# **Chemistry Notices**

For the Week of November 7 to November 11, 2011



# **VISITING SPEAKERS & SEMINARS**

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF ALBERTA Joint Physical and Materials Divisions Visiting Speaker



### Dr. Dennis Hore

Assistant Professor Department of Chemistry

University of Victoria will speak on

"Solvent and Biomolecular Structure at the Solid-Liquid Interface"

The structure of molecules adsorbed at the solid-liquid interface is critical to understanding the biocompatibility of materials, design of biosensors, antimicrobial activity, and biomolecular separations. Yet despite these wide-spread applications, there is a paucity of techniques that are capable of characterizing surface-adsorbed molecules with sufficient selectivity and structural sensitivity. Our group has been working on combined optical probe and molecular modeling approaches to provide a description of solvent and solute structure at solid-liquid interfaces. A unique aspect of our experimental effort is the ability to resolve the polarity of chemical bonds, distinguishing functional groups pointing up or down at the surface in an absolute sense.

DATE: Thursday, 10 November 2011 TIME: 1:00 p.m. PLACE: E3-25 Gunning/Lemieux Chemistry Centre

JGD/Bonnie x3477

### **EMPLOYMENT OPPORTUNITIES**



Acadia University is recognized as one of Canada's premier undergraduate institutions. Academic innovation and a technology-rich teaching and learning environment have garnered the university a reputation for excellence. Our progressive workplace is located only one hour from Halifax in Nova Scotia's beautiful Annapolis Valley - a small-town setting offering an affordable lifestyle, outstanding recreational opportunities, internationally-acclaimed restaurants, a healthy economy, and the best weather in the Atlantic Provinces.

#### Faculty of Pure and Applied Science Chemistry Department PART-TIME FACULTY TEACHING OPPORTUNITY

#### Competition #CHEM 07-301-11

- Course Title CHEM 2710L Biochemistry 1 Laboratory
- Contract Term December 15, 2011 to April 30, 2012 (Winter Term)
- Course Schedule Mondays, 6:00pm 9:00pm
- Employee Group Acadia University Faculty Association

Basic Stipend \$2,750 for 3 hour Lab

#### **Course Description**

Laboratory component for the introductory biochemistry course which covers the major organic substances of living organisms, proteins, carbohydrates, lipids, and nucleic acids: structure, analysis and biochemical function including activity and analysis of enzymes.

#### Qualifications

The successful applicant must have a Master's degree in Chemistry.

Submissions should include a letter of application and curriculum vitae. Applications should be sent via any of the following to:

Kelli Mahoney, Human Resources Department Post: Acadia University, Wolfville NS B4P 2R6 Fax: 902-585-1075 E-mail: kelli.mahoney@acadiau.ca

#### Competition closes November 18, 2011.

The University invites applications from all qualified individuals; however, Canadians and permanent residents will be given priority. Acadia University is committed to employment equity and values a diverse and inclusive workplace. We therefore invite applications from Aboriginal peoples, African Nova Scotians, persons with disabilities, visible minorities, and women, as well as persons of any sexual orientation or gender identity. Consistent with the principles of employment equity, the primary criterion for appointment to a position is academic and professional excellence. Candidates who are a member of one of the aforementioned groups, and who wish to have the application considered as such, should complete the <u>Employment Equity Voluntary Self-Identification Form</u> as part of their application package.

While budgetary approval has been granted for this position, Acadia University reserves the right not to fill this position, or to fill this position at a level different from the advertised level or term.



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#### Faculty of Pure and Applied Science Chemistry Department PART-TIME FACULTY TEACHING OPPORTUNITY

#### Competition #CHEM 06-218-11

Course Title CHEM 3510L – Intermediate Organic Chemistry Laboratory

Contract Term December 15, 2011 to April 30, 2012 (Winter Term)

Course Schedule Tuesdays, 1:30pm – 4:30pm

Employee Group Acadia University Faculty Association

Basic Stipend \$2,750 for 3 hour Lab

#### Course Description

Laboratory component for an intermediate course which will study the chemistry of organic functional groups not covered at the 2000 level. Special attention will be given to the use of sophisticated organic reactions for the synthesis of more complex molecules. The students will be introduced to organic reactions on a microscale in the lab. The students will be introduced to organic reactions under inert and anhydrous atmosphere.

#### Qualifications

The successful applicant must have a Master's degree in Chemistry.

