

39th Topical Meeting

of the **International Society of Electrochemistry**

23 - 26 March 2025

Natal, Brazil

The Role of Electrochemistry
in Sustainable Energy
and the Environment



PROGRAM

<https://topical39.ise-online.org>

e-mail: events@ise-online.org

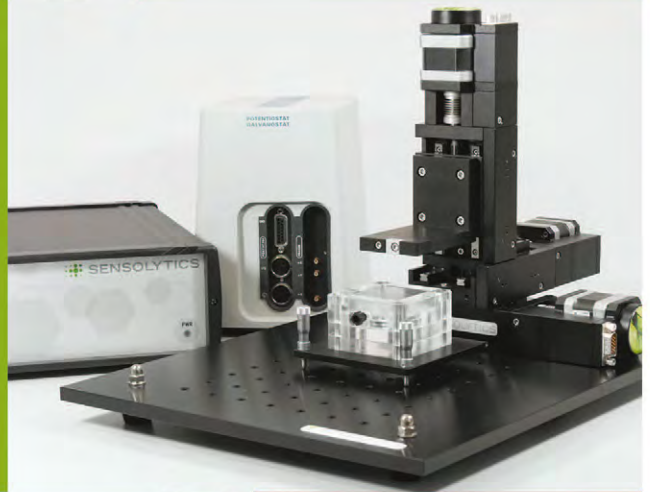


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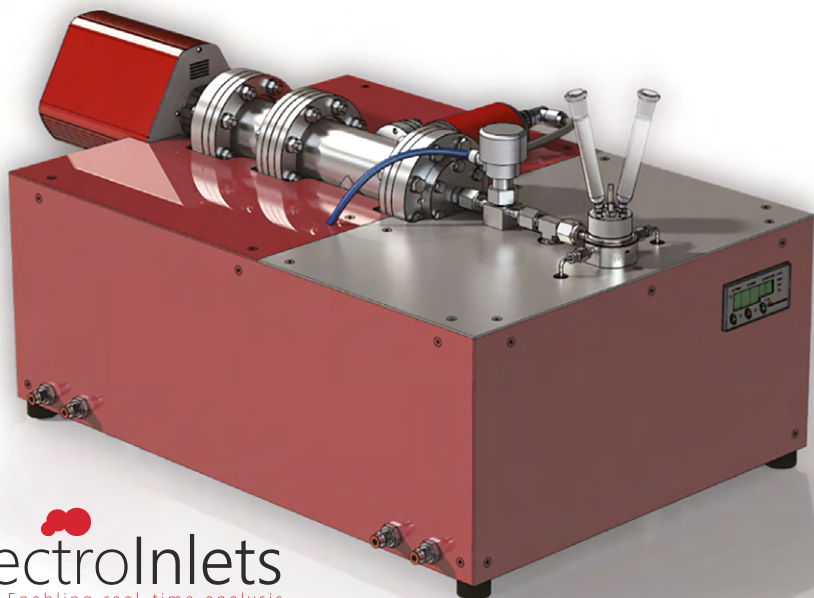


Praiamar Natal Hotel & Convention

Rua Francisco Gurgel, 33 - Ponta Negra,
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Exhibitor Booths

Exhibitor Hours

Sunday: 17:00 - 19:00

Monday: 09:00 - 17:00

Tuesday: 09:00 - 17:00

Wednesday: 09:00 - 14:00

1

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& Sensolytics

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Program of the

39th Topical Meeting of the International Society of Electrochemistry

23 - 26 March 2025
Natal, Brazil

The Role of Electrochemistry
in Sustainable Energy and the Environment

Organized by:

Division 3 - Electrochemical Process Engineering and Technology

Division 5 - Electrochemical Energy Conversion and Storage

ISE Region Brazil



Organizing Committee

Carlos A. Martínez-Huitle

(Universidade Federal do Rio Grande do Norte, Brazil)

Rodrigo Muñoz

(Federal University of Uberlandia, Brazil)

Lucia Helena Mascaro

(UFSCar, Brazil)

Scientific Program

The role of electrochemistry in sustainable energy and the environment:

- S1. *Clean, renewable and new energy systems*
- S2. *Environmental electrochemistry*
- S3. *The coupling of degradation and power generation by photocatalytic fuel cells (PFC)*

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Sunday 23 March 2025

Participant Registration

ISE Desk

15:00 to 17:00 - Registration desk will also be open throughout the conference

Opening Ceremony

Room: Auditorium

17:00 to 18:00 - Inauguration by **Lucia Mascaro & Carlos Alberto Martinez Huitle**

Keynote

Room: Auditorium

Chaired by *Lucia Mascaro*

18:00 to 18:40 Keynote

Roberto Manuel Torresi (*Instituto de Química, Universidade de São Paulo, São Paulo, Brazil*), Heloise M. Sintaku, Paulo F.M. de Oliveira, Breno Luiz de Souza

[Tackling Lithium-Sulfur Battery Challenges with Porous Materials and Operando Techniques](#)

Welcome Reception

Cocktail Area

19:00 to 22:00 **Cocktail Area** at the Conference Center

Tuesday 25 March 2025

Gala Dinner

Aquarium Restaurant

20:00 **Aquarium Restaurant** at the Conference Center

Oral Presentations

Monday 24 March 2025 - Morning

Keynote

Room : Auditorium

Chaired by *Christiane Arruda*

09:00 to 09:40 **Keynote**

Anna Hankin (*Chemical Engineering, Imperial College London, London, United Kingdom*)

[Photoelectrochemical H₂ production: Lessons from field tests](#)

S1 - Clean, renewable and new energy systems

Room 1 : Jacaranda

Chaired by *Susan Torresi and Danilo Dino*

09:50 to 10:20 **Invited**

Susana Cordoba de Torresi (*Instituto de Química, Universidade de São Paulo, São Paulo, Brazil*)

[Plasmon-enhanced Oxygen Evolution Reaction on Au decorated Ni\(OH\)₂ nanostructures: the role of alkaline cations solvation](#)

10:20 to 10:40

Baptiste Py (*Mechanical and Aerospace Engineering Department, The Hong Kong University of Science and Technology, Hong Kong, China*), *Francesco Ciucci*

[Optimizing Regularized Regression for The Distribution of Capacitive Times](#)

10:40 to 11:00

Coffee Break

11:00 to 11:20

João Pedro Santos (*Advanced Energy Storage Program, Unicamp, Campinas, Brazil*), *Gustavo Iervolino, Julia Leite, Cesar Pagan, Lucas Prado, Hudson Zanin*

[Low-cost cell for soluble lead flow batteries based on 3D printing](#)

11:20 to 11:40

Carla Santana Santos (*Analytical Chemistry – Faculty of Chemistry and Biochemistry, Ruhr University Bochum, Bochum, Germany*), Wolfgang Schuhmann

Micro-/nanoelectrochemical Tools for Investigating Charge-Transfer Processes for Mediated-Redox Flow Batteries

11:40 to 12:00

Daniilo Dini (*Chemistry, University of Rome "La Sapienza", Rome, Italy*)

Dye-sensitized solar cells of p-type: last developments and perspectives

S2 - Environmental electrochemistry

Room 2 : **Flamboyant**

Chaired by Jacek Ryl and Christiane Arruda

09:50 to 10:20 *Invited*

Jacek Ryl (*Electrochemistry and Surface Physical Chemistry, Gdańsk University of Technology, Gdańsk, Poland*), Robert Bogdanowicz, Mateusz Cieřlik, Krzysztof Formela, Rodrigo A.A. Munoz, Ana Clara M. Oliveira, Agata Rodak, Gilvana P. Siqueira

Exploring the Electroanalytical Performance of Tailored 3D-Printable Composites in Environmental Sensing

10:20 to 10:40

Luisa Fauaz de Almeida (*Quimica Analitica, Instituto de Quimica da UNICAMP, Campinas, Brazil*), Paula Cristine Rocha Corsato, William Reis de Araujo

Wearable Electrochemical Glove-based Sensors for the Rapid Detection of *Salmonella spp*

10:40 to 11:00

Coffee Break

11:00 to 11:20

Bruna Ferreira Gomes Lobo (*Electrochemical Process Engineering, University of Bayreuth, Bayreuth, Germany*)

Advancing Electrochemical Studies with *In-Situ* XAS: Challenges and Applications

11:20 to 11:40

Julio Lourenço (*IQSC-USP, University of São Paulo, Sao Carlos, Brazil*), Igor Cruz, Guilherme Fortunato, Marcos Lanza, Marc Ledendecker, Beatriz Nogueira, Tulio Pôrto, Robson Rocha, Robson Souto, Nicolas de Moraes

Towards state-of-the-art environmentally friendly catalysts for H₂O₂ electrogeneration: feasibility of using biomass-derived activated carbons as support for Pd-single atoms

11:40 to 12:00

Tabata Feijó (*Instit. of Chemistry, Federal Univ of Rio Grande do Norte, Natal, Brazil*), Luis David Loo-Urgilés, Carlos A. Martínez-Huitle, Elisama V. dos Santos

Electroanalytical Monitoring of Chloride-Mediated Degradation of an Azo Dye at Low Current Density

S3 - The coupling of degradation and power generation by photocatalytic fuel cells (PFC)

Room 3 : Alamo

Chaired by *Patricio Espinoza-Montero and Justyna Widera-Kalinowska*

09:50 to 10:20 *Invited*

Patricio Espinoza-Montero (*Chemistry, Pontificia Universidad Católica del Ecuador, QUITO, Ecuador*), G. Xavier Castillo-Cabrera

Photoelectrochemical study of a carbon dots sensitized TiO₂-modified Boron-Doped Diamond photoelectrode driven by visible light

10:20 to 10:40

Loïc Assaud (*Institute of Porous Materials of Paris, University Paris Sciences & Letters, Paris, France*)

MoxSy Hydrogen Evolution Reaction Electrocatalysts implemented in Proton Exchange Membrane Water Electrolysers (PEMWE)

10:40 to 11:00

Coffee Break

11:00 to 11:20

Leopold Lahn (*Dynamic Electrocatalytic Interfaces, Helmholtz-Zentrum Berlin für Materialien und Energie GmbH, Erlangen, Germany*), Marcus Bär, Raul Garcia-Diez, Olga Kasian, Viktoriia A. Saveleva

Effect of ionic liquids on electronic structure and electrochemical behavior of NiPt alloys

11:20 to 11:40

Justyna Widera-Kalinowska (*Chemistry, Adelphi University, Garden City, USA*), Faria Oyshi, Renata Solarska, Linh Trinh

Copper-Based Photocathodes for PEC Hydrogen Production.

