

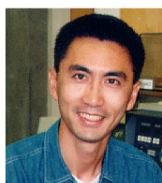
# Chemistry Notices

For the Week of March 28 to April 1, 2011

## VISITING SPEAKERS & SEMINARS

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF ALBERTA

### Analytical Division Visiting Speaker



### David D.Y. Chen

Professor of Chemistry  
University of British Columbia  
Vancouver, B.C.

will speak on

**"Moving from column separation and fraction collection to continuous purification by 2-D electro fluid dynamic devices"**

**DATE:** Tuesday, 29 March 2011  
**TIME:** 2:30 p.m.  
**PLACE:** E3-25 Gunning/Lemieux Chemistry Centre

XCLJdl (tel: 780 248 1506)

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF ALBERTA

### Analytical Division Visiting Speaker



### Professor Alan Doucette

Department of Chemistry  
Dalhousie University, Halifax, NS

will speak on

**"New (or Old) Adventures in Proteomics: Still Searching for Solid Ground"**

**Abstract:**

Proteomics is no longer considered the new kid on the block. While once an impressive feat to map out a few dozen proteins, the proteomics community has proven possible a much greater capacity for near comprehensive proteome profiling. With the right tools (i.e. mass spectrometry), quantitative analysis, PTM identification, protein-protein interactions, top-down profiling, biomarker ID and validation are all made easy...right? The goal of this presentation is to challenge this notion, by pointing to the difficulties still clearly associated with proteome sample preparation. As described here, simple strategies, and new technologies are still urgently required to ensure that proteomics fulfills its role as a vehicle for biological discovery.

**DATE:** Friday, 1 April 2011  
**TIME:** 4:00 p.m.  
**PLACE:** E3-25 - Gunning/Lemieux Chemistry Centre

Refreshments will be served

MJS:dl (tel: 248 1506)

DEPARTMENT OF CHEMISTRY, UNIVERSITY OF ALBERTA

### Inorganic and Materials Division Visiting Speaker



### Dr. Tom Baker

Canada Research Chair in Catalysis Science for  
Energy Applications; Director, Centre for Catalysis  
Research and Innovation

Department of Chemistry, University of Ottawa

will speak on

**" Selective Aerobic Oxidation of beta-O-4 Lignin Models: Copper vs. Oxovanadium Complexes "**

Selective aerobic oxidation of lignin is being explored with a view to obtaining valuable aromatic chemicals. The reactivity of homogeneous CuCl/TEMPO (TEMPO = tetramethylpiperidine *N*-oxide) and (dipic)V<sup>VO</sup>(O)(OPr) (dipic = dipicolinate) catalysts towards the aerobic oxidation of lignin models 1, 2-diphenyl-2-methoxyethanol (1), 1-(3,5-dimethoxyphenyl)-2-(2-methoxyphenoxy)propane-1,3-diol-[2,3-<sup>13</sup>C] (2-<sup>13</sup>C), and 1-(3,4-dimethoxyphenyl)-2-(2-phenoxy)propane-1,3-diol in pyridine (3) has been explored. In the catalytic oxidation of 1, (dipic)V<sup>VO</sup>(O)(OPr) produced benzoic acid and methyl benzoate as the major products via the intermediate ketone benzoin methyl ether, whereas the Cu catalyst afforded benzaldehyde and methyl benzoate directly, without formation of ketone intermediate. Oxidation of more complex lignin models 2-<sup>13</sup>C<sub>2</sub> and 3 using CuCl/TEMPO under oxygen in pyridine at 100 °C also afforded aldehyde as the major product. In contrast, 2-<sup>13</sup>C<sub>2</sub> and 3 were oxidized by (dipic)V<sup>VO</sup>(O)(OPr) under oxygen in pyridine at 100 °C, to yield ketone and dehydrated ketone as major products. The reactivities of the copper and vanadium catalysts in the oxidation of lignin model compounds will be compared and the differences in selectivity discussed.

**DATE:** Wednesday, 30 March 2011  
**TIME:** 3:00 p.m.  
**PLACE:** E3-25 Gunning/Lemieux Chemistry Centre

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# EMPLOYMENT OPPORTUNITIES



UNIVERSITY  
OF MANITOBA

Department of Chemistry

## Instructor I or II position in Biochemistry

The Department of Chemistry at the University of Manitoba invites applications for a probationary faculty position at the rank of Instructor I or II. This position will be available July 1, 2011 or as soon as possible thereafter, subject to budgetary restrictions. Applicants will normally have a M.Sc. plus experience in a similar position, or a doctoral degree in biochemistry or a related field. The successful applicant will be responsible, in consultation with other faculty and support staff, for the classroom teaching of an undergraduate level biochemistry course, as well as the design and delivery of the laboratory components of our second-year biochemistry courses (currently CHEM 2360, CHEM 2370, CHEM 2770 and CHEM 2780). Responsibilities include preparation of the laboratory manuals and supervision of Teaching Assistants. Other duties may include participating in outreach activities. The successful candidate must have the ability to manage the academic aspects of the laboratory operation. Experience in new teaching technologies will be considered an asset.