Submissions should include a letter of application and curriculum vitae. Applications should be sent via any of the following to:

Kelli Mahoney, Human Resources Department

Post: Acadia University, Wolfville NS B4P 2R6 Fax: 902-585-1075 E-mail: kelli.mahoney@acadiau.ca

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Faculté de médecine et des sciences de la santé 3001, 12<sup>°</sup> Avenue Nord Sherbrooke (Québec) CANADA, J1H 5N4 Éric MARSAULT, Ph.D. Associate Professor Department of Pharmacology Telephone: (819) 820.6868 x12433 Fax: (819) 564-5400 E.Mail: Eric Marsault@USherbrooke.ca

Sherbrooke, October 25, 2011

### POSTDOC POSITION

Subject : synthesis of novel antibiotics.

Our group has identified a novel target to fight several multiresistant pathogens, including *C. difficile* and *S. aureus* (Mulhbacher *et al. PLOS Pathogens* **2010**). This very promising target belongs to a new target class involved in the transcriptional control of essential genes. Blockade of the target results in bacterial death, as demonstrated *in bacteria* and *in vivo*.

The project involves the synthesis of heterocyclic analogues of the natural metabolite, testing of biological activity *in vitro* and *in bacteria* with the collaboration of Prs D Lafontaine (Biology), LC Fortier (Microbiology) and R Najmanovich (Bioinformatics).

Desired profile : excellent knowledge of organic synthesis, knowledge of heterocyclic chemistry a plus, proficiency with standard med chem equipment (microwave synthesis, parallel purification, NMR, HPLC, softwares, etc...). Good communication skills and excellent teamwork capabilities.

Location : Laboratoire de chimie médicinale Institut de Pharmacologie de Sherbrooke Université de Sherbrooke

Start date : January 2012

For inquiries, please send CV, research synopsis + 3 letters of recommendation to Dr Éric Marsault (eric.marsault@usherbrooke.ca)



Department of Chemistry

### Assistant Professor in Analytical Chemistry

The Department of Chemistry at the University of Manitoba invites applications for a full-time tenure-track faculty position at the rank of Assistant Professor. This position will be available July 1, 2012. Applicants must have a Ph.D. or equivalent doctoral degree, with relevant postdoctoral experience. The successful applicant will be expected to establish a vigorous externally-funded research program in any area of analytical chemistry and teach at the undergraduate and graduate levels. Candidates specialized in areas (such as separation science) that complement our own strengths are particularly encouraged to apply.

The Department currently has 19 tenured or tenure-track staff, 6 other full-time academic staff, 12 support staff, and over 60 graduate students, post-doctoral fellows, and research associates. The Department has undergone a period of rejuvenation with the appointment of more than 10 new faculty members and about \$20 million in funding for new infrastructure over the past 10 years. We are well equipped for research support in most branches of chemistry with the Manitoba Chemical Analysis Laboratory, service laboratories for NMR (300, 400, 500 and 600 MHz instruments), combination FT-Raman/FT-IR, mass spectrometry (EI, ESI, MALDI and ICP-MS), and materials characterization (ESCA, Auger, powder XRD, SIMS, SEM, SPM; in part via our interdisciplinary Manitoba Institute for Materials). The Faculty of Science has a full-time glassblower and machine and electrical shop facilities. We are in close proximity to national laboratories such as the National Microbiology Laboratory, the Canadian Science Centre for Human and Animal Health, the International Centre for Infectious Diseases, and the NRC Institute for Biodiagnostics.

For further information, see our webpage at: http://umanitoba.ca/chemistry/

Culturally diverse and rich in recreational opportunities, Winnipeg combines the amenities of urban life with easy access to the countryside and to northern lakes and forests. Housing prices are attractive by North American standards.

Review of applications will begin December 1, 2011, and will continue until the position is filled. Please refer to position number #13731 in all correspondence. Electronic submissions are encouraged; MS Word or PDF preferred. Applicants should submit a curriculum vitae, a concise research proposal (5 pages, NSERC format preferred), a statement of teaching experience and philosophy, and the names, mailing addresses, telephone numbers and e-mail addresses of three referees, to:

Dr. Peter H.M. Budzelaar Chair of the Search Committee Department of Chemistry University of Manitoba Winnipeg, MB Canada R3T 2N2

E-mail: <u>acsearch@cc.umanitoba.ca</u> Telephone: (204) 474-9321 Fax: (204) 474-7608

The University of Manitoba encourages applications from qualified women and men, including members of visible minorities, Aboriginal peoples and persons with disabilities. All qualified candidates are encouraged to apply, however, Canadians and permanent residents will be given priority. Application materials, including letters of reference, will be handled in accordance with the *Freedom of Information and Protection of Privacy Act* (Manitoba). Please note that CVs may be provided to participating members of the search process.