11:40 to 12:00

Juliana Bruneli Falqueto (*PSI Center for Energy and Environmental Science, Paul Scherrer Institut, Villigen, Switzerland*), Camelia N. Borca, Nicola P. M. Casati, Adam H. Clark, Emiliana Fabbri, Dariusz J. Gawryluk, Thomas Huthwelker, Thomas J. Schmidt

Oxygen Evolution Reaction on LaNiO₃-d Perovskites: Investigating the Electronic and Structure Changes during Operation

Monday 24 March 2025 - Afternoon

Keynote

Room : Auditorium

Chaired by Caue Ribeiro

14:00 to 14:40 **Keynote**

Nicola Pinna (*Institute of Chemistry, Humboldt-Universität zu Berlin, Berlin, Germany*)

Novel Materials Chemistry for Applications in Energy Storage and Conversion

S1 - Clean, renewable and new energy systems

Room 1 : Jacaranda

Chaired by Wolfgang Schuhmann and Mauricio Isaacs

14:50 to 15:20 **Invited**

Wolfgang Schuhmann (*Analytical Chemistry - Center for Electrochemical Sciences, Ruhr University Bochum, Bochum, Germany*)

From high-throughput electrocatalysts discovery to hybrid model electrolyzers for coupling hydrogen generation or CO₂ reduction with unusual anode reactions

15:20 to 15:40

Adam Weber (*Energy Conversion Group, Lawrence Berkeley National Laboratory, Berkeley, USA*), Alexis Bell, Jason Chiu, Alex King

Design Tradeoffs and Model-Based Optimization for Photoelectrochemical Water Splitting and CO₂ Reduction

15:40 to 16:00

Vladislav Ivanistsev (*Institute of Chemistry, University of Tartu, Tartu, Estonia*), Vitali Grozovski, Vladislav Ivanistsev, Nadezda Kongi, Iuliia Vetik, Nikita Zoglo

Understanding CO₂ Electrosorption on Conductive Metal-Organic-Frameworks

16:00 to 16:20

Dominik Sachse (*IET-4 Electrochemical Process Engineering, Forschungszentrum Jülich, Jülich, Germany*), Andreas Glüsen, Martin Müller, Ralf Peters, Uwe Rau, Klaus Wippermann

The Ammonia Adsorption and Desorption Behavior of Nafion

16:20 to 16:40

Coffee Break

16:40 to 17:00

Mauricio Isaacs (*Departamento de Química Inorgánica, Pontificia Universidad Católica de Chile, Santiago, Chile*), Pablo Barraza, Pedro Pablo Jofré, Elias Mardones

Tandem Electrocatalysis for the Electrochemical of Carbon Dioxide and Nitrogen Reduction

17:00 to 17:20

Mamié Sancy (*Escuela de Construcción Civil, Pontificia Universidad Católica de Chile, Santiago, Chile*), Luis Herrán, Domingo Jullian, Paulo Molina, Edgar Pío, Daniela Silva, Magdalena Wlaczak

A High-entropy Alloy as a Nitrogen Reduction Catalyst for Ammonia Synthesis

17:20 to 17:40

Pawel J. Kulesza (*Faculty of Chemistry, University of Warsaw, Warsaw, Poland*), Iwona A. Rutkowska

Development of iron-phosphide-based electrocatalytic systems for the reduction of nitrogen to ammonia

17:40 to 18:00

Jonathan Quinson (*Biological and Chemical Engineering, Aarhus University, Aarhus, Denmark*)

Surfactant-free colloidal precious metal nanoparticles for improved electrocatalysis

18:00 to 18:20

Ana Luz Tupa Quispe (*Chemistry, State University of Campinas (UNICAMP), Campinas, Brazil*), Pablo Sebastian Fernandez, Carlos C. Lima, José J. Linares, Keyla Teixeira Santos, Victor Y. Yukuhiro

Pt-Ag/C Catalysts for Sustainable Electrochemical Conversion of Glycerol into Value-added Products

18:20 to 18:40

Rainy Sousa (*Department of Chemical Engineering, Federal University of Rio Grande do Norte, Natal, Brazil*), Edney Galvão, Beatriz Germano, Carlos Martinez-Huitle, José Eudes Santos, Rainy Sousa, Elisama dos Santos

Electrodeposition of Ni-Mo-P on Stainless Steel to Evaluate its Effectiveness as a Viable Electrocatalyst in The Hydrogen Evolution Reaction

S2 - Environmental electrochemistry

Room 2 : Flamboyant

Chaired by Ricardo Salazar-González an Pawel Kryszinski

14:50 to 15:20 *Invited*

Ricardo Salazar-González (*Escuela de Química, Pontificia Universidad Católica de Chile, Santiago, Chile*), Saïdy Ayala-Durána, Maria Valnice Boldrin Zanoni, Kallyni Irikura, Hernán Rojas-Mantillaa, Eduardo Rossinia, João de Souza

Performance of Ti/TiO₂-ZIF-67 photoanode under LED irradiation applied to the photoelectrodegradation of the antidepressant venlafaxine (VEN) in municipal wastewater effluent

15:20 to 15:40

João Paulo Carvalho Moura (*Centre of Natural & Human Sciences, Federal Univ. of ABC, Santo André, Brazil*), João Paulo C. Moura, Mauro C. Santos, Ignasi Sirés

Efficient Sunlight-Driven Photoelectro-Fenton/Photoelectrocatalysis System for Ciprofloxacin Degradation in Wastewater

15:40 to 16:00

Luís Ruotolo (*Department of Chemical Engineering, Federal University of São Carlos, São Carlos, Brazil*), Cecília Mandelli, Ricardo Sgarbi

Simultaneous Production of Hydrogen and Electrochemical Treatment of Effluents Containing Organic Pollutants

16:00 to 16:20

Elisabeth Cuervo Lumbaque (*ICRA, Catalan institute for water research, Girona, Spain*), Nick Duinslaeger, Anastasya Kravtchenko, Jelena Radjenovic

Electrochemical Treatment of Per- and polyfluoroalkyl substances (PFAS) in Water via Amino Acid-Tailored Graphene Sponge Electrodes

16:20 to 16:40

Coffee Break

16:40 to 17:00

Brian Villanueva Martinez (*Electrochemical Processes, Université Toulouse III - Paul Sabatier, Toulouse, France*), Chantal Carayon, Clémence Coetsier, Karine Groenen Serrano, Hubert Odier

Study of the Efficacy of Porous Sub-stoichiometric Titanium Oxide Used as a Reactive Electrochemical Membrane for the Advanced Oxidation Treatment of Landfill Leachates

17:00 to 17:20

Matheus Gabriel Guardiano (*Department of Chemistry, Federal University of São Carlos, São Carlos, Brazil*), Lucia Helena Mascaro, Fernando Casale Pianoschi, Anelisse Brunca da Silva

Unraveling Supporting Electrolyte Effects on BiVO₄ Photoanode Efficiency Applied to Pharmaceutical Degradation

17:20 to 17:40

Pawel Kryszynski (*Faculty of Chemistry, University of Warsaw, Warsaw, Poland*), Krystyna Jackowska, Sunday Joseph Olusegun

Tetracycline Antibiotic Photocatalytic Degradation Under Nanoferrite Treatment

17:40 to 18:00

Martin Munoz Morales (*Chemical Engineering Department, University of Castilla la Mancha, Ciudad Real, Spain*), Julio A. Gutiérrez-González, Javier Llanos, Ester López Fernandez, Martín Munoz-Morales, Álvaro Ramírez

Towards the development of Biomass-Derived Carbon Electrodes to produce H₂O₂ by coupling digestate and wetland biomass

18:00 to 18:20

Aline Barrios Trench (*Center for Natural and Human Sciences (CCNH), Universidade Federal do ABC, Santo Andre, Brazil*), Mauro C. dos Santos, Caio M. Fernandes, João P. Moura

Using carbon black modified with F-doped Nb₂O₅ nanoparticles to improve H₂O₂ electrogeneration

18:20 to 18:40

Herbet Lima Oliveira (*Chemical Engineering, Universidade Federal do Rio Grande do Norte, Natal, Brazil*), Carlos Alberto Martínez-Huitle, José Heriberto Oliveira do Nascimento, Myllena Kelly Pereira Ferreira, Leonara Luizza da Costa Leite, Elisama Vieira dos Santos

Reducing the environmental impact of the textile industry by reusing and cogeneration green hydrogen

S3 - The coupling of degradation and power generation by photocatalytic fuel cells (PFC)

Room 3 : Alamo

Chaired by Marcus Worsley and Barbara Mecheri

14:50 to 15:20 *Invited*

Marcus Worsley (*Physical and Life Sciences Directorate, Lawrence Livermore National Laboratory, Livermore, USA*), Nicholas Brady, Giovanna Bucci, Swetha Chandrasekaran, Nicholas Cross, Bruce Dunn, Victoria Ehlinger, Jeremy Feaster, Longsheng Feng, Megan Freyman, Tae Wook Heo, Bintao Hu, Hanyu Li, Yat Li, Dun Lin, Tiras Lin, Yunkai Luo, Asya Orhan, Christine Orme, Anica Pinongcos, Erica Ramos Guzman, Nikhil Rampal, Mariana Reale Batista, Thomas Roy, Sabrina Wan, Marissa Wood, Xinzhe Xue, Jianchao Ye, Jenna Ynzunza, Cheng Zhu

Additively Manufactured Electrodes for Electrocatalysis and Electrochemical Energy Storage

15:20 to 15:40

Ester Lopez-Fernandez (*Department of Chemical Engineering, University of Castilla-La Mancha, Ciudad Real, Spain*), Jorge Comendador, Javier Llanos, Martín Muñoz-Morales, Alvaro Ramírez-Vidal

Valorization of Contaminated Biomass for Hydrogen Production

15:40 to 16:00

Jan Macak (*CEITEC, Brno University of Technology, Brno, Czech Republic*), Jhonatan Rodriguez-Pereira, Ivan Saldan, Raul Zazpe

Pd Nanoparticles with Different Sizes and Shapes for Hydrogen Evolution Reaction

16:00 to 16:20

Barbara Mecheri (*Department of Chemical Science and Technologies, University of Rome Tor Vergata, Rome, Italy*), Alessandra D'Epifanio, Barbara Mecheri, Williane da Silva Freitas

