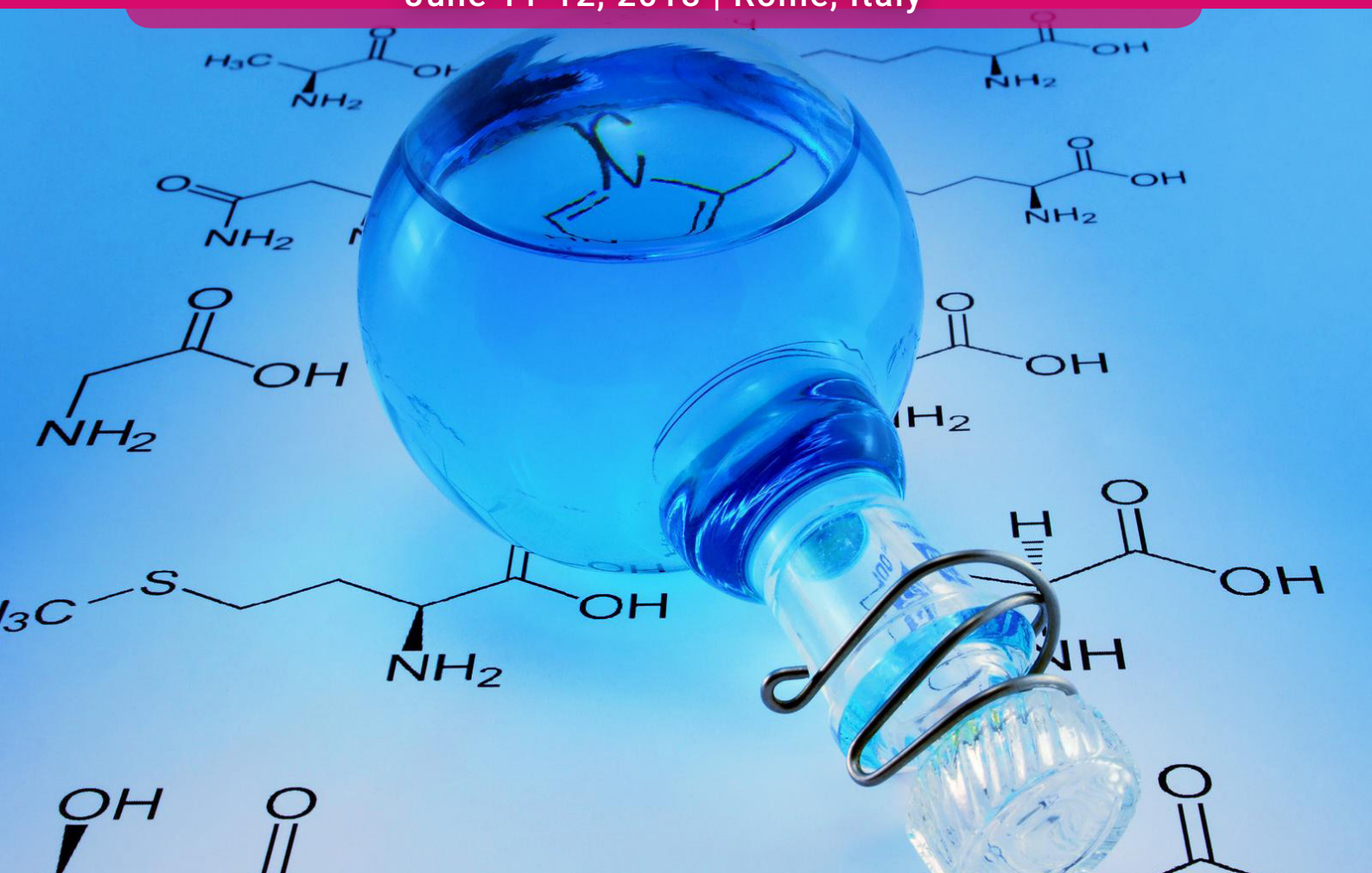


4<sup>th</sup> International Conference on

# Electrochemistry

June 11-12, 2018 | Rome, Italy



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Day 1 June 11, 2018

08:00-09:00 Registrations

## Hall - Olimpica 1

conference**series**.com 09:00-09:20

# Opening Ceremony

## Keynote Forum

09:20-09:30 **Introduction**

**Title: How neutrons as a probe for *in situ* and *in operando* measurements support the understanding of electrochemistry in Li-ion battery research**

