



The Electrochemical Society Inc.
Canadian Section Canadienne

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FALL SYMPOSIUM D'AUTOMNE

Saturday, November 5, 2011 /
Samedi, le 5 novembre 2011

Electrochemistry for Energy and the Environment / L'électrochimie pour l'énergie et l'environnement

Energy Environment Experiential Learning
Building (EEEL), Room 345,
University of Calgary
2500 University Drive NW
Calgary, Alberta Canada T2N 1N4

Organized by / Organisé par

Bill Santos and Li Yan

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Please confirm attendance by / SVP confirmer
avant le **October 24, 2011** at/à:
yanli@novachem.com or bsantos@nrcan.gc.ca

Application forms for student travel assistance:
www.electrochem.org/ecs/sections/cana/cana.htm#a
Bourse étudiante pour couvrir frais de conférence

PROGRAM / PROGRAMME

08:00 *Registration / Inscription*

08:25 **Welcome / Bienvenue**

08:35 **Predicting Corrosion in Nuclear Waste and Pipeline Systems**

Fraser King, Integrity Corrosion Consulting Ltd.

09:15 **Electrochemical Corrosion of Pipelines Under Coating**

Frank Cheng, Dept. of Mechanical and Manufacturing Engineering, U. of Calgary

09:40 **Corrosion of Pipeline Steels Under Anaerobic - Aerobic Cycling Conditions in Simulated Groundwaters**

David Shoesmith, Dept. of Chem., UWO

10:05 *Coffee break / Pause Café*

10:20 **AWARD LECTURE: 2011 Student Award of the Canadian Section**

Active/passive Dissolution of Chalcopyrite (CuFeS₂) in Sulfuric Acid Solutions

Ahmad Ghahremaninezhad, Dept. of Materials Engineering, UBC.

10:45 **Use of Standard Electrochemical Measurements in the Investigation of Microbially Influenced Corrosion in Oilfield Systems**

Tom Jack, Dept. of Biological Sciences, U. of Calgary

11:10 **Corrosion Behaviour of Simulated Weld HAZ of X-80 Pipeline Steel**

Akram Alfantazi, Dept. of Materials Engineering, UBC.

11:35 **Role of Microstructure and Material Properties for Crack Initiation of Line Pipe Steel**

Mimoun Elboujdaini, CANMET Materials and Technology Laboratory

12:00 *Lunch / Dîner*

13:00 **AWARD LECTURE: Lash Miller Award**

Diverted Electrochemistry: Electrical Characterization of Molecularly Modified Silicon Surfaces and Devices
Hogan Yu, Dept. of Chemistry, Simon Fraser University

13:35 **SOFC Operating on Syngas**

Jingli Luo, Dept. of Chemical and Materials Engineering, U. of Alberta

14:00 **Materials for Solid Oxide Fuel Cells**

Venkataraman Thangadurai, Dept. of Chemistry, U. of Calgary

14:25 *Coffee Break / Pause Café*

14:40 **STXM Study of Graphene and Graphene Based Novel Nanocomposites for Sustainable Energies**

Jigang Zhou, Canadian Light Source

15:05 **Corrosion and Electrochemistry in the Petrochemical Industry**

Jeffrey Xie, NOVA Chemicals Research and Technology Centre

15:30 **Poster Session / Session d'affiches**

16:00 **Wine and Cheese Reception / Réception vins et fromages**

POSTER SESSION / SÉANCE DE PRÉSENTATION DES AFFICHES

Those interested in submitting a poster should contact the organizers before **October 24, 2011** and provide a title. The maximum poster dimensions allowed are 45" x 45". There will be prizes for best student posters. Posters from non-students are also welcome. No abstracts required. / Pour présenter une affiche, vous devez d'abord contacter les organisateurs, et ce, avant le **24 octobre 2011**. Vous devez également donner le titre de votre affiche. Les affiches ne dépasseront pas les dimensions suivantes: 45"x45". De plus, des prix seront remis aux meilleures affiches des étudiants.

TRAVEL DIRECTIONS AND PARKING / DIRECTIONS DE VOYAGE ET STATIONNEMENT

Travel directions to the University of Calgary and parking information can be found at:
Les directions de voyage à l'Université de Calgary et des informations sur le stationnement se trouvent à:

<http://www.ucalgary.ca/admissions/parking>

The symposium will take place in **Room 345 of the Energy Environment Experiential Learning (EEEL) Building** / Le symposium aura lieu au **Ch. 345 de l'Energy Environment Experiential Learning Building**.

ACCOMODATION / LOGEMENT

ALMA HOTEL & CONFERENCE SERVICES UNIVERSITY OF CALGARY

169 University Gate NW, Calgary, AB T2N 1N4
Tel: (403) 220-3203 / Toll Free: 1-877-498-3203
Email: stay@hotelalma.ca

Blocks of rooms have been reserved at a conference rate for the nights of Friday and Saturday, November 4 and 5, 2011. Rates are based on single occupancy.

Des blocs de chambres à des tarifs très avantageux ont été négociés auprès de l'hôtel Alma. Ces tarifs sont basés sur une occupation simple et s'appliquent aux nuits de vendredi et de samedi (4 et 5 novembre 2011).

Promo Code: NOVACH must be mentioned at time of reservation to insure the group rate. Please make your own arrangements by contacting the hotel.

Le code promotionnel (NOVACH) doit être mentionné lors de la réservation afin d'acquiescer le tarif de groupe. SVP, faites vos propres arrangements avec l'hôtel.

Room Rates: \$110.00 + taxes (Standard Room)
\$145.00 + taxes (1 Bedroom Suite)

Reservations are accepted until November 4, 2011 but will be subject to availability.
Les réservations sont acceptées jusqu'au 4 Novembre 2011, mais seront soumises à disponibilité.

Other/ Autres

<http://www.visitcalgary.com/accommodations/hotels>

SPONSORS / COMMANDITAIRES

The organizers gratefully acknowledge the financial contributions of the following sponsors:
Les organisateurs remercient les commanditaires suivants pour leurs contributions financières:



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Scientific Limited

833 Consortium Court, London, ON, N6E 2S8
Phone: 1-800-270-5665
Email: bdeffet@lsl.ca

PRE-REGISTRATION / PRÉINSCRIPTION

A confirmation of your attendance to the organizers would be appreciated by October 24, 2011 to facilitate the registration process and aid in planning the complementary luncheon and reception.

Veillez confirmer votre présence aux organisateurs avant le 24 octobre, 2011, afin de faciliter l'inscription et l'organisation des repas qui vous seront offerts.

REGISTRATION / INSCRIPTION

Registration fee will be collected at the meeting (cash or check), and will include breakfast, coffee, lunch and w & c reception. / Les frais d'inscription doivent être payés au premier jour du symposium (espèces ou chèques). Les frais d'inscription couvrent le déjeuner, le café, le dîner et le vins et fromages.

Membre ECS Member	\$60
Non-membre / Non-member	\$70
Membre étudiant ECS Student Member	\$20
Étudiant non-membre/Student Non-member	\$30