## **Chemistry Newsletter**

January 22, 2010 Volume 37 No. 3

Archived newsletter website – <a href="http://www.chem.ualberta.ca/news\_seminars/2009/newsletter/contents.html">http://www.chem.ualberta.ca/news\_seminars/2009/newsletter/contents.html</a>
To submit an item for inclusion in the departmental weekly newsletter, please email the item to newsletter@chem.ualberta.ca.

To submit a request for a room for events such as seminars, visiting speakers etc., please submit your request to roombooking@chem.ualberta.ca

## **Visiting Speakers And Seminars**

**Dr. Ratmir Derda**, Harvard University, Department of Chemistry & chemical biology, will speak on "Controlling cell growth and differentiation with synthetic extracellular environments" on Monday, January 25, 2010 at 10:00 a.m. in E3-25.

**Prof. John Sorensen**, Department of Chemistry, University of Manitoba, Winnipeg, Manitoba, will speak on "*Natural product biosynthesis in lichens and other fungi*" on Monday, January 25, 2010 @ 11:00 a.m. in NRE 2-003.

There will be a pizza lunch for Prof. Sorensen on Monday, January 25 @ 12:00 p.m. in E4-43 for all organic division students.

#### **Congratulations to:**

**Leah Martin-Visscher** (Dr. Vederas) passed her PhD final exam January 18, 2010.

**Xiao Xing** (Dr. McCreery) passed her MSc final exam January 21, 2010.

**Prof. Jon Rainier**, Department of Chemistry, University of Utah, Salt Lake City, USA, will speak on "*Targeting Heterocyclic natural products at 4700 feet above sea level*" on Tuesday, January 26, 2010 @ 11:00 a.m. in E3-25.

**Prof. Sergey Kozmin**, Department of Chemistry, University of Chicago, will speak on "Small molecule regulation of cellular energy metabolish" on Friday, January 29, 2010 @ 1:00 p.m. in E3-25.

**Dr. David Vocadlo**, Simon Fraser University, will speak on "Design and use of chemical tools to study O-glycosylation" on Monday, February 1, 2010 @ 11:00 a.m. in NRE 2-003.

#### **502 Seminars**

**Shaohui Yu** will speak on "Recent advances in transition metal catalyzed oxidative vicinal aminofunctionalization of alkenes" on Wednesday, January 27 @ 1:00 p.m. in DP-2022.

#### **EMPLOYMENT OPPORTUNITIES**

Are posted on the bulletin board across from the elevators on the third floor. Please do not remove the employment notices from the bulletin board.

Employment opportunities are posted on a new internet site: <a href="http://www.careerowl.ca">http://www.careerowl.ca</a>.

There is a competition for a continuing position as a technical officer in the MS lab at NRC in Saskatoon (closing Feb. 10). If you know of anyone who might be interested, please refer them to the following website: <a href="http://www.nrc-">http://www.nrc-</a>

cnrc.gc.ca/careers/jobpost.nsf/EnglishAll/CEFE496DE7D5A544852576AF00549953>http://www.nrc-cnrc.gc.ca/careers/jobpost.nsf/EnglishAll/CEFE496DE7D5A544852576AF00549953

**TESOL cram school in Taiwan** requires certified teachers – requirements are that you need to be native English speaker, have a 4 yr. degree or 2 yr. college diploma with TESOL certificate. Please e-mail <u>tesolhr@gmail.com</u> for any further information.

**Prep 101**, is an exam prep company that has openings for part time MCAT prep instructors to teach weeknight and weekend classes in summer 2010 (May 25-August 1). For more information, please see website at <a href="www.prep101.com/mcat">www.prep101.com/mcat</a> or call 1-877-878-0882.

**Brandon University** invites applications for a Tier 2 Canada Research Chair in Env. Chemistry or Env. Geochemistry. For more information regarding this position, please see www.brandonu.ca.

