

Department of Materials Science & Engineering

Position: Sessional Lecturer I/II

Course Title and Code: MSE 245H1 S: Organic Materials Chemistry and Properties.

Course Description: This is an introduction to organic chemistry and organic materials. Naming, bonding and shapes of organic molecules. Properties and reactions of organic compounds. Key mechanisms including electrophilic addition nucleophilic aliphatic substitution, elimination reactions and electrophilic aromatic substitution. Synthesis of polymers (step-growth and radical chain growth polymerization) and processing methods. Structure and properties of polymeric materials (amorphous, crystalline, elastomeric). Thermo-transition and viscoelastic properties of polymers. Life-cycle of polymers, mechanisms of degradation and strategies of polymer recycle. Hands-on organic synthesis and separation experiments.

Estimated Enrolment: 42

Estimated TA support: Tutorial: 60; Laboratory: 64

Class schedule: Lectures: 2 hours/week; Tuesday and Friday 9-10 a.m.

Sessional date of appointment: Winter Session, January-April 2018

Salary: Minimum level of pay is \$7,359.07 (Sessional Lecturer I) and \$7,823.85 (Sessional Lecturer II), and may increase depending on applicant's level of experience and suitability for the position.

Qualifications: A Ph.D. in Materials Science and Engineering, or a closely related field is essential. Experience lecturing and/or coordinating laboratories at the university level are preferred.

Please note: Undergraduate or graduate students and postdoctoral fellows of the University of Toronto are covered by the CUPE Unit 1 collective agreement rather than the Unit 3 collective agreement, and should not apply for positions posted under the Unit 3 collective agreement.

Brief description of duties:

The Department of Materials Science and Engineering requires a lecturer to teach MSE 245H1 S- Organic Materials Chemistry and Properties during the Winter 2017-2018 semester. The successful applicant will be responsible for effectively delivering the course with all of the attendant organizational issues of lecture preparation and delivery, setting, supervision and marking of exams, final course marks, course evaluations, and so forth.

To indicate interest in this position, please send an updated CV and completed application form electronically download from <http://dlrissywz8ozqw.cloudfront.net/wp-content/uploads/sites/27/2016/04/19-Unit-3-Application-Format.doc>.

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Posting Date: Tuesday August 8, 2017

Closing date: Monday August 28, 2017

"This notice is posted in accordance with the CUPE 3902 Unit 3 Collective Agreement." "Preference in hiring is given to qualified individuals advanced to rank of Sessional Lecturer II and Sessional Lecturer III in accordance with Article 14:12." It is understood that some announcements of vacancies are tentative pending final course determination and enrolment.