Department of Chemistry

### Assistant Professor in Inorganic Chemistry

The Department of Chemistry at the University of Manitoba invites applications for a full-time tenure-track faculty position at the rank of Assistant Professor. This position will be available July 1, 2012. Applicants must have a Ph.D. or equivalent doctoral degree, with relevant postdoctoral experience. The successful applicant will be expected to establish a vigorous externally-funded research program in any area of inorganic chemistry and teach at the undergraduate and graduate levels. Candidates specialized in areas (such as bio-inorganic chemistry, inorganic materials or energy-related topics) complementing our own strengths are particularly encouraged to apply.

The Department currently has 19 tenured or tenure-track staff, 6 other full-time academic staff, 12 support staff, and over 60 graduate students, post-doctoral fellows, and research associates. The Department has undergone a period of rejuvenation with the appointment of more than 10 new faculty members and about \$20 million in funding for new infrastructure over the past 10 years. We are well equipped for research support in most branches of chemistry, including a full-time glassblower and service laboratories for NMR (300, 400, 500 and 600 MHz instruments), combination FT-Raman/FT-IR spectrophotometer, mass spectrometry (EI, ESI, MALDI and ICP-MS), and materials characterization (ESCA, Auger, powder XRD, SIMS, SEM, SPM; in part via our interdisciplinary Manitoba Institute for Materials). We are in close proximity to national laboratories such as the National Microbiology Laboratory, the Canadian Science Centre for Human and Animal Health, the International Centre for Infectious Diseases, and the NRC Institute for Biodiagnostics.

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Dr. Peter H.M. Budzelaar Chair of the Search Committee Department of Chemistry University of Manitoba Winnipeg, MB Canada R3T 2N2

E-mail: <u>icsearch@cc.umanitoba.ca</u> Telephone: (204) 474-9321 Fax: (204) 474-7608

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## OTHER OPPORTUNITIES



Chemical Institute of Canada -Edmonton section



### Flash, Bang, Boom! Exploring Chemistry In The World Around You

Incredible chemical demonstrations

Come Celebrate the International Year of Chemistry (IYC 2011) with us.

Nov. 22, 2011 at 7:00 PM Room 1-440 Centennial Centre for Interdisciplinary Science University of Alberta North Campus







### OTHER OPPORTUNITIES, continued

### SciFinder Training/Information Sessions

Chemistry faculty and students –

On Wednesday November 9<sup>th</sup> Kristen Arienti from CAS will be on campus to provide three SciFinder training/information sessions. As most of you know, SciFinder is the world's leading source of chemical information, providing the most comprehensive index to the chemistry literature, the largest registry of chemical substances, and reaction, structure, and substructure searching capabilities.

In addition to covering text-based searching, Kristen will be demonstrating some of the newer features available in SciFinder:

- SciPlanner: a new interactive workspace that enables scientists to more quickly identify synthesis options for designing the best research pathways and approaches
- Assign priorities for preferred or non-preferred chemical suppliers
- Uncover additional, valuable patent information with Explore by Markush structure
- Prioritize answer sets in ascending or descending order
- Copy/paste from ISIS draw or Chemdraw
- Focus your reaction searches by limiting or refining by Non-participating Functional Groups or classes
- The addition of citations to MEDLINE<sup>®</sup> records

Kristen will be offering three sessions, all of which cover the same material, so hopefully one of these times will work for anyone who's interested in attending. The sessions last for one hour, with an additional 30 minutes available for Kristen to answer any SciFinder-related questions you may have. All sessions will be held in the Cameron (Science & Technology) Library computer lab in Room 1-30.

Session 1: 9:00-10:30 Session 2: 11:00-12:30 Session 3: 2:00-3:30

No registration is required. While these are demonstrations rather than hands-on instruction sessions, if you'd like to follow along either on the lab computers or your own laptop, please make sure that you've registered for your own SciFinder account before November 9th:

https://origin-scifinder-cas-org.login.ezproxy.library.ualberta.ca/registration/index.html?corpKey=9C062931-86F3-F00A-11BD-EE58577AB085

SciFinder has agreed to open up our license for the day so that more people will be able to log on at the same time. Please feel free to contact me if you'd like any further information. Elizabeth

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Elizabeth Wallace Collections Librarian, Science & Technology Library Liaison for Chemistry and Earth & Atmospheric Sciences

1-68 Cameron Library

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<u>elizabeth.wallace@ualberta.ca</u> 780.492.1419 (phone) 780.492.2721 (fax)

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