Designing Sustainable Oxygen Electrocatalysts for Hydrogen Energy Systems

16:20 to 16:40

Coffee Break

16:40 to 17:00

Juliana Mendonça Silva de Jesus (*Center of Natural and Human Sciences, Federal University of ABC, Santo André, Brazil*), Caroline de Oliveira Carrilho, Tuani Carla Gentil, Victor Augusto de Paula Guimarães, João Paulo Carvalho Moura, Mauro Coelho dos Santos

Unveiling the Morphological Impact of Magnetite Nanoparticles on Electrocatalytic Activity in Glycerol Oxidation

17:00 to 17:20

Youssef Kharchouf (*Chemistry, Sorbonne Université, CNRS, Paris, France*), Mireille Turmine, Vincent Vivier

Modelling the long-term effects of corrosion on proton exchange membrane electrolyzer performance

17:20 to 17:40

Charline Rémy (*PEM fuel cell, CEA Liten / Grenoble Alpes University, Grenoble, France*), Fabrice Micoud, Arnaud Morin, Sébastien Rosini

[Towards Understanding of the Phenomena During the Proton Exchange Membrane Fuel Cell \(PEMFC\) Break-in Procedure.](#)

17:40 to 18:00

Thais Tasso Guaraldo (*Research Centre for Manufacturing and Materials (CMM), Coventry University, Coventry, United Kingdom*), Prabukumar Chinnusamy, Oliver Curnick, John Graves, Hugh Hamilton, Egle Latvyte, Patricia Sutton

[Ni-rich Metal Organic Frameworks Membrane Electrode Assemblies for Anion Exchange Membrane Electrolysers](#)

18:00 to 18:20

Gabriel Soldi de Souza (*Chemical and Food Engineering Department, Federal University of Santa Catarina, Florianópolis, Brazil*), Ricardo Antônio Francisco Machado, Marwan Ben Miled, Samuel Bernard, Maíra Debarba Mallmann, Marina Fradin, Regina de Fátima Peralta Muniz Moreira

[Polymorphic Nickel Nanoparticles Immobilized in Low-Temperature Polymer Derived Si-C-O-N Matrix for Electrocatalytic Oxygen Evolution Reaction](#)

18:20 to 18:40

Mitja Kostelec (*Department of Materials Chemistry, National Institute of Chemistry, Ljubljana, Slovenia*), Lazar Bijelić, Matija Gatalo, Nejc Hodnik, Miha Hotko

[IL-SEM as a Tool for PEM FC Electrocatalyst Characterization](#)

Tuesday 25 March 2025 - Morning

Keynote

Room : **Auditorium**

Chaired by Elisama Vieira dos Santos

09:00 to 09:40 **Keynote**

Manuel Andrés Rodrigo Rodrigo (*Chemical Engineering, FCyTQ, UCLM, Ciudad Real/13004, Spain*), Pablo Cañizares, Raul García-Cervilla, Engracia Lacasa, Justo Lobato, Maya Richa, Cristina Saez

[Organic Electrorefineries: towards a new paradigm in electrochemical environmental technology](#)

S1 - Clean, renewable and new energy systems

Room 1 : **Jacaranda**

Chaired by Ana Tavares and Jorge Montero

09:50 to 10:20 **Invited**

Ana Tavares (*Centre Énergie Matériaux Télécommunications, Institut National de la Recherche Scientifique, Varennes, Canada*)

[Electrochemical Exfoliation of Graphite in Mixed Electrolytes: Novel Graphene-Based Materials for Energy Conversion and Storage](#)

10:20 to 10:40

Filipe Braga (*Chemistry, University of Liverpool, Liverpool, United Kingdom*), Dafydd A Jones, Jakub Glowacki, Christopher Hampson, Theo Hobson, Laurence J Hardwick, Gabriella Pizzuto, Rory Powell, Alex R Neale

[Automation enabled the development of advanced Li-ion powder coatings](#)

10:40 to 11:00

Jorge Montero (*Chemistry, Sapienza University of Rome, Rome, Italy*),
Pedro Pablo Machado Pico, Maria Assunta Navarra, Stefano Passerini,
Akiko Tsurumaki

Development of Bifunctional Electrocatalysts for High-Performance
Seawater Batteries

11:00 to 11:20

Coffee Break

S2 - Environmental electrochemistry

Room 2 : **Flamboyant**

Chaired by Shelley Minteer and Janaina Garcia

09:50 to 10:20 *Invited*

Shelley Minteer (*Chemistry, University of Utah, Salt Lake City, USA*)

Using Ionic Liquids to Improve Bioelectrochemical Carbon Dioxide
Reduction

10:20 to 10:40

Jéssica Alvim (*Physical Chemistry, Institute of Chemistry - Unicamp,
Campinas, Brazil*), Daniele Benetti, Rubens Caram, James Durrant,
Pablo Fernandez, Claudia Longo, Rafael Vicente, Abner de Siervo

Photoelectrochemical properties and structural stability of Cu_2WO_4
photoelectrode for CO_2 conversion

11:00 to 11:20

Coffee Break

S3 - The coupling of degradation and power generation by photocatalytic fuel cells (PFC)

Room 3 : Alamo

Chaired by Iwona A. Rutkowska and Josef Schefold

09:50 to 10:20 Invited

Iwona A. Rutkowska (*Faculty of Chemistry, University of Warsaw, Warsaw, Poland*), Pawel J. Kulesza

Development of selective electrocatalytic systems for CO₂-reduction in acid medium

10:20 to 10:40

Pamella Silva Rodrigues (*Physical Chemistry, São Carlos Institute of Chemistry, University of São Paulo, São Carlos, Brazil*), Serhiy Cherevko, Tatiana Priamushko, Edson A. Ticianelli, Gabriel C. da Silva, Moisés A. de Araújo

Structural reconstruction and performance of IrOx-NiSe₂ for OER

10:40 to 11:00

Josef Schefold (*Low Carbon Hydrogen Systems, European Institute for Energy Research, Karlsruhe, Germany*), Aline Léon

Durability of Electrolyte Supported Solid Oxide Cells Operated at High Current Density in Steam Electrolysis Mode

11:00 to 11:20

Coffee Break

Tuesday 25 March 2025 - Afternoon

Keynote

Room : Auditorium

Chaired by Carlos Martinez Huitle

14:00 to 14:40 **Keynote**

Siegfried Waldvogel (*Department of Electrochemistry, Max Planck Institute for Chemical Energy Conversion, Mülheim, Germany*)

Electrochemical Upcycling of Pollutants

S1a - Clean, renewable and new energy systems

Room 1 : Jacaranda

Chaired by Luiz Henrique Dall Antonia and Mauro Santos

14:50 to 15:20 **Invited**

Luiz Henrique Dall Antonia (*Chemistry, Universidade Estadual de Londrina, Londrina, Brazil*), Luan Pereira Camargo, Paulo Rogério Catarini da Silva, Julia Helena Rossieri

Graphitic Carbon Nitride and Tin Niobate/Tin Oxide Ternary Compound:
Exploring Photoelectrochemical Nitrogen Reduction Reaction

15:20 to 15:40

Theodora von Zuben (*Chemistry, Universidade Estadual de Campinas - UNICAMP, Campinas, Brazil*)

Study of water oxidation by Birnessite mineral doped with transition metals

15:40 to 16:00

Eduardo Telli (*Laboratório de Filmes Finos e Superfícies (LFFS), Universidade Federal de Santa Catarina, FLORIANÓPOLIS, Brazil*), Laura von Gilsa Cury

Substrate effect on electrophoretic deposition of Nb₂O₅ nanoparticles

16:00 to 16:20

Matheus Brito (*Chemistry Department, Federal University of São Carlos, São Carlos, Brazil*), Kelvin Costa, Danielle Estevan, Lucia Mascaro, Ernesto Pereira, Davi Souza

Electrodeposition of Ni-S Based Catalysts for HER in Alkaline Solution: Employing Chemometric Tools to Achieve Optimized Conditions

16:20 to 16:40

Coffee Break

16:40 to 17:00

Mauro Santos (*Centro de Ciências Naturais e Humanas, Universidade Federal do ABC, Santo André, Brazil*)

Use of Niobium Oxide for Energy and Environmental Applications

17:00 to 17:20

Dyovani Coelho (*Chemistry Department, Federal University of Sao Carlos, São Carlos, Brazil*), Serhiy Cherevko, Lucia H. Mascaro, Tatiana Priamushko

Evaluation of the activity-stability relationship and dynamic equilibrium of the metallic phosphides based on Co, Ni, and Fe to overall water splitting

17:20 to 17:40

Luan Pereira Camargo (*Department of Chemistry, State University of Londrina, Londrina, Brazil*), Luiz Henrique Dall'Antonia, Paulo Rogério Catarini da Silva

Unveiling Tungsten Trioxide and Iron Vanadate Heterojunction: Enhanced Photoelectrochemical Response Via Improved Visible-Light Absorption and Charge Carrier Separation for Energy Production

17:40 to 18:00

Swathi Patchaiammal Raju (*Physical Chemistry, UNICAMP, Campinas, Brazil*)

Electrochemistry as a Characterization Technique for the Study of Exsolution of Pt Nanoparticles from Titanate Perovskites

18:00 to 18:20

Caue Ribeiro (*National Lab Nanotechnology for Agriculture, Embrapa - Brazilian Agricultural Research Corporation, Sao Carlos, Brazil*),
Eduardo Arizono dos Reis, Gelson Tiago S. Tavares da Silva, Elisabete Santiago

Revisiting Electrocatalytic CO₂ Reduction in Nonaqueous Media: Promoting CO₂ Recycling in Organic Molecules by Controlling H₂ Evolution

18:20 to 18:40

Gabriel Wosiak (*Chemist Department, Federal University of São Carlos, São Carlos, Brazil*), Guido Bender, Marcelo Carmo, Serafina Fortiner,
Puvikkarasan Jayapragasam, Ernesto Pereira, Jacob Wrubel

Physically Accurate Microstructure Generation for Low-Temperature Electrolysis Catalyst Layers

S1b - Clean, renewable and new energy systems

Room 3 : Alamo

Chaired by Elisama do Santos and Walter Orellana

14:50 to 15:20 *Invited*

Elisama Vieira dos Santos (*School of Science and Technology, Elisama Vieira dos Santos / Federal University of Rio Grande, NATAL, Brazil*),
Jussara Câmara Cardozo, Carlos Alberto Martínez Huitle,
Tabata Natasha Feijoó Zambrano, Marco Antonio Quiroz Alfaro

Towards win-win electrochemical alternative (integrate-hybrid approach) for depolluting water and producing green H₂ hydrogen