**ABIC Foundation Inc.** is accepting applications for travel bursaries for the forthcoming ABIC 2010 Conference to be held in Saskatoon, Sask. From Sept. 12 through 15, 2010. The deadline for submission of applications is Feb. 15, 1020 with award announcement set for April 2010. To learn more about the ABIC 2010 conference, please visit the website at http://www.abic.ca/abic1020.

**University of Alberta**, Oncology Department is looking to recruit graduate students interested in organic and medicinal chemistry to perform research in the field of radiopharmaceutical sciences. Please see <a href="http://www.oncology.med.ualberta.ca/faculty/facultymember.cfm?id=139">http://www.oncology.med.ualberta.ca/faculty/facultymember.cfm?id=139</a> for more information.

#### WINTER WORKSHOP ON PRACTICAL SURFACE ANALYSIS

#### University of Alberta, February 22 & 23, 2010

The Alberta Centre for Surface Engineering and Science (ACSES) at the University of Alberta is hosting a two day workshop on surface analysis with main emphasis on ultra-high vacuum (UHV) techniques including X-ray photoelectron spectroscopy (XPS), Secondary ion mass spectroscopy (SIMS), and Auger electron spectroscopy (AES) / Scanning Auger microscopy (SAM). The winter workshop is offered primarily to the Faculty of Science, and other faculties follow in the summer and fall semesters. As in previous formats, a 3-hour lecture presentation of the techniques will be followed by ~3 hours of laboratory demonstrations and practical work on each of our UHV instruments: XPS (AXIS-165, Kratos Analytical), SIMS (ToF SIMS IV, ION TOF GmbH) and AES (JAMP-9500F, JEOL). The workshop is aimed at graduate students, PDFs, faculty and researchers in academia or industry who are planning to use UHV surface analyses in their work. The goal is to provide participants with basic knowledge and understanding of the techniques along with hands-on experience necessary to prepare and run the experiments as well as to interpret the results. The workshop does not replace any formal material characterization courses offered to students of UofA or training for independent instrument usage.

The presentation will cover the fundamentals of each technique, vacuum requirements, instrumentation, advantages/disadvantages, typical applications (e.g., corrosion, catalysis, organics, nanostructures, biological materials, medical implants/devices) and guidelines for sample preparation, selection of the appropriate technique, data collection and analysis.

The demos/training for each of the instruments will include procedures for sample loading and focusing, selection of parameters for the analysis, preparation of batch files and collection of data in spectroscopy modes, destructive and non-destructive depth profiling, and mapping/imaging. Data processing techniques will be illustrated using software provided by instrument manufacturers and some licensed commercial computer programs. Selected samples of the participants can be run during the workshop, please contact us in advance if you want to use this opportunity.

The three hour sessions on both days will run from 900-1200 and from 1300-1600 hours. Training will be provided by ACSES staff. After the introductory session, participants will be divided into three groups which will rotate to the XPS, SIMS, or AES stations. Refreshments and two lunches will be provided. A fee of \$100.00 for each participant will cover all activities, including meals, instrument time and handouts of the presentation. University of Alberta participants can pay by indent, while external participants should pay by cheque or money order made out to the University of Alberta – ACSES Workshop.

The number of the participants is limited. Registrations will be accepted till January 28th, 2010 and the approved applicants will be advised by February 8th. Out of town attendees seeking on-campus accommodation can call (780) 492-6057 or visit www.ualberta.ca/conferenceservices for assistance.

Further details can be obtained by calling (780) 492-8576 or by visiting www.ualberta.ca/ACSES.

# WORKSHOP ON PRACTICAL SURFACE ANALYSIS USING XPS, SIMS, AES, AND EDXS

### University of Alberta February 22 & 23, 2010

Name:	Title:
Affiliation:	
Address:	
Telephone: E-mail address:	
I have enclosed a cheque / money order / indent for \$100.00	
Special dietary requirements, if any:	
Manager / Supervisor:	
Please return this form and payment to:	
Leanne Swekla, Event Coordinator ACSES Workshop Department of Chemical and Materials Engineering University of Alberta	
7 <sup>th</sup> Floor ECERF, 9107 – 116 <sup>th</sup> Street Edmonton, Alberta T6G 2V4	

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