

**Job Title:**

Post Doctoral Fellow/Research Scientist

**Accountable To:**

Dr. Arthur Mar (Professor – University of Alberta) and Dr. Patricia Nadworny (Chief Scientific Officer, Innovotech Inc.)

**Education:**

Recent Ph.D. in Chemistry (graduated within last 5 years); has, or is willing to obtain, Post Doctoral Fellow status at the University of Alberta; eligible and willing to apply for Mitacs Elevates program

**Description:**

- Responsible for the development, delivery, and evaluation of internal R&D projects in accordance with company and University policies and contract requirements, procedures, and guidelines.
- Performs manufacturing, purification, and analysis of silver and other compounds (including water content by Karl Fischer, metal content by atomic absorption or ICP-OES/-MS, UV-Vis spectra, XRD, x-ray crystallography, etc.).
- Develops and performs industrial scale-up procedures.
- Performs testing of product properties/behavior, including physicochemical properties, stability, etc.
- Incorporates silver compounds into/coats silver compounds onto appropriate substrates, and tests product properties/behavior.
- Designs, plans, executes, and reports on protocols, SOPs, or MOIs (master operating instructions) as applicable.
- Participates in the communication of experimental findings on behalf of the company, including presentations, publications, technical reports, and/or intellectual property developments based on findings.
- Evaluates and applies the results of research for potential new products, processes, techniques, or practices.
- Works closely with the management team, microbiologists, other chemists/engineering staff, and laboratory technologies in the completion of research programs.
- Participates in laboratory meetings.
- Trains laboratory technicians or co-op/intern/summer students, as required.
- Completes grant and/or award applications to support internal research, as required.
- Maintains awareness of developments by other researchers in areas of interest.
- Keeps accurate records of work carried out, and processes and organizes the resulting data.
- Prepares reagents, samples, and solutions.
- Maintains inventories of laboratory supplies.
- Cleans/maintains/calibrates/operates laboratory equipment on a routine basis; documents actions related to laboratory apparatus, equipment, glassware, instruments, and safety devices; and notifies supervisor when repair or service is needed.

**Required skills:**

- Trained in laboratory techniques and procedures.
- Knowledge of inorganic chemistry.
- Experience in chemical synthesis/manufacturing, and research & development.

- Must be proficient in Microsoft Office: MS Word, Excel, PowerPoint, Outlook.
- Strong verbal and written communication skills.
- Strong organizational skills.

**Preferred skills:**

- Knowledge of surface & materials sciences an asset.
- Experience in biomedical sciences, pharmacy, medicine, or a related discipline an asset.
- Experience/knowledge related to microbiology, especially biofilms, an asset.
- Experience with quality systems (such as GMP, GLP, or ISO) an asset.