

14th PTA School of Electrochemistry

2nd to 6th December, 2019



Instituto de Química, Universidade de São Paulo, São Paulo, Brazil



University of São Paulo

Institute of Chemistry

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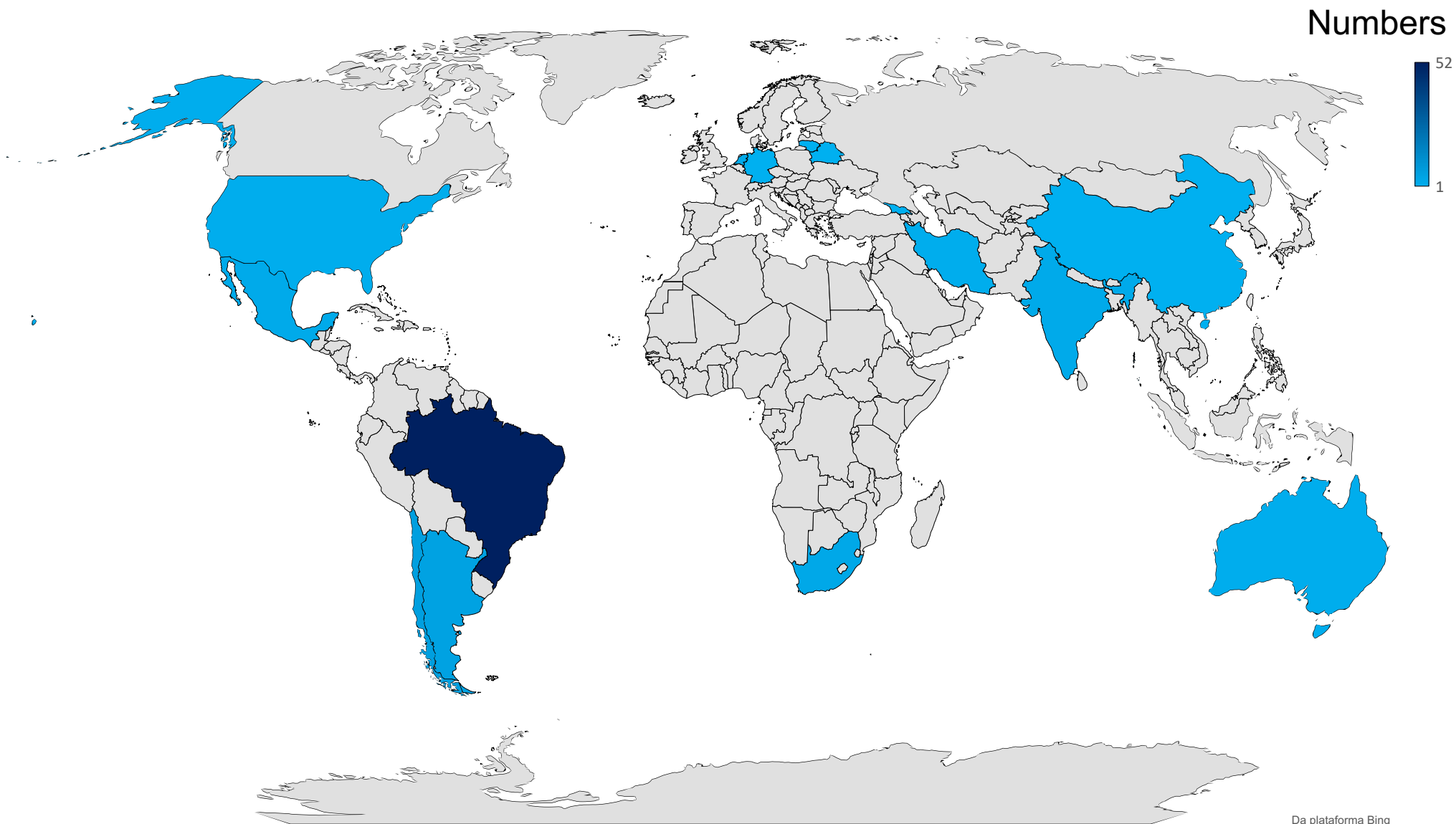


About the PTASchool

The Paulo Teng An Sumodjo School of Electrochemistry is annually organized at IQUSP. The target audience is graduate students and young doctors from all over the world. The number of participants is limited to 25 to ensure access to equipment to develop the experiments in small groups.