15:20 to 15:40

Mireille Turmine (*Laboratoire de Réactivité de Surface UMR7197, Sorbonne Université - CNRS, Paris, France*), Antoine Miche, Vincent Vivier, Yuelin Xie

Nanoporous Multi-Element Cu-Zn-Ni-Co Alloys Synthesized via Ionic Liquids for Enhanced Hydrogen Evolution Reaction Catalysis

15:40 to 16:00

Walter Orellana (*Departamento de Física y Astronomía, Universidad Andrés Bello, Santiago, Chile*), Pedro H. Souza

Two-Dimensional $\text{Cu}_3(\text{HHTP})_2$ Metal-Organic Framework as Bifunctional ORR/OER Electrocatalysts: A DFT study

16:00 to 16:20

Jiazhe Zhao (*School of Engineering and Materials Science, Queen Mary University of London, London, United Kingdom*), Joe Briscoe, Steffi Krause, Ruixiang Li, Ana Belén Jorge Sobrido, Bo Zhou

D photoelectrochemical imaging for the investigation of the localized kinetics of photocatalytic water splitting

16:20 to 16:40

Coffee Break

16:40 to 17:00

Evgeny Senokos (*Colloid Chemistry, Max Planck Institute of Colloids and Interfaces, Potsdam, Germany*)

Architecting Hybrid Sulfur-Carbon Nanostructures: Insights into Sulfur Confinement and Electrode-Electrolyte Interactions for Stable Room Temperature Na-S Battery

17:00 to 17:20

Rita Policia (*Physics, University of Minho, Braga, Portugal*), Ricardo Brito-Pereira, Graziela C. Sedenho, Senentxu Lanceros-Méndez, Carlos M. Costa, Frank N. Crespilho, Nelson Pereira

Fully rechargeable bio-battery powered by *Saccharomyces cerevisiae*

17:20 to 17:40

Marcelo A. Andrade (*ST2E Stockage et Transformation Electrochimique de l'Energie, Institut des Matériaux Jean Rouxel de Nantes, Nantes, France*), Thierry Brousse, Olivier Crosnier, Patrik Johansson

Recycled Energy Storage Materials from Wastewater Adsorbents

17:40 to 18:00

Vitor Martins (*Instituto de Química, Universidade de São Paulo, São Paulo, Brazil*), Elizabeth Fernandes, Paulo Zanotto

Effect of the Processing Solvent in Polymeric Solid Electrolytes for Li Batteries

18:00 to 18:20

Janusz Tobola (*Department of Condensed Matter Physics, AGH University, Krakow, Poland*), Janina Molenda, Michal Rybski

Interplay of electronic structure and electrochemical efficiency in novel cathode materials for Li- and Na-ion batteries

18:20 to 18:40

Alfredo Ortiz Sainz de Aja (*Chemical and Biomolecular Engineering, Universidad de Cantabria, Santander, Spain*), Victor Manuel Maestre, Inmaculada Ortiz

Sustainable and self-sufficient social home through a combined PV hydrogen pilot

S2 - Environmental electrochemistry

Room 2 : Flamboyant

Chaired by Claudia Longo and Vincent Vivier

14:50 to 15:20 *Invited*

Claudia Longo (*Institute of Chemistry, University of Campinas, Campinas, Brazil*), Mian Abdul Ali, Jéssica Costa Alvim, Vanderlei Silva Lima, Icaro Levi Nascimento, Leonardo Carvalho Soares, Henrique Pena Verinaud

Sustainable applications of photo-responsive gas-diffusion electrodes: photoreactors for water decontamination and CO₂ conversion

15:20 to 15:40

Marina Medina (*Chemistry, UNESP, Araraquara, Brazil*), Juliana Ferreira de Brito, Vinícius José Carvalho, Marina Medina

Photoelectrocatalytic degradation of organic pollutants simultaneously with ammonia electrosynthesis *via* nitrogen reduction

15:40 to 16:00

Vincent Vivier (*Laboratoire de Réactivité de Surface, CNRS- Sorbonne Université, Paris, France*), Sophia Akkari, Carlos Sanchez Sanchez

Wastewater Treatment using NiO/NiOOH Anode for Urea Electro-Oxidation: toward a deeper understanding of the reaction mechanism

16:00 to 16:20

Lazara Hernandez Ferrer (*Fundamental Chemistry, Institute of Chemistry, University of São Paulo, São Paulo, Brazil*), Susana Inés Córdoba de Torressi, Leandro A. Faustino, Paulo Filho Marques de Oliveira

Electrocatalytic Nitrogen Reduction to Ammonia Using a Water-in-Salt Electrolyte

16:20 to 16:40

Coffee Break

16:40 to 17:00

Gelson da Silva (*Department of Chemistry, UFSCAR, São Carlos, Brazil*), Cao Thang Dinh, Lucia Mascaro

Revealing the role of surfactants in improving the conversion of CO₂ into CO at high current densities

17:00 to 17:20

Mohamed Amzian (*Department of Materials Science and Physical Chemistry, University of Barcelona, Barcelona, Spain*), B. Moses Abraham, Teresa Andreu, Daniel Dolz, Francesc Illas, Ángel Morales-García, Maria Sarret, Francesc Viñes

Enhancing CO₂RR Selectivity and Efficiency Using Halide-Functionalized Au-Based Alloys: Toward Industrially Viable Catalysts

17:20 to 17:40

Jéssica Alves Nogueira (*Departamento de Química Fundamental, Instituto de Química da Universidade de São Paulo, São Paulo, Brazil*), Lucas Dias Germano, Leonardo Domenico De Angelis, Susana Inés Córdoba de Torressi

In-situ Raman Study of Ni(OH)₂ Electrocatalysts: Ethanol's Role in NiOOH Reduction and Surface Regeneration

17:40 to 18:00

Francisco Manuel Soria López (*Departamento de Ingeniería Química, Universidad de Castilla la-Mancha, Hellín, Spain*), Roberto Campana Prada, Carmen María Fernández-Marchante, Mahmoud Mohammed Gomaa Mohammed, Justo Lobato Bajo, Manuel Andrés Rodrigo Rodrigo, Jesús Rodríguez Ruiz

Non-fluorinated eco-friendly electrodialysis membrane, synthesized from a natural polymer

18:00 to 18:20

Roelf Maring (*Engineering and Technology Institute Groningen, University of Groningen, Groningen, Netherlands*), Vassilis Kyriakou

Enhancing Electrochemical Syngas Production by *In-Situ* Exsolution from $\text{Sr}_{2-x}\text{Fe}_{1.5-y}\text{Mo}_{0.5}\text{Ni}_y\text{O}_{6\pm\delta}$ Electrocatalysts

Wednesday 26 March 2025 - Morning

Keynote

Room : **Auditorium**

Chaired by Rodrigo Munoz

09:00 to 09:40 **Keynote**

Christine Kranz (*Institute of Analytical and Bioanalytical Chemistry, Ulm University, Ulm, Germany*), Giada Caniglia, Andreas Hellmann, Sarah Horn, Eva Oswald

Advanced Scanning Electrochemical Probe Microscopy for the Screening of Photocatalytic Activity

S1 - Clean, renewable and new energy systems

Room 1 : **Jacaranda**

Chaired by Luis Dick and Dyovani Coelho

09:50 to 10:20 **Invited**

Luis Dick (*Metallurgy, UFRGS-Federal University of Rio Grande do Sul, Porto Alegre, Brazil*), Bernardo Castaneda, Anderson Fraga, Gabriel Rasch

Fabrication of Porous MnO₂ Electrodes for OER by Selective Porous Anodizing of FeMn Alloys

10:20 to 10:40

Debargha Chakravorty (*Energy, Imec, Leuven, Belgium*), Maarten Mees, Philippe Vereecken

Mesoporous TiO₂-SiO₂ Composite for Reversible Ion Insertion from Aqueous Solutions

10:40 to 11:00

Renan Lopes Munhos (*Chemistry, Biochemistry and Pharmaceutical Sciences, Universität Bern, Bern, Switzerland*), Luis A. Cipriano, Matthias Arenz, Jan Rossmeisl

Corrosion of Au_xPd_y nanocatalyst alloys in 1M HX (X= Cl or Br)

11:00 to 11:20

Coffee Break

S2 - Environmental electrochemistry

Room 2 : Flamboyant

Chaired by Monica Cerro Lopez and Andre Dourado

09:50 to 10:20 *Invited*

Monica Cerro-Lopez (*Chemical and Biological Chemistry Department, University of the Americas Puebla, San Andrés Cholula Puebla, Mexico*), Jessica Campos-Delgado, Scarlet Duran Izaguirre, Carlos Alberto Martínez-Huitle

Ketorolac Photoelectrocatalytic Removal Assisted with Solar Cell

10:20 to 10:40

Thalita Medeiros Barros (*Postgraduate Program in Chemical Engineering, Federal University of Rio Grande do Norte, Natal, Brazil*),

Carlos Alberto Martínez-Huitle, Jussara Câmara Cardozo, Elisama Vieira dos Santos

Selective extraction of high added value phenolic compounds from cork biomass (*Quercus Suber*) using electrogenerated green oxidant

10:40 to 11:00

Andre Dourado (*Institute of Chemistry, UNESP, Araraquara, Brazil*), Antonio Curvelo, Fábio Diniz, Hamilton Varela, Júlia da Silva

Lignin Electrochemical Valorization: Fundamental Investigation on Ni

11:00 to 11:20

Coffee Break

Wednesday 26 March 2025 - Afternoon

S1 - Clean, renewable and new energy systems

Room 1 : Jacaranda

Chaired by Germano Tremiliosi-Filho and Elton Sitta

14:00 to 14:20

Fernanda Massante (*G2E, Institute of Chemistry, Universidade Federal Fluminense, Niteroi, Brazil*), Pedro Corrêa, Ane Vitória Martins, Eduardo Ponzio, Nicolly Silva

Incorporation of carbon materials in PbO through ball mill methodology to enhance lead-acid battery performance

14:20 to 14:40

Thayná Pereira de Araújo (*Analytical, Physical and Inorganic Chemistry, São Paulo State University - Institute of Chemistry, Araraquara, Brazil*), Thayná Pereira de Araújo, Hebe de las Mercedes Villullas

Pd nanoparticles on hybrid carbon-oxide supports for alcohol oxidation and hydrogen evolution reactions

14:40 to 15:00

Germano Tremiliosi-Filho (*Chemistry Institute of Sao Carlos, University of Sao Paulo, Sao Carlos, Brazil*), Nelson Galiote, Cesar Rodriguez, Hamilton Varela, Seiti Venturini

