

Quantiam Technologies Inc., is one of Canada's leading private sector technology companies operating in Deep Tech in the Cleantech, Energy, Chemicals-Petrochemical and Defence sectors. Quantiam has amongst the best private sector R&D laboratories in Canada, working at the leading edge of Advanced Materials, Surface Science, Nanotechnology, Catalysis and Advanced Manufacturing with an annual R&D operating budget of ~\$5M. **We are currently seeking candidates passionate about Cleantech to join our Advanced Energy Materials team as a Research Technologist.**

Position Title: Research Technologist I / II / III, R & D

Competition #: 7000-30

Compensation: **\$24.00 - \$37.00/hr** (depending on experience); 40-hour work week; overtime applies; comprehensive competitive Benefits package; Group RRSP with matching Deferred Profit-Sharing Plan.

Experience: **2 - 10 years** related hands-on industrial experience would be an asset

Education: 2-year College Diploma in Chemical Technology, Nano Systems Engineering Technology, Chemical Engineering Technology, or related field. A Bachelor's degree in Chemistry or related discipline from a recognized University will also be considered.

Closing Deadline: Until Filled

The position will involve a minimum of a 1-year training period and which may involve rotation assignment within R&D and in pilot-scale Trial Manufacturing.

Brief Job Description:

Responsibilities (with training) include the following:

- Assist in the development and characterization of novel advanced materials, surfaces, coatings and catalysts aimed at utilizing captured carbon dioxide to make high value products or producing hydrogen via electrolysis.
- Collect and record experimental data.
- Assist in the synthesis of catalysts and deposition of coatings using standard operating procedures.
- Materials analysis/characterisation using Scanning Electron Microscopy and Energy Dispersive Spectroscopy (SEM/EDS), X-ray Diffraction (XRD), and other tools as needed.
- Catalyst characterisation using BET surface area measurements, temperature programmed techniques, chemisorption; and catalyst performance testing in benchtop microreactors.
- Analytical electrochemistry, such as electrochemical impedance spectroscopy (EIS), Electrochemically Active Surface Area (ECSA), and reliability testing.
- Analytical chemistry, such as preparation of samples and calibration standards, chemical analysis via, UV-Visible spectroscopy, particle size analysis, gas chromatography.
- Operation of vacuum high-temperature furnaces.
- Adhere to safety protocols: Follow established safety protocols and procedures rigorously. This includes wearing and using personal protective equipment (PPE) as required, correctly handling and storing materials, and performing tasks in accordance with safety guidelines and understanding Safety Data Sheets.
- Maintain the R&D lab area to a high standard of cleanliness, proactively organize work areas, set an exemplary standard of cleanliness and organization.

Skills/Work Experience Required:

- **Materials science:** Familiarity with wet chemistry, sample preparation, and common characterization techniques (UV-Vis, GC, DLS, pH and conductivity measurements, etc.).
- **Good mechanical aptitude:** Ability to operate within a manufacturing environment as some R&D equipment is housed in our trial manufacturing facility. Previous experience with hand and power tools would be useful.
- **Computer experience:** Strong skills with Microsoft Office (Word, Excel, Access, PowerPoint). Programming knowledge would be an asset.
- **Analytical thinking:** Strong attention to detail, reporting and problem-solving skills.
- **Fluent in English:** Excellent verbal and written communication skills.
- **Productivity:** Able to plan and achieve a high level of productivity while following procedures and taking direction.
- **Strong documentation skills:** Accurate record-keeping, organization of results and written reporting.

Behavioural Skills Required:

- **Well-developed interpersonal skills:** Understand and adhere to written and verbal instructions.
- **Must have a strong work ethic.**
- **Initiative and Motivation:** Must be a self-starter and be highly self-motivated, able to work efficiently and independently as well as in a team.
- **Safety compliant:** Must adhere to the highest standards of quality, reliability, and safety.
- **Team player:** You understand and respect the roles and contributions of each team member.
- **Respect:** You respect your teammates and are always ready to help them achieve our common goals.
- **Positive attitude:** Your behaviour affects that of everybody around you in a positive way.
- **Flexibility:** SMEs and their technology teams must be able to re-adjust priorities and tasks at moments notice.
- **Customer orientated:** You provide quality customer service to internal and external clients.
- **Quality of work:** Must adhere to the highest standards of quality, reliability, and safety on all deliverables. Strong attention to detail to deliver quality, reliable results on or ahead of schedule.
- **Strong willingness to learn.**

We thank all applicants in advance for their interest. Only those selected for an interview will be contacted.

Please forward to Human Resources a resume and cover letter in one (1) PDF document including competition number to: E-mail: careers@quantiam.com