

**ECS Canadian Section  
2019 Fall Symposium**



**Queen's**  
UNIVERSITY

**Current Challenges and  
Recent Advances in  
Electrochemical Technologies  
for a Sustainable Society**

**December 19<sup>th</sup> 2019**

**Chernoff Hall, Queen's University,  
90 Bader Lane, Kingston, ON K7L 3N6**

**SPRINGER NATURE**

**Swagelok**  **Metrohm**



**Ni Electro Can** 

NSERC Discovery Frontiers

## ECS Canadian Section – Fall Symposium – Program

**8:00 - 9:00 – Registration, Poster Setup, Exhibition Setup, Coffee and Continental Breakfast (Chernoff 4<sup>th</sup> floor)**

Morning Session 1 – Chernoff 117 (Chairs – M. Tintor and S. Fujita)

**9:00 - 9:10 – Welcome and Introductory Remarks**

**9:10 - 9:40 – *Keynote Lecture* – Dr. Deborah Jones, University of Montpellier, France – “The European VOLUMETRIQ project: driving forward automotive fuel cells”**

**9:40 - 10:00 – Prof. Bruno G. Pollet, Norwegian University of Science and Technology, Norway – “The use of sound for the development of proton exchange membrane water electrolyzer and fuel cell electrocatalysts”**

**10:00 - 10:20 – Prof. Yoshiyuki Kuroda, Yokohama National University, Japan – “Self-repairing catalyst for highly durable anode catalysts of alkaline water electrolysis”**

**10:20 - 10:40 – Coffee Break**

**10:40 - 11:00 – Prof. Frode Seland, Norwegian University of Science and Technology, Norway – “Ni/NiO electrocatalysts for hydrogen evolution”**

**11:00 - 11:10 – *Award* – Presentation of the ECS Canadian Section Lash Miller Award to Dr. Edouard Asselin, University of British Columbia**

**11:10 - 11:40 – *Award Lecture* – Dr. Edouard Asselin, University of British Columbia – “The electrochemistry of chalcopyrite and its importance in copper production”**

**11:40 - 12:00 – Prof. Christophe Coutanceau, University of Poitiers, France – “Catalytic materials for the selective electro-reforming of biomass”**

## 12:05 - 1:15 – Lunch, Networking and Poster Session (Chernoff 4<sup>th</sup> floor)

Afternoon Session – Chernoff 117 (Chairs F. Foroughi & D. Esau)

**1:20 - 1:50 – *Keynote Lecture*** – Prof. Ralph G. Nuzzo, University of Illinois at Urbana-Champaign, USA – **“Autonomous light management in flexible electrochromic thin films integrating high performance silicon solar microcells”**

**1:50 - 2:10** – Prof. Shigenori Mitsushima, Yokohama National University, Japan – **“Reverse current mechanism and ADT protocol for alkaline water electrolyzer”**

**2:10 - 2:30** – Prof. Germano Tremiliosi-Filho, University of Sao Paulo, Brazil – **“Development of TiO<sub>2</sub>(nanotubes)/Pt electrodes for application in photo-assisted direct alcohol fuel cells”**

**2:30 - 2:40 – *Award*** – Presentation of the ECS Canadian Student Award to Mr. Jeffrey D. Henderson, University of Western Ontario

**2:40 - 3:10 – *Award Lecture*** – Mr. Jeffrey D. Henderson, University of Western Ontario – **“Atomic emission spectroelectrochemistry (AESEC) in the investigation of the behaviour of alloying elements”**

**3:10 - 3:30** – Prof. Michael H. Eikerling, FZ Jülich, Germany – **“What determines local reaction conditions in PEM fuel cell catalyst layers? Insights from theory and computation”**

**3:30 - 5:00 – Reception, Continuation of the Poster Session, and Industry Showcase**

**5:00 - 5:30 – Adjournment**

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**Registration** information for the symposium and poster session will be available at <http://www.electrochem.ca/>.

**Fees:** Student/Postdoctoral Fellow → \$ 60 + 13% HST = \$ **67.80**

Other → \$120 + 13% HST = \$ **135.60**

**Accepted Payment Method:** (1) cheque or (2) money order payable to **Department of Chemistry Queen's University**

## **Venue**

Chernoff Hall, Queen's University, Kingston. The conference location is highlighted by a red circle in the campus map on the next page.

All oral presentations will be held in room 117 of Chernoff Hall. All other conference activities will occur in the Chernoff Hall's 4<sup>th</sup> floor lounge.

## **Getting here/ Parking**

Information on parking and directions to the Queen's University Campus are available at <http://www.queensu.ca/about/visit/directions>.

## **Campus map**

<http://www.queensu.ca/campusmap/main> or on the next page.

## **Hotels**

A number of hotels are available within walking distance or a short taxi ride of the Queen's University Main Campus, including:

### ***Confederation Place Hotel***

237 Ontario Street, Kingston, ON K7L 2Z4

Tel: 1-613-549-6300 <http://www.confederationplace.com/>

### ***Holiday Inn - Kingston Waterfront***

2 Princess Street, Kingston, ON K7L 1A2

Tel: 1-613-549-8400 <http://www.hikingstonwaterfront.com/>

### ***Four Points by Sheraton Kingston***

285 King Street E, Kingston, ON K7L 3B1

Tel: 1-613-544-4434 <http://www.fourpointskingston.com/>

### ***Delta Hotels by Marriott Kingston Waterfront***

1 Johnson Street, Kingston, ON K7L 5H7

Tel: 1-613-549-8100 <http://www.marriott.com/hotels/travel/ygkdk-delta-hotels-kingston-waterfront/>

## Poster Session

Poster presentations will be held in Chernoff's 4<sup>th</sup> floor lounge during the lunch period and after the afternoon session has completed. The dimensions of the poster must be less than 36" (width) × 48" (length). Posters should be installed upon arrival during the initial registration/breakfast period (8:00 – 9:00 a.m.), and removed immediately following the afternoon poster session (5:00 – 5:30 p.m.).

Those participating in the poster session are asked to submit an abstract using the template that we have provided separately.