Sustainable Hydrogen Production by Electrolysis Promoted by Ethanol Oxidation

15:00 to 15:20

Elton Sitta (*Chemistry Department, Federal University of Sao Carlos, Sao Carlos, Brazil*), Katlin Eguiluz, Isabelle Gonzaga, Lucia Mascaro, Giancarlo Salazar-Banda, Maria Santos

RuO₂-MnO₂/Ti Anodes for O₂ Evolution: Insights from Unconventional Heating Techniques

15:20 to 15:40

Roger Gonçalves (*Chemistry Department, Federal University of Sao Carlos, Sao Carlos, Brazil*), Ernesto Pereira

Polypyrrole/Carbon Nitride composite with metal particles decoration for HER in a wide pH range

15:40 to 16:00

Juliano Bonacin (*Department of Inorganic Chemistry, UNICAMP, Campinas, Brazil*), Sylvio Barbon Jr., Airton Salles Jr, João Soares, Theodora von Zuben

Predicting Glycerol Oxidation Potentials Using Machine Learning

S2 - Environmental electrochemistry

Room 2 : Flamboyant

Chaired by Hugo Oliveira Vargas and Alejandro Perez Lopez

14:00 to 14:20

Hugo Olvera-Vargas (*Institute for Renewable Energy, National Autonomous University of Mexico (UNAM), Temixco, Mexico*), Quetzalli Fernández González, R. Angélica Guillén-Garcés, Marina E. Rincón

Sustainable electrochemical production of oxalic or oxamic acid using the water pollutant paracetamol as a renewable carbon source

14:20 to 14:40

Alejandro Pérez López (*Chemical Engineering and Materials, Complutense University of Madrid, Madrid, Spain*), Salvador Cotillas, Carmen M. Domínguez, Paula González-García, Aurora Santos

Removal of nanoplastics from urban treated wastewater by electrocoagulation using iron and aluminium electrodes.

14:40 to 15:00

Luis Loor-Urgilés (*Institute of Chemistry, Universidade Federal Rio Grande do Norte, Natal, Brazil*), Tabata Feijoó, Carlos A. Martinez-Huitile, Erika Méndez, Elisama Vieira dos Santos

Chloride-mediated electrocatalytic oxidation of azo dye at Ti/SnO₂-IrO₂-Sb₂O₃ anode: Novel perspective of by-products valorization pathway

15:00 to 15:20

Neso Sojic (*Institut des Sciences Moléculaires, University of Bordeaux, Pessac, France*)

Combining photoelectrochemistry and electrochemiluminescence at semiconductor surfaces

15:20 to 15:40

Williane da Silva Freitas (*Department of Chemical Science and Technologies, University of Rome Tor Vergata, Rome, Italy*), Vincenzo Baglio, Alessandra D'Epifanio, Irene Gatto, Carmelo Lo Vecchio, Barbara Mecheri, Manuela Montalto, Erminia Mosca, Williane da Silva Freitas

PGM-free High-Entropy Oxides for Oxygen Evolution Reaction in Anion Exchange Membrane Water Electrolyzers

15:40 to 16:00

Ahmad Tayyebi (*CiQUS, Univesity of Santiago de Compostela, Santiago de Compostela, Spain*), Maria Lopez Gimenez

Ruthenium-decorated Layered Titanate Nanosheets for Ammonia Production

Poster Presentations

Tuesday 25 March 2025

11:00-12:30 & Coffee Break

Symposia 1 & 3

Wednesday 26 March 2025

11:00-12:30 & Coffee Break

Symposia 2

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<i>Symposium 3</i>	page 47

S1 - Clean, renewable and new energy systems

S1-001

Camilo Andrea Angelucci (*Center for Natural and Human Sciences, Federal University of ABC, Santo Andre, Brazil*), Mauricio Domingues Coutinho-Neto, André Pesquero, Matheus Godoy Bertelli Rodrigues

Optimizing [Cu(bpy)₂]²⁺ for Efficient Benzyl Alcohol Electrooxidation in Anaerobic Copper/TEMPO Systems

S1-002

Camilo Angelucci (*Center for Natural and Human Sciences, Federal University of ABC, Santo Andre, Brazil*), Vinnicius de Souza Ferreira

Study of indirect electrooxidation of cyclohexanol assisted by the redox mediator TEMPO

S1-003

Eduardo Arizono dos Reis (*Universidade de São Paulo, Instituto de Química de São Carlos, São Carlos, Brazil*), Anelisse Brunca da Silva, Hermenegildo Garcia, Lucia Helena Mascaro, Caue Ribeiro

Biomass-Derived FeCo Phosphides on Graphene for Efficient Ammonia Synthesis *via* Electrochemical N₂ Reduction

S1-004

Eduardo Arizono dos Reis (*São Carlos Institute of Chemistry, University of São Paulo, São Carlos, Brazil*), Gelson T. S. T. da Silva, Lucia Helena Mascaro, Caue Ribeiro

Potassium Ion Modulation of Electrode Microenvironment for Tartaric Acid Formation in Non-aqueous CO₂ Electroreduction

S1-005

Francisco Armijo (*química inorgánica, Pontificia Universidad Católica de Chile, Santiago, Chile*), Maria Jesus Aguirre, Vicente Arteaga, Gonzalo Cima, Mauricio Isaacs

Poly(3,4-ethylenedioxythiophene)@Ni Hybrid Material as Electrocatalyst for Oxidation of Ammonia and Urea in Alkaline Medium

S1-006

Gustavo Adriano Barbosa Santana (*LEAA, UFRN, Natal, Brazil*), Leticia Gracyelle Alexandre Costa, Gustavo Adriano Barbosa Santana, José Eudes Lima Santos, Carlos Alberto Martínez Huitile, Elisama Viera dos Santos

Ethanol Electroconversion to Acetate using BDD and DSA Anodes

S1-007

Evaldo Batista Carneiro-Neto (*Chemistry Department, UFSCar, São Carlos, Brazil*), Kelvin Costa de Araújo, Ernesto Pereira

Computational Investigation of the Distribution of Catalyst Nanoparticles Mapped by Chemometrics

S1-008

Filipe Braga (*Chemistry Department, University of Liverpool, Liverpool, United Kingdom*), Laurence J Hardwick

One-step electrodeposition of iron oxyhydroxide onto 3D porous graphene substrates for on chip asymmetric micro-supercapacitors

S1-009

Anelisse Brunca Da Silva (*Chemistry Department, Federal University of São Carlos, São Carlos, Brazil*), Eduardo Arizono dos Reis, Matheus Guardiano, Lucia Helena Mascaro, Caue Ribeiro

Synergistic Electrochemical Co-reduction of CO₂ and NO₃⁻ to Urea and Valuable Products Using Sn-modified Ni-P Electrocatalysts

S1-010

Anelisse Brunca da Silva (*Chemistry Department, Federal University of São Carlos, São Carlos, Brazil*), Josep Alberó, Eduardo Arizono dos Reis, Hermenegildo Garcia, Jiajun Hu, Lucia Helena Mascaro, Caue Ribeiro

Boosting Ammonia Production from Nitrate Reduction via δ -FeOOH-Modified Nickel Phosphide Catalysts

S1-011

Ana Beatriz Cardile (*Chemistry department, Federal University of São Carlos, São Carlos, Brazil*), Caio Almeida, Frank Marken, Lucia Helena Mascaro, Lara Kelly Ribeiro

Exploring the Impact of 3+ Oxidation State Doping (Pr³⁺) on the Electrochemical Activity of MoS₂ Electrodes for Nitrogen Reduction

S1-012

Bénédicte Claude-Montigny (*PCM2E, University of Tours, Tours, France*), Sophie Le Caër, Carine Maaliki, Malaurie Paillot

How Thermodynamics Can Guide the Formulation Choice of the Electrolyte for Greener Electrical Energy Storage Devices

S1-013

Melina Cozzarin (*Y-TEC, YPF Tecnologia S.A., Berisso, Argentina*), Jorge J. Acosta, Emiliano Alarcón, Melina Cozzarin, Luis Hernandez, Laura Pampillo, Fabio D. Saccone

Galvanostatic Cycling and Impedance Spectroscopy Analysis of the Cathode Material LiFePO_4/C

S1-014

Melina Cozzarin (*Materials and Compound, YPF-TECNOLOGIA, La Plata, Argentina*), Jorge Andres Donadelli, Sofia Gomez, Nicolas Gomez Alicandro, Maria Laura Para, Fabio Saccone, Jorge Enrique Thomas

Understanding the Effect of Additives on the Characteristics and Composition of SEI of Li/ LiFePO_4 Batteries

S1-015

Alessandra D'Epifanio (*Department of Chemical Science and Technologies, University of Rome Tor Vergata, Rome, Italy*), Alessandra D'Epifanio, Williane da Silva Freitas, Barbara Mecheri

Electrochemical Energy Storage with Porphyrin-based Aqueous Organic Redox Flow Batteries

S1-016

Luiz Henrique Dall Antonia (*Chemistry, State University of Londrina, Londrina, Brazil*), Luan Pereira Camargo, Paulo Rogério Catarini da Silva, Willian Aparecido dos Santos

Synthesis and Characterization of BiVO_4 Anchored on Carbon Nanotube (CNT): Photoelectrochemical Glucose Detection

S1-017

Rubul Das (*Energy Science and Engineering, Indian Institute of Technology Bombay, Mumbai, India*)

Temperature-Dependent Investigation of ORR Kinetics on Precious Metal Catalysts in Acidic Media

S1-018

Rodrigo de Araujo (*Physical Chemistry, University of São Paulo, São Carlos, Brazil*), Joelma Perez, Beatriz Schiavo

Rh-Cu Bimetallic Catalysts for Nitrate Electroreduction: Insights from Online Electrochemical Mass Spectrometry

S1-019

Rodrigo de Araujo (*Physical Chemistry, University of São Paulo, São Carlos, Brazil*), Joelma Perez

Exploring Nitrogen Reduction Pathways on MoS₂ Surfaces via by Online Electrochemical Mass Spectrometry

S1-020

Wilson Furtado de Araujo Garcia (*LEAA, UFRN, Natal, Brazil*), Carlos A. Martinez-Huitle, Marco A. Quiroz, Danillo C G Candido, Amanda Duarte Gondim, Mayra K. S. Monteiro, Aruzza Mabel Araujo, Elisama V. dos Santos

Using a hybrid electrolyzer to treat industrial wastewater and produce green H₂ simultaneously

