

Research Associate Position
Limited Term

The Department of Materials Science and Engineering at the University of Toronto, is seeking a Research Associate, Limited Term, who can lead experimental research in the design and synthesis of novel contrast and therapy agents for the imaging and treatment of cancer.

Qualifications

The successful candidate will have research experience in nano- and micron-scale agent synthesis, surface or colloidal chemistry, microfluidics, and mini/microemulsion development is highly desirable. Applicants with previous experience developing strategies for stabilizing and controlling the physicochemical properties of lipid based encapsulation systems, and working with fluorinated emulsions and microbubbles will be strongly considered. Applicants must have a doctoral degree, possess excellent oral and written communication skills, and be fluent in English.

PhD in physical chemistry, chemical engineering, materials science (or related field):

- Relevant experience in an academic or industrial setting
- Specific experience in the following areas is desirable:
 - the development and characterization of microemulsions
 - surface or colloidal chemistry
 - lipid science
 - microfluidic synthesis techniques
 - perfluorocarbons
 - optical and chemical characterization of contrast and therapy agents
 - synthesis and characterization of inorganic nanoparticles (e.g. quantum dots, iron oxide, silica and gold nanoparticles)

Description of Duties:

The ideal candidate will be part of a growing, ambitious, highly collaborative and interdisciplinary team of engineers, radiologists, basic scientists and students as part of the Department of Materials Science and Engineering and the Department of Medical Imaging at the University of Toronto. The candidate will be responsible for the design, development, fabrication and characterization of light, x-ray and ultrasound-activatable medical agents for in vitro and in vivo detection and treatment of cancer. Our research laboratory is located at Sunnybrook Research Institute within Sunnybrook Health Sciences campus, a world-renowned teaching hospital in the University of Toronto, which provides a unique and leading-edge training environment, spanning the full range of cancer agent development, starting with agent synthesis to preclinical evaluation. This is a full-time appointment for one year, with a possibility for renewal.

Salary:

Commensurate with qualifications and experience.

Contact information:

To apply, please send a single PDF document containing a letter of application, current CV, one sample publication and contact information for three references to: szhu@sri.utoronto.ca, attention to Prof. N. Matsuura.

Naomi Matsuura, Ph.D., P.Eng.

Assistant Professor

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We thank all applicants for their interest. Only those candidates qualified for an interview will be contacted. Evaluation of position will begin Nov 24th, 2015 and will remain until filled.