



Programme

Location:

Coast Victoria Hotel & Marina by APA



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Welcome to CANOPENER 2018!

We are delighted to welcome you to the 2nd annual CANOPENER conference, in Victoria, Canada.

The main topic of this year's conference is "Fluid Flow and Gas Evolution in Electrochemistry", and we will be starting the programme with a plenary talk in this area. Over the following two days, we have an exciting series of presentations lined up, with speakers from around the globe. In addition, we will have conference dinners on Thursday and Friday night, and a final group meal on Monday in Seattle, for those attending the annual Electrochemistry Society conference.

We hope that you have an interesting and exciting time in Victoria, and we look forward to hearing about your research.

If you have any questions during the event, please ask Katie McCay or David Harrington and we will try our best to help you.



Participants from CANOPENER 2017, held in Trondheim, Norway

Day 1 – Thursday 10th May 2018

08:00	Breakfast and Registration
09:00	Svein Sunde and David Harrington Can-Opening
09:15	Kristian Etienne Einarsrud (NTNU) Gas evolution and fluid flow in electrochemical systems
10:00	Robert Sacci (ORNL) Electrochemistry within non-newtonian electrolytes
10:20	Break
10:40	Kurian Jomy Vachaparambil (NTNU) Thermodynamics of bubble nucleation
11:00	Zohreh Jalili (NTNU) New Insights into Computational Fluid Dynamic (CFD) Modeling of Concentration Overpotential
11:20	Ned Djlali (UVic) Modelling of transport phenomena in fuel cells
12:00	Lunch
13:00	3 Minute Thesis (3MT) Presentations, Part 1:
	Dilip Ramani (SFU) 4D structural characterization of mechanical degradation in reinforced fuel cell membranes using in situ visualization
	Yash Raka (NTNU) Electrodialysis and reverse electrodialysis of ammonium bicarbonate solution
	Xinzhi Cao (SFU)
	Victor Aiyejuro (UVic) Electrocatalytic oxidation of Glycerol on Nickel
	Kjersti Wergeland Krakhella (NTNU) Energy Storage in River and Sea Water
13:25	Break
13:30	3 Minute Thesis (3MT) Presentations, Part 2:
	Zoe Paula (SFU) Synthesis of Imidazolium Based Polymers for Use in Anion Exchange Membranes
	Mohammad Alikarami (UVic) Mechanistic study on initial stages of nickel oxidation using dynamic impedance spectroscopy
	Karina Asheim (NTNU) LiFSI as electrolyte salt for Si-based Li-ion batteries

	Wei Li (SFU) Design and Synthesis of Poly(Aryl Imidazolium) for AEM Fuel Cells
	Ida Johanne Molvik Haga (NTNU) Heat to H ₂
	Natalie Stubb (UVic) Kinetics of Initial Stages of Pt Oxidation from Electrochemistry and Surface X-Ray Diffraction
14:00	Break and transport to the University of Victoria
15:00	Poster Session at the University of Victoria, Bob Wright Building
16:30	Tour of the University of Victoria

18:00, Dinner at:



The
UNIVERSITY CLUB
of Victoria

Day 2 – Friday 11th May 2018

08:00	Breakfast
09:00	Alexandre Brolo (UVic) Spectroelectrochemistry on Nanostructured Electrodes
09:40	Ellen Synnøve Skilbred (NTNU) Heat to H ₂
10:00	Jonathan Ward (SFU) Benzimidazolium Based Polymers For Use As Anion Exchange Membranes
10:20	Break
10:40	Amelia Hohenadel (SFU) Water Electrolysis with Novel Proton and Anion Exchange Membranes
11:00	Alejandro Oyarce Barnett (SINTEF) Anion exchange membrane fuel cells and electrolyzers
11:20	Alaa Faid (NTNU) Electrocatalyst for alkaline Hydrogen evolution
11:40	Kristian F.K. Thorbjørnsen (NTNU) Towards Iridium Core/Shell Catalysts for PEM Water Electrolyzer Anodes Synthesized via Galvanic Exchange

12:00	Lunch
13:00	Mohamed El Hannach (SFU) Modeling of Coupled Mechanical and Chemical Degradation of the Ionomer Membrane in Polymer Electrolyte Fuel Cells
13:20	Katie McCay (NTNU) A New Generation of Bipolar Plates for PEM Fuel Cells
13:40	Omar Ibrahim (SFU) Glycerol electro-oxidation in microfluidic fuel cells with flow-through porous electrodes
14:00	Tianyu Li (UVic) Detection of Electro-oxidation Products in Microfluidic Devices Using Raman Spectroscopy
14:20	Break
14:40	Tory Borsboom (UVic) High Temperature Electro-oxidation of Glycerol on Nickel
15:00	Maidhily Manikandan (NTNU) Development of Ni-Based Bimetallic Electrocatalysts for Hydrogen Oxidation Reaction in Alkaline Fuel Cells
15:20	Fatemeh Poureshghi Oskouei (NTNU) Oxygen evolution on homo-structured Ni catalysts
15:40	David Harrington (UVic) X-ray Studies of Pt Electrooxidation

18:00, Dinner at:



Day 3 – Saturday 12th May 2018

17:00	Boat to Seattle leaves from Victoria Ferry Terminal
19:45	Arrive in Seattle at Pier 69 More info here: https://www.clippervacations.com/

Participant List

We have participants from a number of institutions in both Norway and North America:

Norwegian University of Science and Technology, Norway (NTNU)

University of Victoria, Canada (UVic)

Simon Fraser University, Canada (SFU)

SINTEF Materials and Chemistry, Norway (SINTEF)

Oak Ridge National Lab, USA (ORNL)

UVic	Mr. Victor Aiyejuro
UVic	Mr. Mohammad Alikarami
NTNU	Ms. Karina Asheim
UVic	Mr. Tory Borsboom
UVic	Professor Alexandre Brolo
SFU	Ms. Xinzhi Cao
UVic	Professor Ned Djlali
NTNU	Associate Professor Kristian Etienne Einarsrud
SFU	Dr. Mehrtoos Eslamibidgoli
SFU	Dr. Mohamed El Hannach
NTNU	Mr. Alaa Faid
NTNU	Ms. Ida Johanne Molvik Haga
UVic	Professor David Harrington
SFU	Ms. Amelia Hohenadel
SFU	Professor Steven Holdcroft
SFU	Mr. Omar Ibrahim
NTNU	Ms. Zohreh Jalili
NTNU	Mr. Kurian Jomy Vachaparambil
NTNU	Ms. Kjersti Wergeland Krakhella
SFU	Mr. Wei Li
UVic	Mr. Tianyu Li
NTNU	Dr. Maidhily Manikandan

NTNU	Ms. Katie McCay
SINTEF	Dr. Alejandro Oyarce Barnett
SFU	Ms. Zoe Paula
NTNU	Ms. Fatemeh Poureshghi Oskouei
NTNU	Ir. Yash Raka
SFU	Mr. Dilip Ramani
ORNL	Dr. Robert Sacci
NTNU	Ms. Ellen Synnøve Skilbred
UVic	Ms. Natalie Stubb
NTNU	Professor Svein Sunde
NTNU	Mr. Kristian Thorbjørnsen
SFU	Mr. Jonathan Ward

Contact Us

If you have any questions during the event, or afterwards, regarding both CANOPENER 2018 and the ongoing project, please get in touch.

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