S1-021

Wilson Furtado de Araujo Garcia (*LEAA, UFRN, Natal, Brazil*), Carlos A. Martinez-Huitle, Marco A. Quiroz, Danillo C G Candido, Amanda Duarte Gondim, Mayra K. S. Monteiro, Aruzza Mabel Araujo, Elisama V. dos Santos

Green H₂ produced DSA||Ni hybrid-integrated electrolyzer to generate electrical energy using fuel cells

S1-022

Rodrigo del Rio (*Facultad de Química y de Farmacia, Pontificia Universidad Católica de Chile, Santiago, Chile*), Michelle Arriagada, Daniel Correa-Encalada, Mauricio Isaacs, Almendra Leyton, Galo Ramirez

Synthesis of bismuth oxides with application in photoelectrocatalysis

S1-023

Danilo Dini (*Chemistry, University of Rome "La Sapienza", Rome, Italy*)

Analysis of the dynamics of photogenerated carriers at the MAPbBr₃/SrTiO₃ interface with IR synchrotron radiation: a study for hybrid photovoltaics

S1-024

Juliana Bruneli Falqueto (*PSI Center for Energy and Environmental Science, Paul Scherrer Institut, Villigen, Switzerland*), Nerilso Bocchi, Adam H. Clark, Mario El Kazzi, Lukasz Kondracki

Understanding the (De-)Lithiation Mechanism of LiMn_2O_4 Spinel Allows the Design of a Cycling Protocol for Long-term Battery Cycling Stability

S1-025

Tuani C. Gentil (*Instituto de Química de São Carlos (IQSC), Universidade de São Paulo (USP), São Carlos, Brazil*), Vinicius Del Colle, Germano Tremiliosi-Filho

Ag-nanoparticles improving the electrocatalytic activity of glycerol oxidation reaction in alkaline media

S1-026

Sofia Gomez (*Materiales y Compuestos, YPF Tecnología (Y-TEC), Berisso, Argentina, 1923, Argentina*), Jorge Acosta, Emiliano Alarcon, Melina Cozzarin, Maria Alejandra Floridia, Maria Laura Para, Fabio Saccone, Jorge Thomas

Performance of Lithium-Ion Batteries: The Role of Synthetic Graphite Particle Size

S1-027

Sofia Gomez (*Materiales y Compuestos, YPF Tecnología (Y-TEC), Berisso, Argentina, 1923, Argentina*), Valentina Colli, Juan M. Giussi, Agustin Iborra, Fabio Saccone, Jorge Thomas, Isabel N. Vega

Water-Based Binder for LiFePO_4 Cathodes in Li-Ion Batteries

S1-028

Leandro Hostert (*Physical Chemistry, Sao Carlos Institute of Chemistry, University of Sao Paulo, Sao Paulo, Brazil*), Antonio Oliveira-Filho, Joelma Perez, Geraldo Tessaro, Hamilton Varela, Naiza Vilas-Bôas

An OLEMS investigation of the electro-oxidation of ethanol on Pt and Pt_3Sn catalysts

S1-029

Victor Hoyos (*Departamento de Física y Astronomía, Universidad Andrés Bello, Santiago, Chile*), Walter Orellana

Catalytic Activity of MOF-74 Metal-Organic Frameworks for the Oxygen Reduction Reaction and Oxygen Evolution Reaction

S1-030

Mauricio Isaacs (*Departamento de Química Inorgánica, Pontificia Universidad Católica de Chile, Santiago, Chile*), Pedro Pablo Jofré, Elias Mardones, Macarena Nadal, Natalia Sáez, Zachary Schultz

Copper-Zinc Tandem Electrocatalysis on Electrochemically Synthesized Nanocubes

S1-031

Herbet Lima Oliveira (*Chemical Engineering, Universidade Federal do Rio Grande do Norte, Natal, Brazil*), Carlos Alberto Martínez-Huitle, Amanda Duarte Gondim, Suely Souza Leal de Castro, Elisama Vieira dos Santos, Maria Vitória Alves Batista

Electro-conversion of cashew nut-shell liquid for the production of value-added products

S1-032

Patrícia Macilon (*Chemical Engineering, UFRN, Natal, Brazil*), Patricia Gabrielle C. A. Macilon, José H. O. de Nascimento, Bruno R. Carvalho, Elisama V. dos Santos

Recent Advances in Energy Conversion Using Borophene 2D Nanomaterials

S1-033

Karen Magalhães (*Postgraduate Program in Chemical Engineering, Federal University of Rio Grande do Norte, Parnamirim, Brazil*), Jussara Cardozo, José do Nascimento, Elisama dos Santos, Maiara Ferreira, Carlos Martinez-Huitle

Energy-saving electrochemical green hydrogen production coupled with active chlorine species valorization

S1-034

Alex S. Moraes (*Chemistry Dept., São Carlos Federal University (UFSCar), São Carlos, Brazil*), Rafaela Binda, Marco A. B. Ferreira, Ernesto C. Pereira

Computational Screening of Phthalimide-Based Molecules for Redox Flow Batteries

S1-035

Maria Laura Para (*Materials and Compound, Para, La Plata, Argentina*), Jorge Acosta, Emiliano Alarcon, Melina Cozzarin, Sofia Gomez, Lucas Mardones, Fabio Saccone, Jorge Enrique Thomas

Mesoporous Silica As An Alternative Sulfur Support In Lithium-Sulfur Batteries

S1-036

Luan Pereira Camargo (*Department of Chemistry, State University of Londrina, Londrina, Brazil*), Luiz Henrique Dall'Antonia, Wallace Junio Cardoso da Silva

Electrocatalytic CO₂ Reduction Using SnO₂ and rGO-Based Electrodes: Synthesis, Characterization, and Performance Evaluation

S1-037

Manuel Andrés Rodrigo Rodrigo (*Chemical Engineering, FCyTQ. UCLM, Ciudad Real/13004, Spain*), Pablo Cañizares, Carmen María Fernandez Marchante, Rafael Granados-Fernández, Justo Lobato, Iñaki Requena-Leal, Alberto Rodríguez-Gómez, Cristina Saez

Storing Green Energy through the EDEN® Process: Case Studies

S1-038

Edson Ticianelli (*Physical Chemistry, São Carlos Institute of Chemistry, Sao Carlos, Brazil*), Amanda Garcia, James Portela, Allan Sakita

Effect of iron impurities in the activity of Mo₂C/C for the hydrogen evolution reaction in alkaline electrolyte

S1-039

Liis Siinor (*Institute of Chemistry, University of Tartu, Tartu, Estonia*), Heigo Ers, Piret Pikma

The Adsorption Studies at Solid | Liquid Interface – for Clean and Renewable Energy Systems

S1-040

Carlos Vasconcellos (*Institute of Chemistry of São Carlos, University of São Paulo, São Carlos, Brazil*), Laetitia Dubau, Fabio Lima, Frédéric Maillard, Vincent Martin

Combining N-coordinated Copper Single-Atoms and Copper Clusters for CO₂ Electrochemical Reduction

S2 - Environmental electrochemistry

S2-001

Rodrigo Alejandro Abarza Muñoz (*Institute of Chemistry, Federal University of Uberlandia, Uberlandia, Brazil*), Osmando F. Lopes, Amanda Beatriz Nascimento, Ana C. M. Oliveira, Eduardo M. Richter, Raquel G. Rocha, Isabela C. O. F. Silva

One-Step Process to Obtain Laser-induced NiFe₂O₄ Embedded Graphene as a New Platform for Environmental Electrochemical Sensing

S2-002

Higor Alves (*Chemical Engineering, Universidade Federal de São Carlos, São Carlos, Brazil*), Rita Maria Alves, Miguel Galante, Janaina Gomes

Copper-based Bimetallic Catalysts for Carbon Dioxide Electrochemical Conversion in C₂ Compounds

S2-003

Kelvin Araújo (*Department of Chemistry, Federal University of São Carlos, São Carlos, Brazil*), Jonata Batista, Ailton Moreira, Ernesto Pereira, Jeysse Silva, Felipe Staciaki, Francisco Trivinho-Strixino

An Innovative Method for Environmental Remediation Using Sparks Formed during Plasma Electrolytic Oxidation on Aluminum Foils

S2-004

Gustavo Adriano Barbosa Santana (*LEAA, UFRN, Natal, Brazil*), Leticia Gracyelle Alexandre Costa, Gustavo Adriano Barbosa Santana, Amanda Duarte Gondim, Carlos Alberto Martínez Huitle, Amanda Medeiros de Azevedo, Livia Nunes Cavalcanti, Elisama Viera dos Santos

Electrochemical Disinfection and Treatment of Domestic Municipal Wastewater Using Boron-Doped Diamond

S2-005

Calebe Borges (*Licenciatura em Química, Instituto Federal do Sertão Pernambucano, Ouricuri, Brazil*), Gustavo Acosta-Santoyo, Leticia G. A. Costa, João M. M. Henrique, Carlos A. Martinez-Huitle, Paulo H. O. Mendes, Elisama V. Santos, José E. L. Santos, Igor J. G. Silva

Electrogeneration of products of industrial interest through the electrochemical degradation of dyes

S2-006

João Paulo Carvalho Moura (*Centre of Natural and Human Sciences, Federal university of ABC, Santo André, Brazil*), Victor A. P. Guimarães, Odivaldo C. Alves, João Paulo C. Moura, Mauro C. Santos, Caio M. Fernandes, Juliana M. S. de Jesus, Julio Cesar M. Silva, Caroline O. Carrilho, Aila O. Santos

Enhanced Electrochemical Performance of Mn-Modified CeO₂ Nanowires on Carbon: ORR Activity

S2-007

Caio Vinícius da Silva Almeida (*Chemistry Department, Federal University of São Carlos (UFSCar), São Carlos, Brazil*), Alexander, J. Cresswell, Frank Marken, Lucia, H. Mascaro

Aqueous Electroreduction of Dinitrogen to Amines

S2-008

Dawany Dionsio (*Research Centre of Greenhouse Gas Innovation, University of São Paulo, São Paulo, Brazil*), Thiago Lopes, Julio R. Meneghini, Beethoven Narváez-Romo, Igor F. Pereira, Emilio C. N. Silva

Converting CO₂ Into Oxalate with Negative Carbon Emissions

S2-009

Isabelle Gonzaga (*Department of Chemistry, Universidade Federal De São Carlos, São Carlos, Brazil*), Caio Almeida, Lucia Mascaro