Applications will begin to be reviewed on April 25, 2011 and the position will remain open until filled. Please refer to position number **12832** in all correspondence. Short-listed candidates will be required to give a teaching presentation on an assigned topic. Electronic applications (MS Word or PDF preferred), including a curriculum vitae, a statement of teaching experience and philosophy, and the names, mailing addresses, telephone numbers and e-mail addresses of three referees, should be sent to:

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

E-mail: [BiochemInst\\_search@umanitoba.ca](mailto:BiochemInst_search@umanitoba.ca)  
Telephone: (204) 474-9321  
Fax: (204) 474-7608



THE UNIVERSITY OF  
WINNIPEG

The Department of Chemistry at the University of Winnipeg invites applications for a twelve-month sessional appointment at the rank of Instructor for the 2011-12 academic year. Salary and level of appointment will be commensurate with qualifications and experience. Duties will include lecturing and instructing student laboratories in first- and/or second-year level courses (as appropriate depending on qualifications); and other duties as assigned by the Chair. The successful candidate is expected to have teaching experience and a graduate degree (M. Sc. or Ph.D.) in a relevant field.

The review of applications will begin on May 1. Subject to budgetary approval, the position will start August 1, 2011. Applicants should submit a *curriculum vitae* and a statement of teaching experience and interests, and arrange for three letters of recommendation to arrive by May 1. Inquiries and applications should be directed to Dr. Désirée Vanderwel, Chair, Department of Chemistry, The University of Winnipeg. 515 Portage Avenue Winnipeg, MB, Canada R3B 2E9. Phone: (204)789-1483; Fax: (204) 775-2114; Email: [d.vanderwel@uwinnipeg.ca](mailto:d.vanderwel@uwinnipeg.ca). Applications and letters of reference may be submitted electronically.

## OTHER OPPORTUNITIES

Hello. I am looking for a person to tutor my daughter in grade 12 chemistry (Chem 30). I have been contacting tutors listed on the Student Union's tutor registry but have not had any luck yet. It appears that most of them are already fully booked. So I thought I would give the Chemistry Graduate Students' Society a try. If you are interested or know of any graduate students interested in earning some extra money (\$20-30 per hour seems to be the typical rate), please contact me:

Mark Loewen: mrloewen@ualberta.ca; 780-492-3447

My daughter has a spare in the morning every other day so she could receive tutoring at these times. Also she is free on Sat. and after school and evenings Tues, Wed. or Thurs.

Thank you for any help you can provide.

Mark

### **ACPA Scholarship Applications Due March 31**

Two scholarships of \$1000, one for chemistry undergraduates and one for chemistry graduate students, will be awarded by the ACPA this year. For details, please see the ACPA web page at <[www.pchem.ca](http://www.pchem.ca)>. *The deadline for applications and for any supporting documentation is March 31.*

### **Call for Exhibits/Volunteers for Science Rendezvous Edmonton 2011**

2011 is the International Year of Chemistry. The Chemical Institute of Canada and TELUS World of Science would like to establish **Science Rendezvous Edmonton 2011** as the inaugural one-day festival style celebration of chemistry and science at TELUS World of Science (TWOS) for all the public. **Science Rendezvous Edmonton 2011** runs from 10:00 a.m. to 4:00 p.m. on Saturday May 7. Consider exhibiting and help the public celebrate Science with us!

#### **Who are you** (in groups of 1-6 ...ideally 4)?

You are a group of people who might have: a few good hands on kitchen/household science or chemistry experiments/demonstrations that you'd like to show to folks of all ages.

You might be a college or university professor/ teacher/researcher/graduate student doing, or directing, research/work of import that you wish to show the general public.

You could be someone who will dress up and take on the persona of, a famous scientist (Einstein, Newton, Curie, Rutherford, Dalton, Priestly, Lavoisier, etc) for the day at TWOS.

You could be a drama student, or drama group, willing to perform a short scene/excerpt from a play featuring a scientist or scientists (Hoffman and Djerasi's *Oxygen*, Capek's *R.U.R.*, Brecht's *Galileo*, Durenmatt's *The Physicists*, Kipphardt's *In the Matter of J. Robert Oppenheimer*, Stoppard's *Arcadia*, Andreyev's *To the Stars*, Maxim Gorky's *Children of the Sun*, and countless other suitable plays) – potentially in the foyer of TWOS.

A group of high school students, with their teacher willing, to demonstrate some research they've done or with exciting chemistry demonstrations to share.

A group of high school teachers demonstrating some exciting chemistry demonstrations they'd like to share.

## OTHER OPPORTUNITIES, *continued*

A chemistry winner/finalist of the Regional Science fair contest.

An Association of local professionals (forensic scientists, fireman, EMTs, etc) who have a science demonstration the public just has to see.

Other relevant interested science group or company (...selling science not your services)

### **How long do you have to exhibit?**

In shifts your group will man a table continuously from 10:00 am to 4:00 p.m. on May 7th, 2011. The precise location of your (8×4) table in TWOS will be determined at a later date.

### **What does each group member get for your volunteer labour?**

The undying thanks of the organizing committee and a CIC Edmonton Volunteer T-shirt.

### **How do you apply to participate in Science Rendezvous Edmonton 2011?**

You must email the following information to Ian Phillips ([ian.phillips@epsb.ca](mailto:ian.phillips@epsb.ca))

**Your Name:** \_\_\_\_\_

**Your Address:** \_\_\_\_\_

**Your Group's name:** \_\_\_\_\_

**Your Organization's name:** \_\_\_\_\_

**Your Group Members' names:** \_\_\_\_\_

**Your Activity:** (Describe your exhibit in no more than 100 words)

There are currently only 30 spots available. Depending on the numbers and variety of entries for Science Rendezvous Edmonton 2011, there is no guarantee that your proposal will be accepted. Informal auditions at a yet to be chosen location (TBA) may be necessary to arrive at the final roster of participants. A call for volunteers is under consideration as of this writing.

Do not hesitate to telephone me at 780-448-5000 to talk to me in person if you need some clarification.

I look forward to working with you in Science Rendezvous Edmonton 2011,

Dr. Ian G. Phillips (Teacher Ross Sheppard High school).