



Job Description 2022-03

Position: Research Scientist

Location: Edmonton, AB

Specific Responsibilities:

Applied Quantum Materials Inc., based in Edmonton, Alberta, Canada is seeking a knowledgeable and motivated professional capable of working effectively in a multi-disciplinary team environment. The successful candidate will assume a full-time employment role. With your commitment and the drive you bring to the workplace every day, you will be part of a team that is changing the world with the creation, development and integration of new advanced nanomaterials.

We are looking for creative individuals who can think “outside-the-box”, wants to work together to support a team dedicated to make a meaningful difference in introducing new technologies and applications into the marketplace. The candidate should thrive on performing well within a stimulating and fast-paced environment.

The successful candidate must display the core values of integrity, commitment, and collaboration while working at a high level of excellence and taking personal accountability for their actions. The position will remain open until a suitably qualified candidate is identified.

Company Background:

Applied Quantum Materials Inc. (AQM) was founded with the mission to commercialize functionalized silicon-based nanomaterials. Our business model is to design, synthesize, functionalize and manufacture custom nanomaterials and chemical precursors for our clients.

We offer the successful candidate the opportunity to work within a culture of highly motivated, talented individuals who are dedicated to the company's mission. This job provides wide-ranging responsibilities due to numerous product applications and the opportunity to enhance their skills through ongoing project development.

Position – Research Scientist

- Project management as required to meet client needs and defined by AQM management;
- Laboratory equipment set-up, purchase materials, manage inventory, and laboratory maintenance;
- Project tasks assigned by the management team;
- Maintain the highest safety protocols;
- Oversee project resources - specific equipment and apparatus requirements, including all chemicals, raw materials for assigned projects;

- Support employment policies and procedures for technical employees (including approval of timesheets, competency reviews, development plans and performance management);
- Supervise junior employees as identified by AQM management.
- Participate and support in the recruitment and retention of technical employees;
- Oversee characterization equipment usage, reporting in accordance with company policies and procedures;
- Other duties that may arise from time to time and may be assigned to the Employee.
- Assist senior management in determining techniques, equipment and production rates for cost study purposes;
- Represent the company at meetings with clients as required;
- Writing of progress reports, technical reports and proposals for clients and management team.

Knowledge, Experience and Analytical Skills

- Requires a Ph.D. or M.Sc. in Chemistry or Chemical Engineering with research experience in nanomaterials and polymer development.
- Expertise in the synthesis of inorganic nanostructures including silicon/silica and other materials.
- Expertise in the surface modification and functionalization of nanostructured silicon, silica, metals, and metal oxides.
- Expertise in polymer synthesis and processing.
- An experienced and capable individual who motivates other staff, leads by example, acts with integrity, mentors others, and is committed to working in a team environment.
- Experience with the following analytical techniques preferred: Multinuclear NMR spectroscopy, electron microscopy (SEM and TEM), atomic force microscopy (AFM), X-ray diffraction analysis (powder and single crystal), X-ray photoelectron spectroscopy (XPS), UV-Vis, FTIR, and Raman spectroscopy, mass spectrometry, gel-permeation chromatography.
- Exceptional and demonstrated creativity.
- Excellent demonstrated communication skills (both verbal and written), interpersonal skills, strong planning skills, and outstanding problem solving skills are essential.
- Must be able to participate in and lead highly effective teams.
- Proficiency of Microsoft Office and ChemDraw computer software.

To respond to this job offering, please submit a cover letter and your resume to:
contact@aqmaterials.com