CuO_xTiO₂/Ti Applied to the Conversion of Nitrate to Ammonia

S2-010

Thi Anh Dao Ho (*Chemical Engineering, Queen's University, Kingston, Canada*), Cao Thang Dinh

Tuning Ionomer Distribution In Catalyst Layers For Efficient Ethylene Electrosynthesis With Diluted CO₂ Feedstock

S2-011

Yolina Hubenova (*Bioelectrochemistry, IEES, Sofia, Bulgaria*), Eleonora Hubenova

Electrochemistry of Dyes in Nonconductive Medium

S2-012

Eleonora Hubenova (*Chemistry, IEES, Sofia, Bulgaria*), Yolina Hubenova, Mina Todorova

Azo Dyes As Electrochemically Active Molecules For Use As Exogenous Mediators In MFC

S2-013

Zofia Jeleniewska (*Applied Physics and Mathematics, Gdańsk University of Technology, Gdańsk, Poland*), Robert Bogdanowicz, Mohsen Khodadadi Yazdi, Adrian Koterwa, Angelika Lepek, Klaudia Prusik, Jacek Ryl

Fabrication and Characterization of a Novel Highly Porous Graphene-Gold Microelectrode based on Laser-Induced Graphene for Molecular Biosensing of Uropathogenic *E. coli*

S2-014

Juliana Jesus (*Center of Natural and Human Sciences, Federal University of ABC, Santo André, Brazil*), Caroline de Oliveira Carrilho, Victor Augusto de Paula Guimarães, João Paulo Carvalho Moura, Eduardo Corrêa dos Santos, Mauro Coelho dos Santos, Felipe M. Souza

Nb₂O₅/Pd/C Electrocatalysts for Enhanced Hydrogen Peroxide Electrogeneration

S2-015

Sang Hoon Kim (*Extreme materials research center, Korea Institute of Science and Technology, Seoul, Korea*), Thi Thao Le, Gun-hee Moon

Highly efficient cathodes for removal of recalcitrant pollutants using electro-Fenton processes

S2-016

Matheus Schiavon Kronka (*Analytical Chemistry Department, Sao Paulo State University, Araraquara, Brazil*), Rodrigo de Mello, Guilherme Vilalba Fortunato, Marcos Roberto de Vasconcelos Lanza, Eduardo Luiz Rossini, Maria Valnice Boldrin Zanoni

Microplastic removal from aqueous solutions using a gas diffusion electrode coated with a very low content of Pd for H₂O₂ production

S2-017

Rafael L. Romano (*São Carlos Institute of Chemistry, University of São Paulo, São Carlos, Brazil*), Fabio H. B. Lima, Kotaro Sasaki

Insights on the Restructuring of Copper Complexes During Electrochemical Reduction of Carbon Dioxide

S2-018

Yueying Li (*Chemical Engineering, Queen's University, Kingston, Canada*), Cao -Thang Dinh, Jianying Ouyang

Ultrasmall Gold Nanocrystals and Conjugated Polymer Wrapped Single-Walled Carbon Nanotubes Composites for Catalyzing CO₂ Electroreduction

S2-019

Luis Loor-Urgilés (*Institute of chemistry, Universidade Federal Rio grande do norte, Natal, Brazil*), J.L. Guzmán-Mar, Valeria Herrera-Doñez, L Hinojosa-Reyes, Carlos Martínez-Huitle, Elisama V. Dos Santos

Development of a novel g-C₃N₄/PDMI@MOF-74(Ni) photocatalyst for the photoelectrodegradation of metoprolol and propranolol

S2-020

Julio Lourenço (*IQSC-USP, USP, Sao Carlos, Brazil*), Nicolas de Moraes, Guilherme Fortunato, Marcos Lanza, Marc Ledendecker, Robson Rocha, Liana Rodrigues

Sustainable H₂O₂ electrogeneration employing gas diffusion electrodes produced from tannin-cellulose xerogel

S2-021

Thalita Medeiros Barros (*Postgraduate Program in Chemical Engineering, Federal University of Rio Grande do Norte, Natal, Brazil*), Carlos A. Martínez-Huitle, Jussara Câmara Cardozo, Luis D. Loor-Úrgilés, José Heriberto Oliveira do Nascimento, Myllena Kely Pereira Ferreira, Elisama Vieira dos Santos

Removal of reactive dye using Nb₂O₅/Ag as a catalyst in photocatalytic processes

S2-022

Amanda Medeiros de Azevedo (*Institute of Chemistry, Federal University of Rio Grande do Norte, Natal, Brazil*), Carlos A. Martínez-Huitle, Marco A. Quiroz, Aruzza Araújo, Jussara Câmara Cardozo, Amanda Duarte Gondim, Letícia G.A. Costa, José Eudes Lima Santos, Amanda Medeiros de Azevedo, Lívia Nunes Cavalcanti, Aline Maria Sales Solano, Elisama Vieira dos Santos

Solar-Driven Upgrading of Nitrobenzene by Coupled Hydrogenation Using Electrochemically Generated Green H₂

S2-023

Paulo Mendes (*Licenciatura em Química, Instituto Federal do Sertão Pernambucano, Ouricuri, Brazil*), Gustavo Acosta-Santoyo, João M. M. Henrique, Carlos A. Martínez-Huitle, Mayra K. S. Monteiro, Calebe A. B. Santos, Elisama V. Santos, Igor J. G. Silva, José E. L. Silva

Comparison of two advanced oxidation processes in the generation of sulfate radicals for rhodamine B degradation in water

S2-024

Paulo Mendes (*Licenciatura em Química, Instituto Federal do Sertão Pernambucano, Ouricuri, Brazil*), Gustavo Acosta-Santoyo, Letícia G. A. Costa, João M. M. Henrique, Carlos A. Martinez-Huitle, Calebe A. B. Santos, José E. L. Santos, Elisama V. Santos, Igor J. G. Silva

Evaluation of PbO₂-F electrode in caffeine degradation in aqueous matrices

S2-025

Karla Montenegro (*Química Inorgánica, Pontificia Universidad Católica de Chile, Santiago, Chile*), Ricardo Salazar-González, Francisco Vicuña

Treatment of Industrial Liquid Wastes generated in the production of Olive Oil by means of Electrocoagulation with iron electrodes.

S2-026

Eryka Nóbrega (*Department of Chemistry, Federal University of São Carlos, São Carlos, Brazil*), Kelvin C. de Araújo, Regiane C. de Oliveira, Ernesto C. Pereira, Sirlon F. Blaskiewicz, Sherlan G. Lemos, Lucia H. Mascaro, Ailton J. Moreira, Leandro L. Soares, Gelson T. S. T. da Silva

Enhanced Photocatalytic Degradation of Emerging Pharmaceutical Pollutants Using Cobalt-Doped Zinc Oxide Nanostructures

S2-027

Alejandro Pérez López (*Chemical Engineering and Materials, Complutense University of Madrid, Madrid, Spain*), Salvador Cotillas, Jose Leandro da Silva Duarte, Carmen M. Domínguez, Ana Hayat, Aurora Santos

Electrochemical oxidation with MMO electrodes: a breakthrough in removing pharmaceuticals from hospital wastewater

S2-028

Josimar Ribeiro (*Chemistry, Universidade Federal do Espírito Santo, Vitória, Brazil*), Murilo Amaral, Othon Campos, Rolando Pedicini, Manuel Pinzon, Luciene Proféti, Demetrius Proféti, Maria de Lourdes S. Vasconcellos, Hudson Zanin

Ti/RuO₂-TiO₂ Dimensionally Stable Anode Type Electrodes Modified with SnO₂ and Ta₂O₅ for the oxygen evolution reaction

S2-029

Luís Ruotolo (*Department of Chemical Engineering, Federal University of São Carlos, São Carlos, Brazil*), Bruno Alves

Electrochemical Desalination Using Commercial Activated Carbon Felt Electrode in a Radial Flow Cell

S2-030

Jacek Ryl (*Electrochemistry and Surface Physical Chemistry, Gdansk University of Technology, Gdansk, Poland*), Mateusz Cieslik, Kornelia Kozłowska, Paweł Niedziałkowski

Development and characterization of 4D printable filters for heavy ions removal

S2-031

Kaïque S. G. C. Oliveira (*Institute of Chemistry, Federal University of Rio Grande do Norte, Natal, Brazil*), Carlos A. Martínez-Huitle, Elisama V. dos Santos

Synergic Approach of a Sustainable Electrochemical Process Integrating Wastewater Treatment with Production of Green Hydrogen

S2-032

Kaïque S. G. C. Oliveira (*Institute of Chemistry, Federal University of Rio Grande do Norte, Natal, Brazil*), Carlos A. Martínez-Huitle, Elisama V. dos Santos

Use of Boron-Doped Diamond Electrodes for Pollutant Degradation and Water Disinfection: A Bibliometric Analysis

S2-033

Alan Sakita (*Físico-Química, Instituto de Química de São Carlos-Universidade de São Paulo, Sao Carlos, Brazil*), Edson Ticianelli

Key parameters influencing CO₂ electrolysis performance in a zero-gap electrolyzer with acidic anolytes

S2-034

Danna Salinas (*Química, Universidad Nacional de Colombia, Bogota, Colombia*), Andrés Cabrera Orozco, Ivan David Caicedo Mojica, Jorge Enrique Gómez López

Electrochemical Evaluation of Fe/Ni/Co Oxyhydroxides on Nickel Foams by Linear and Cyclic Voltammetry for Efficient Hydrogen Generation in Water Electrolysis

S2-035

Luis Salviato (*Environmental Sciences, Universidade do Vale do Taquari, Lajeado, Brazil*), Christiane Rodrigues, Simone Stulp

Photoelectrocatalytic Wastewater Treatment: Membrane Technology Coupled with Ti-O-W Nanotubes Modified with Electrodeposited MOF

S2-036

Calebe Santos (*Licenciatura em Química, Instituto Federal do Sertão Pernambucano, Ouricuri, Brazil*), Gustavo Acosta-Santoyo, João M. M. Henrique, Carlos A. Martinez-Huitle, Paulo H. O. Mendes, Mayra K. S. Monteiro, Elisama V. Santos, José E. L. Santos, Igor J. G. Silva

Electrooxidation: evaluation of PbO₂-F and PbO₂ electrodes for the electrochemical degradation of Methyl Red in an aqueous medium

S2-037

Francisco Manuel Soria López (*Departamento de ingeniería química, Universidad de Castilla la-Mancha, hellín, Spain*), Roberto Campana Prada, Carmen María Fernández-Marchante, Manuel Andrés Rodrigo Rodrigo, Jesús Rodríguez Ruiz

Water refinery to avoid water resources salinization in the green hydrogen production.