09:30-10:00

**Ralph Gilles**, Technical University of Munich, Germany

**Title: Polyelectrolyte multilayer assemblies and brushes on reduced graphene oxide field-effect transistors for sensing applications**

10:00-10:30

**W Knoll**, Austrian Institute of Technology, Austria

## Group Photo

Sessions: Theoretical and Computational Electrochemistry | Batteries and Energy Storage  
Sensors Physical and Analytical Electrochemistry | Photoelectrochemistry | Electrochemical Energy  
Electrochemical Engineering | Electrochemical Water Treatment | Electronic Materials and Processing  
Dielectric Science and Materials

Session Chair: **Guowei Li**, Max Planck Institute for Chemical Physics of Solids, Germany

Session Co-Chair: **Jelena Popovic**, Max Planck Institute for Solid State Research, Germany

## Session Introduction

10:30-10:50 **Title: Design and development of catalyst materials for the production of fuels and chemicals in a sustainable manner**

**Thomas F Jaramillo**, Stanford University, USA

## Networking & Refreshment Break: 10:50-11:05 @ Foyer

11:05-11:25 **Title: Interfacially engineering topological semimetal MoP into a superior electrocatalyst for hydrogen evolution**

**Guowei Li**, Max Planck Institute for Chemical Physics of Solids, Germany

11:25-11:45 **Title: Electrochemistry of bipolar s-tetrazine derivatives**

**M Lapkowski**, Silesian University of Technology, Poland

11:45-12:05 **Title: Computational studies of ferroelectric composites and thin films containing polyvinylidene fluoride (PVDF) and graphene/graphene oxide**

**Vladimir S Bystrov**, Keldysh Institute of Applied Mathematics RAS, Russia

12:05-12:25 **Title: Integration of functional liquids in solid-state electronic circuits**

**E Fillis Tsirakis**, Max Planck Institute for Solid State Research, Germany

12:25-12:45 **Title: (Electro)chemical water disinfection – challenges for the 21<sup>st</sup> century**

**M E Henry Bergmann**, Anhalt University of Applied Sciences, Germany

12:45-13:05 **Title: Oxygen evolution reaction at the surface of nickel cobaltites: The impact of surface restructuring phenomena on the activity**

**Aurelien Habrioux**, University of Poitiers, France

## Lunch Break: 13:05-13:55 @ Hotel Restaurant

13:55-14:15 **Title: New poly(3,4-ethylenedioxythiophene) coatings for neural recording and stimulation**

**Stefano Carli**, Italian Institute of Technology, Italy

14:15-14:35 **Title: Electrochemical regulation of the acidity in miniaturized electrochemical cells: The route to increase flexibility and multiplexing of chemical control**

**César Pascual García**, Luxembourg Institute of Science and Technology, Luxembourg

- 14:35-14:55** **Title: Interaction between the morphology and the kinetics of the (de)lithiation reactions of novel SiNW based anodes in lithium ion batteries**  
Ulrike Langklotz, TU Dresden, Germany
- 14:55-15:15** **Title: Verification of photo-splitting of H<sub>2</sub>O to HOOH and H<sub>2</sub> as initial photoproducts**  
Shozo Yanagida, Osaka University, Japan
- 15:15-15:35** **Title: Electrodialysis and electrodeionization applied to remove Cr (III)**  
Lucia Alvarado, Guanajuato University, Mexico
- 15:35-15:55** **Title: S-layer protein lattice as a key component in biosensor development**  
Bernhard Schuster, University of Natural Resources and Life Sciences, Austria
- 15:55-16:15** **Title: Surface chemistry and electrode design for high performance Li-S battery**  
Wen Liu, Beijing University of Chemical Technology, China

**Networking & Refreshment Break: 16:15-16:30 @ Foyer**

- 16:30-16:50** **Title: Immunosensor for label-free PSA cancer detection on GQDs-AuNRs modified screen-printed electrodes**  
Rajiv Prakash, Banaras Hindu University, India
- 16:50-17:10** **Title: The impact of M Faraday's work on the development of natural science**  
Essen N Suleimenov, Kazakh British Technical University, Kazakhstan
- 17:10-17:30** **Title: New approach of flexible electrodes coated with carbon nanotubes/poly(3,4-ethylenedioxythiophene (PEDOT) for mancozeb analysis in water**  
Roy Zamora, Costa Rica Institute of Technology, Costa Rica

