.

### **Job Summary:**

The successful candidate will be responsible for the technical development of fermentation process analytics, from process conceptualization and definition, to scale-up and commercialization. Specific focus will be on laboratory analyses to determine the chemical (particularly lipid) composition and physical characteristics of microbial fermentations. Secondary focus will be to provide analytical support to improve overall fermentation development, including equipment maintenance and operation, personnel training, process controls, and process automation.

### **Essential Duties and Responsibilities:**

1. Use scientific methods in experimental designs.
2. Apply technical concepts and experience to complete assigned projects.
3. Identify and analyze problems to determine appropriate and original solutions.
4. Provide technical support to a small team.
5. Monitoring fermentor experiments while they are ongoing.
6. Apply methods for quantitative analysis of lipids and lipid-soluble components from microorganisms.
7. Operate and troubleshoot analytical equipment and instrumentation including GC, LC, plate reader, spectrophotometer, NMR, etc.
8. Collecting data and preparing reports on experimental results.
9. Establish new procedures for data collection and analysis.
10. Identify issues and relationships with data when applicable.
11. Make decisions and recommendations of lower level personnel and within scope of several programs based on own analysis.
12. Organize tasks to complete project for self and team members.
13. Contribute to developing program concepts and goals.
14. Organize and deliver technical information to internal customers.
15. Record annual spending to work within development budget.

### **Supervisory Responsibilities:**

1. Provide technical direction to several projects simultaneously or a small program.

**Qualifications:**

1. Bachelors or Masters in a relevant discipline required. MS preferred
2. 2-8+ year's of relevant experience required.
3. Ability to work independently or within a team environment.
4. Knowledge of Chromatography Science.
5. Excellent oral and written communication skills.
6. Demonstrate effective interpersonal skills while interaction with all levels of staff is required.
7. Excellent computer skills.
8. Good working knowledge and understanding of aseptic design is required.

**Physical Demands:**

N (N/A) A (1 - 25%) B (26 - 50%) C (51 - 75%) D (76 - 100%)

Sitting	A %	Standing	B %
Walking	A %	Driving	A %
Bending/Stooping	A %	Climbing	N/A %
Reach above shoulder	A %	Kneeling	A %
Pushing/Pulling	A %	Crawling/Crouching	A %
Lifting	<u>50 lbs</u>		

**Computer work**

N/A Minimal  Moderate Significant

**Temperature extremes**

N/A Minimal Moderate  Significant

**Noise**

N/A Minimal  Moderate Significant

**Travel:**

Domestic 5 % International 0 %

**Other exposures/demands:**

Exposure to laboratory chemicals and solvents  
Handling of microorganisms

**Equipment:**

Bench-scale and pilot-scale fermentation equipment including chemostats and batch fermentors (2 liter - 130 liter volume) - both stirred tank and airlift, various bio-analyzers, gas chromatographs, oxygen generating systems, boilers, air compressors, sterile feed tanks, autoclaves, off-gas mass spectrometers, and various process control software. (including i-FIX, Delta V, BioCommand, etc.)

Please submit your resume and/or application ([www.martek.com](http://www.martek.com)) to Human Resources at [jobs@martek.com](mailto:jobs@martek.com) or fax to 410-772-5811. No Recruiters Please.

Martek Biosciences Corporation is an Equal Opportunity Employer.  
M/F/V/D