S2-038

Pedro Souza (*Departamento de Física y Astronomía, Universidad Andrés Bello, Santiago, Chile*), Walter Orellana

Pollutant Gas Detection with MOF-5 Organometallic Structures: Insights from DFT and XPS Simulations

S2-039

Janaina Souza-Garcia (*Center for Natural Sciences and Humanities, Federal University of ABC, Santo André, Brazil*), Fabio Furlan Ferreira, Juan Manuel Iglesias Pascual

La₂CuO₄ modified perovskites as electrocatalyst for CO₂RR

S2-040

Felipe Staciaki (*Chemistry, Federal University of São Carlos, São Carlos, Brazil*), Adilson J. A. de Oliveira, Roger Gonçalves, Alexandre J. Gualdi, Ernesto Pereira, Luis A. M. Ruotolo, Gabriel Wosiak

Enhancing Ion Removal in Capacitive Deionization by Magnetohydrodynamic Effect

S2-041

Ahmad Tayyebi (*CiQUS, Univesity of Santiago de Compostela, Santiago de Compostela, Spain*), Leo Kahlmeyer, Maria Lopez Gimenez

Rational Design of Ruthenium-Copper Bimetallic Electrocatalyst for Efficient Conversion of Nitrate to Ammonia

S2-042

Elisama Vieira dos Santos (*School of Science and Technology, Federal University of Rio Grande do Norte, NATAL, Brazil*), Jussara Câmara Cardozo, Luis D. Loor-Úrgilés, Carlos A. Martínez-Huitle, Thalita Medeiros Barros, José heriberto Oliveira do Nascimento, Myllena Kely Pereira Ferreira, Elisama Vieira dos Santos

[Nb₂O₅ doped with Mo, W and Ni synthesis, characterization and photoelectrochemical performance](#)

S2-043

Justyna Widera-Kalinowska (*Chemistry, Adelphi University, Garden City, USA*), Noor Ellahie, Syeda Shobnam, Magdalena Skompska

[Photocatalytic Properties of BiVO₄ Modified with Metallo-Organic Coordination Polymers and Au nanoparticles for the Degradation of Pharmaceuticals.](#)

S2-044

Andrés Yar-Hernandez (*Ingeniería y Ciencias con la Industria, Pontificia Universidad Católica de Chile, Santiago, Chile*), Ricardo Salazar-González

[Efficient Degradation of Tramadol via Solar Photoelectro-Fenton Process: A Sustainable Approach for Contaminant Removal](#)

S3 - The coupling of degradation and power generation by photocatalytic fuel cells (PFC)

S3-001

Vladislav Ivanistsev (*Institute of Chemistry, University of Tartu, Tartu, Estonia*), Iuliia V. Voroshylova

Ionic liquid–electrode interface: Classification of ions, voided-to-saturated overscreening, structure-determined potentials, and CO₂ electroreduction

S3-002

Germano Tremiliosi Filho (*Eletroquímica, Instituto de Química de São Carlos, São Carlos, Brazil*), Seiti Inoue Venturinia, Germano Tremiliosi Filho

Hydrogen Evolution from Ethanol *via* the Nano-catalytic Activity of NiB Alloy in Alkaline Medium as a Catalytic Cathode Material

S3-003

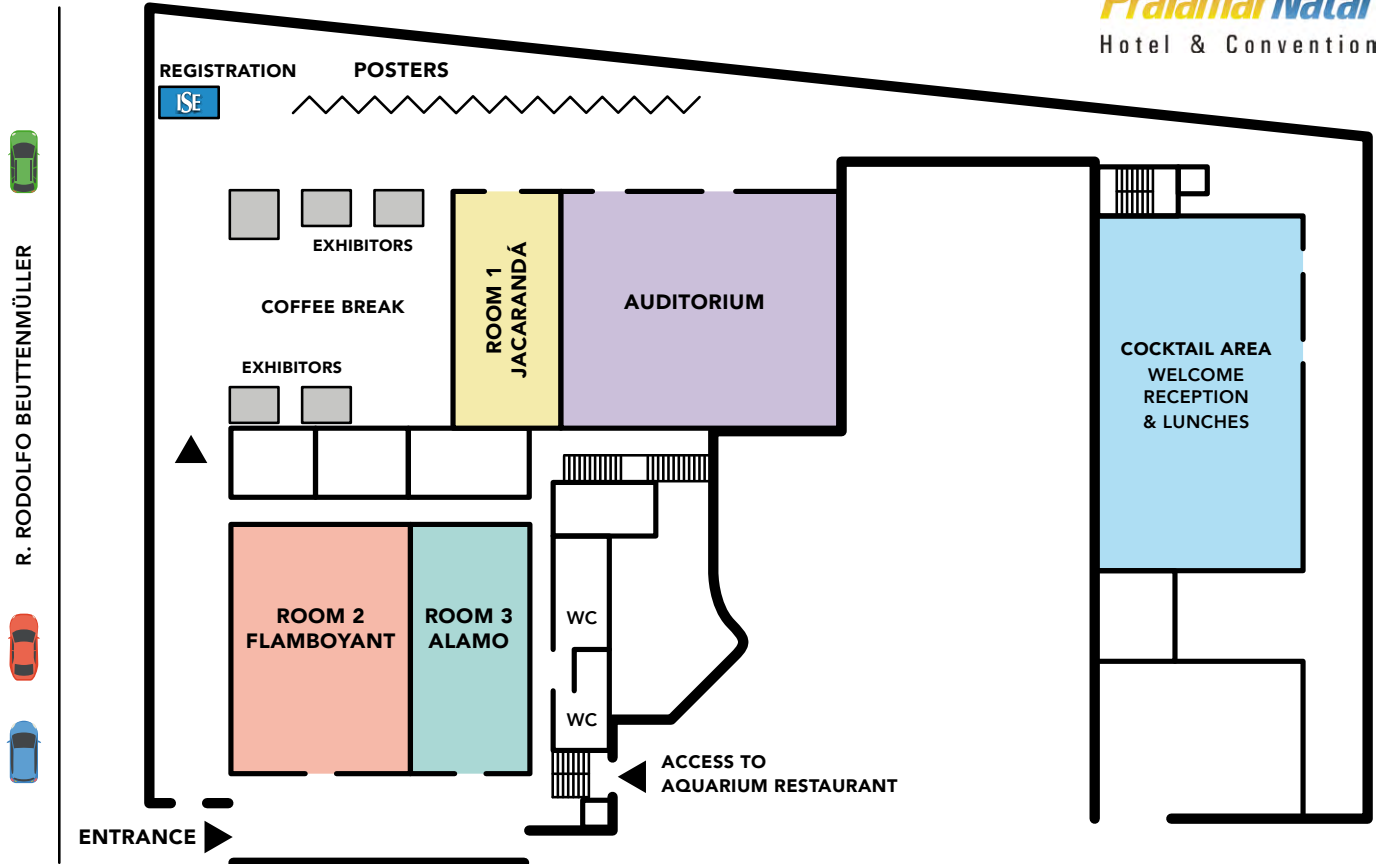
Luis Felipe Silva de Miranda (*Postprogram in Chemical Engineering - PPGEQ, Federal University of Rio Grande do Norte, Parnamirim, Brazil*), Gerffeson Almeida Moura, Maiara Barbosa Ferreira, Fabíola Correia de Carvalho, Amanda D. Gondim, Herbet Lima Oliveira, Carlos A. Martinez-Huitile, Marco Quiroz, Edney R. Viana Pinheiro Galvão, Elisama Vieira Dos Santos

Development of a hybrid-integrated wastewater treatment system with clean energy production

Notes

A series of 20 horizontal dotted lines for writing notes.

Conference Centre Plan





39th Topical Meeting of the International Society of Electrochemistry

Conference Schedule 23-26 March 2025 *Natal, Brazil*

SUNDAY 23 March		MONDAY 24 March			TUESDAY 25 March			WEDNESDAY 26 Mar.	
	09:00 - 09:40	Auditorium - Keynote - Anna Hankin			Auditorium - Keynote - Manuel A. Rodrigo			Auditorium - Keynote - Christine Kranz	
Key to Symposia:	Room	1. Jacaranda	2. Flamboyant	3. Alamo	1. Jacaranda	2. Flamboyant	3. Alamo	1. Jacaranda	2. Flamboyant
S1 - Clean, renewable and new energy systems	09:50 - 10:20	S1 - Invited	S2 - Invited	S3 - Invited	S1 - Invited	S2 - Invited	S3 - Invited	S1 - Invited	S2 - Invited
S2 - Environmental electrochemistry	10:20 - 10:40	S1 - Oral	S2 - Oral	S3 - Oral	S1 - Orals	S2 - Orals	S3 - Orals	S1 - Orals	S2 - Orals
S3 - The coupling of degradation and power generation by photocatalytic fuel cells (PFC)	10:40 - 11:00	Coffee Break			Coffee Break & Poster Sessions 11:00 - 12:30			Coffee Break & Poster Sessions 11:00 - 12:30	
	11:00 - 12:00	S1 - Orals	S2 - Orals	S3 - Orals	Coffee Break & Poster Sessions 11:00 - 12:30			Coffee Break & Poster Sessions 11:00 - 12:30	
	12:00 - 14:00	Lunch 12:00 - 14:00			Lunch 12:30 - 14:00			Lunch 12:30 - 14:00	
	14:00 - 14:40	Auditorium - Keynote - Nicola Pinna			Auditorium - Keynote - Siegfried Waldvogel				
	14:50 - 15:20	S1 - Invited	S2 - Invited	S3 - Invited	S1a - Invited	S2 - Invited	S1b - Invited	S1 - Orals	S2 - Orals
Registration 15:00 - 17:00	15:20 - 16:20	S1 - Orals	S2 - Orals	S3 - Orals	S1a - Orals	S2 - Orals	S1b - Orals	S1 - Orals	S2 - Orals
	16:20 - 16:40	Coffee Break			Coffee Break			Closing Ceremony 16:20 - 16:40 Auditorium	
Opening Ceremony 17:00 - 18:00 Auditorium	16:40 - 18:40	S1 - Orals	S2 - Orals	S3 - Orals	S1a - Orals	S2 - Orals	S1b - Orals		
Auditorium - Keynote - Roberto M. Torresi									
Welcome Reception 19:00 - 22:00 Cocktail Area	Evening				Gala Dinner 20:00 - 23:00 Aquarium Restaurant				