Nanomaterials Process Engineer/Chemist

Edmonton, Alberta
Full-time, Permanent position, 40-hour work week
Benefits include medical, dental and vision insurance and paid vacation.
Closing Deadline: Until filled

Company Description

AQM is a privately held R&D and product development company that manufactures innovative nanomaterials for research and commercial markets. Our mission is to develop high performance nano-enabled products, based on sustainable and innovative solutions, that advance and improve society. We manufacture different variants of Group 14 nanomaterials and nanocomposites for a wide range of applications including: nanolithography, quantum dot sensors, energy, medical devices and optical systems. We're passionate about what we do and are looking for smart, energetic and self-motivated individuals who take pride in their work to join our innovative team in this transformational industry.

Job Description

The Nanomaterials Process position requires working on chemical production equipment for the manufacturing of specialty nanomaterials for industrial clients. The applicant will leverage their nanoparticle synthesis background to fabricate tailored products that provide increases in performance, new properties. At AQM we are accelerating different technologies to market and the candidate will participate in all aspects of commercialization including project planning, applied R&D, scale-up, transfer to manufacturing, quality control and commercial production.

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 one's skills through ongoing project development. With your creativity, commitment and the drive, you bring to the workplace every day, you will be part of a team that is transforming the world with the integration of new nanomaterials. The successful candidate must display the core values of integrity, commitment, collaboration, working at a high level of excellence, and taking personal accountability for their actions.

Qualifications

- Masters or PhD degree in chemistry or chemical and materials engineering with experience in nanoparticle fabrication. Experience with nanolithography would be an asset.
- Expertise in the synthesis of inorganic nanostructures including silicon/silica, quantum dot, metal/metal oxide, polymer, core-shell nanoparticles and composite materials.
- Pilot or production scale chemistry including reactor design, production scale manufacturing, or continuous flow processes.
- Expertise in the surface modification and functionalization of nanostructured silicon, silica and metal oxides.
- Experience with analytical, physical, inorganic materials chemistry laboratory procedures, techniques and equipment.
- Ability to multi-task, handle frequently changing job functions, and rapidly learn new techniques and approaches.
- Excellent communication (both verbal and written), interpersonal, strong planning and outstanding problem-solving skills are required.
- The candidate should thrive on performing well within a stimulating and fast-paced environment.
- Must hold Canadian citizenship or permanent residency card.

Knowledge, Experience and Analytical Skills

- An experienced and capable leader who motivates 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 and variable-temperature 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 and FTIR spectroscopy, mass spectrometry, gas chromatography, liquid chromatography, gel-permeation chromatography.
- The candidate will be responsible for brainstorming new ideas for products, developing proposals and communicating early stage concepts both internally and externally.
- Proficiency of Microsoft Office computer software.

Application Process

Qualified candidates should submit a resume and cover letter in Word or PDF form to Human Resources at contact@aqmaterials.com The cover letter should include information and specific examples on how your previous experience relates to the job requirements and your availability. You will not be considered without a cover letter.

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.