

29th November - 4th December, 2015

2nd Workshop: **E**lectrochemistry,
from **S**ensing to **E**nergy
Conversion and **S**torage



10th PTASchool of
Electrochemistry

Instituto de Química
Universidade de São Paulo
São Paulo, Brazil

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3rd and 4th December, 2015

Precondições

Alunos de doutorado

Doutores

Alunos dos laboratórios envolvidos não
participam da escola

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Apoio financeiro



Universidade de São Paulo
Brasil

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Apoio em equipamentos e materiais

Grupo de pesquisa em Química Analítica Instrumental (Prof. Lúcio Angnes)

Grupo de Sensores Eletroquímicos e Métodos Eletroanalíticos (Prof. Mauro Bertotti)

Grupo de Materiais Eletroativos (Profs. Roberto e Susana Torresi)

Chemical Sensors Lab (Prof. Thiago Paixão)

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pensalab

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60 alunos inscritos e 27 selecionados

Argentina:	2 participantes
Brasil:	22 participantes
Equador:	1 participante
Itália:	1 participante
Peru:	1 participante

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Participantes

Name	City	Institution/University	Country of Institution/University
Adriana Coelho Queiroz	Sao Carlos	IQSC-University of Sao Paulo	Brasil
Ana Luiza Lorenzen	Curitiba	Universidade Federal do Paraná	Brasil
Bárbara Noronha	Curitiba	Universidade Federal do Paraná	Brasil
Chiara Gaetani	Venezia	Università Ca' Foscari Venezia	Italy
Franco Zanotto	Córdoba	FCQ-Universidad Nacional de Córdoba	Argentina
Guilherme Fortunato	Campo Grande	Universidade Federal de Mato Grosso do Sul	Brasil
Jéssica A. Nogueira	São Carlos	IQSC-University of Sao Paulo	Brasil
Juan Aguirre	Sao Paulo	IQ-Universidade de Sao Paulo	Brasil
Juliana de Almeida	São Paulo	Universidade Federal de São Paulo	Brasil
Juliana F. de Brito	Araraquara	Universidade do Estado de São Paulo	Brasil
Karina K. Nakashima	Sao Paulo	IQ-Universidade de Sao Paulo	Brasil
Lianet Aguilera Domínguez	Manaus	Universidad Federal do Amazonas	Brasil
Marcel Castilho	São Paulo	University of São Paulo	Brasil
Mariela Ortiz	La Plata	INIFTA-Universidad Nacional de La Plata	Argentina
Miguel Galante	Campinas	Universidade Estadual de Campinas	Brasil
Miriam valeriano	Lima	Universidad Nacional de Ingenieria	Peru
Natália Medeiros	Porto Alegre	Universidade Federal de Rio Grande do Sul	Brasil
Patricio J. Espinoza Montero	Cidade de Mexico	Instituto de Química / Universidad Nacional Autónoma de México	México
Pedro F. B. D. Martins	São Carlos	IQSC-University of Sao Paulo	Brasil
Rafael Geonmonond	São Paulo	IQ-Universidade de Sao Paulo	Brasil
Rodrigo Montes	Uberlândia	Universidade Federal de Uberlândia	Brasil
Steve Gonski	Newark	University of Delaware	USA
Thaísa Baldo	São Carlos	Federal University of São Carlos	Brasil
Thaissa Lúcio	Arapiraca	Universidade Federal de Alagoas	Brasil
Thallis Almeida	Ibicaraí	Universidade Estadual de Santa Cruz	Brasil
Ulises Quiroz Aguinaga	Lima	Universidad Nacional de Ingeniería	Peru

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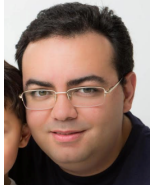

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2nd Workshop: Electrochemistry: from Sensing to
Energy Conversion and Storage

Thursday, December 3rd

09:00 - 09:40 h		Edson Ticianelli (IQSC-USP) Activity and stability of supported nano-sized electrocatalysts for the H₂/O₂ fuel cell reactions
09:40 - 10:20 h		Alain Walcarius (Université de Lorraine) Electrochemically-assisted generation of vertically-aligned, ordered and functionalized, mesoporous silica films
10:20 - 10:40 h		Break
10:40 - 11:20 h		Thiago Paixão (IQUSP) Use of an electrochemical sensor and an array of chemical sensors aiming at forensic, clinical and environmental applications
11:20 - 11:40 h		Marcio Vidotti (Federal University of Parana) The use of ultrasound on the synthesis of electrocatalytic materials

11:40 - 12:00 h		Romulo Ando (IQUSP) Absorption of CO₂ and SO₂ by ionic liquids
12:00 - 14:00 h		Lunch
14:00 - 14:40 h		Susana Córdoba de Torresi (IQUSP) Tuning the electrochemical properties of nanostructures
14:40 - 15:20 h		Daniel Butry - Arizona State University Designer Ionic Liquids for Reversible Mg Metal Anodes
15:20 - 16:00 h		Sub Reddy (University of Surrey) Application of Functional Membranes in Electrochemical Biosensors
16:00 - 16:20 h		Break
16:20 - 17:00 h		Christophe Bucher (Ecole Normale Supérieure, Lyon) pi-Radicals as Building Blocks for the Construction and Operation of Electron-Switchable Molecules and self-Organized Assemblies : Towards Redox-Responsive Molecular Tools.
17:00 - 17:40 h		Guy Denuault (University of Southampton) Transient study of the oxygen reduction reaction at microelectrodes

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Friday, December 4th

09:00 - 09:40 h		Marc T.M. Koper (University of Leiden) Electrocatalysis for fuel production: a tale of electrons, protons, and volcanoes
09:40 - 10:20 h		Mauro Bertotti (IQUSP) Electrochemical sensors: design, characterisation and applications
10:20 - 10:40 h		Break
10:40 - 11:20 h		Lauro Kubota (IQ - UNICAMP) Some approaches for electrochemical detection in point of care devices
11:20 - 11:40 h		Lucas L. R. Vono (IQUSP) Preparation of supported metal nanoparticle catalysts through organometallic precursors
11:40 - 12:00 h		Fabio H. Lima (IQSC-USP) Electrocatalytic processes for hydrogen electrochemical energy conversion and storage
12:00 - 14:00 h		Lunch

14:00 - 14:40 h		Jean-Claude Moutet (Université Joseph Fourier) Nanocomposite electrode materials for the water splitting and hydrogen evolution reactions
14:40 - 15:20 h		Hamilton Varela (IQSC - USP) The Complex Electro-oxidation of Simple Molecules
15:20 - 15:40 h		Frank Crespiho (IQSC - USP) Designing new carbon surfaces for direct bioelectrocatalysis
15:40 - 16:00 h		Break
16:00 - 16:40 h		Manuel del Valle Zafra (Autonomous University of Barcelona) Voltammetric electronic tongue systems
16:40 - 17:20 h		Daniel Belanger (University of Quebec) Chemical functionalization of materials for use in energy storage materials: electrochemical capacitors and lithium-ion batteries
17:20 - 17:30		Closing Ceremony

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