**Panel Discussion**

**Day 2 June 12, 2018**

**Hall - Olimpica 1**

**Keynote Forum**

- 09:20-09:30** **Introduction**
- 09:30-10:00** **Title: The connection between chemistry and electric function in solids**  
Joachim Maier, Max Planck Institute for Solid State Research, Germany
- 10:00-10:30** **Title: Interfacial effects and charge carrier chemistry in lithium electrolytes**  
Jelena Popovic, Max Planck Institute for Solid State Research, Germany

**Networking & Refreshment Break: 10:30-10:45 @ Foyer**

**Sessions: Environmental Electrochemistry | Electronic Materials and Processing | Electrochemical Water Treatment | Dielectric Science and Materials | Electrochemical Engineering | Physical and Analytical Electrochemistry**

**Session Chair: Elod L Gyenge, University of British Columbia, Canada**

**Session Co-Chair: Peggy Gunkel Grillon, University of New-Caledonia, New Caledonia**

**Session Introduction**

- 10:45-11:05** **Title: Novel manganese dioxide-based electrocatalyst formulations for bifunctional oxygen reduction and evolution reaction activity**  
Elod L Gyenge, University of British Columbia, Canada
- 11:05-11:25** **Title: Calcareous electrochemical precipitation, a new method to trap dissolved metallic contaminants in seawater**  
Peggy Gunkel Grillon, University of New-Caledonia, New Caledonia
- 11:25-11:45** **Title: Ce<sub>0.8</sub>Gd<sub>0.2</sub>O<sub>1.9</sub>/VO<sub>2</sub> memristive devices**  
Roman Korobko, ETH Zurich, Switzerland
- 11:45-12:05** **Title: Linear response in topological semimetals**  
Yan sun, Max Planck Institute for Chemical Physics of Solids, Germany

**Young Research Forum**

- 12:05-12:25** **Title: Electrochemical breast cancer screening technology facilitating earlier clinical diagnosis**  
Mackenzie Honikel, Arizona State University, USA

- 12:25-12:45** **Title: Improving single carbon nanotube electrode contacts using molecular electronics**  
**Atiweena Krittayavathananon**, University of Oxford, UK
- 12:45-13:05** **Title: Nanocrystalline scaffold of AMT-Ag for electro-sensing of ciprofloxacin drug in biological fluid and pharmaceutical formulation**  
**Vinita**, Banaras Hindu University, India

**Lunch Break: 13:05-13:55 @ Hotel Restaurant**

- 13:55-14:15** **Title: Ch@AgNPs modified SPGE: Voltammetric estimation of anti -HIV drug**  
**Preeti Tiwari**, Banaras Hindu University, India
- 14:15-14:35** **Title: Surface induced assembly of PTZ-TCNQ complex and its charge transport characteristics**  
**Richa Mishra**, Banaras Hindu University, India
- 14:35-14:55** **Title: Experimental study on conductivity versus concentration of electrolytes for electrochemical deburring process**  
**Alay Patel**, Pandit Deendayal Petroleum University, India
- 14:55-15:15** **Title: Organization of chemical reactions by using the discrete properties of electric current**  
**Dina U Alshimbayeva**, Kazakh National Research Technical University, Kazakhstan

**Networking & Refreshment Break: 15:15-15:30 @ Foyer**

- 15:30-15:50** **Title: Experimental study of combined electrolytes for electrochemical deburring process**  
**Meet Oza**, Pandit Deendayal Petroleum University, India
- 15:50-16:10** **Title: Experimental investigations of ECD process parameters**  
**Harsh Thakkar**, Pandit Deendayal Petroleum University, India

**Poster Presentation 16:10-16:40**

**Poster Judge : Vladimir Bystrov**, Keldysh Institute of Applied Mathematics RAS, Russia

**Panel Discussion**

**Bookmark your dates**

5<sup>th</sup> International Conference on

# Electrochemistry

May 27-28, 2019 Barcelona, Spain

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