The 14th PTASchool of Electrochemistry was held from 2nd to 6th December, 2019.

14thPTASchool of Electrochemistry in Numbers (90 registrations, 26 selected participants)



14thPTASchool of Electrochemistry in Numbers (90 registrations, 26 selected participants)



Argentina	7
Australia	2
Brazil	52
Chile	7
China	1
Georgia	1
Germany	1
India	3
Iran	2
Lithuania	1
Mexico	3
Netherlands	3
Republic of Belarus	1
South Africa	4
United States	2



Argentina	1
Australia	1
Brazil	16
Georgia	1
Germany	1
India	1
Iran	1
Lithuania	1
Mexico	1
Netherlands	1
South Africa	1
United States	1

Participants from outside São Paulo city and other Universities or academic organizations received a financial support consisting in only accommodations and meals.

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Scientific Program 14th PTASchool of Electrochemistry

Monday, December 2nd	
09:00 - 09:30 h	Opening Ceremony (Queijinho A5 Room)
09:30 - 12:00 h	Fundamentals on Electrode Processes (Queijinho A5 Room) - Roberto Torresi (IQUSP)
12:00 - 13:30 h	Lunch
13:30 - 15:00 h	Transport phenomena (Queijinho A5 Room) - Vitor L. Martins (IQUSP)
15:00 - 15:20 h	Break
15:20 - 16:50 h	Electrochemical kinetics (Queijinho A5 Room) - Vitor L. Martins (IQUSP)
16:50 - 17:50 h	Cyclic Voltammetry with Autolab PGSTAT's (Queijinho A5 Room) - Paula Machado (Electrochemistry Specialist Metrohm Brasil Instrumentação Analítica Ltda.)
Metrohm Lecture	

Tuesday, December 3rd	
08:45 - 10:10 h	Cyclic voltammetry (Queijinho A5 Room) - Mauro Bertotti (IQUSP)
10:10 - 10:30 h	Break
10:30 - 11:50 h	Reaction Mechanisms (Queijinho A5 Room) - Mauro Bertotti (IQUSP)
11:50 - 13:30 h	Lunch
13:30 - 17:30 h	Experiment: Cyclic voltammetry

Wednesday, December 4th	
08:45 - 10:10 h	Electrochemical Impedance Spectroscopy (Queijinho A5 Room) - Germano Tremiliosi Filho (IQSC-USP)
10:10 - 10:30 h	Break
10:30 - 11:50 h	Electrochemical Impedance Spectroscopy (Queijinho A5 Room) - Germano Tremiliosi Filho (IQSC-USP)
11:50 - 13:30 h	Lunch
13:30 - 17:30 h	6 Different experiments 1- Electrochemical Impedance Spectroscopy 2- Rotating Ring-Disc Electrode 3- Fabrication and application of microelectrodes 4- Paper-Based Electrochemical Sensors - ePADs 5- Espectro-electrochemistry: Electrochromism of Prussian Blue 6- Electroanalysis Under Flowing Regime

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Thursday, December 5th	
08:45 – 10:10 h	Electrocatalysis - Susana I. C. de Torresi (IQ-USP) (Queijinho A5 Room)
10:10 – 10:30 h	Break
10:30 – 11:50 h	Electrochemical Paper-Based Devices: Fabrication and Applications in Sensing – Thiago R.L.C. Paixão (IQ-USP) (Queijinho A5 Room)
11:50 – 13:30 h	Lunch
13:30 – 17:30 h	6 Different experiments <ol style="list-style-type: none">1. Electrochemical Impedance Spectroscopy2. Rotating Ring-Disc Electrode3. Fabrication and application of microelectrodes4. Paper-Based Electrochemical Sensors - ePADs5. Espectro-electrochemistry: Electrochromism of Prussian Blue6. Electroanalysis Under Flowing Regime

Friday, December 6th	
08:45 – 10:10 h	Scanning electrochemical microscopy - Mauro Bertotti (IQ-USP) (Queijinho A5 Room)
10:10 – 10:30 h	Break
10:30 – 11:50 h	Closing conference: Multifunctionality of conducting polymers nanotubes – Marcio Vidotti (UFPR) (Queijinho A5 Room)
11:50 – 13:30 h	Lunch
13:30 – 17:00 h	6 Different experiments <ol style="list-style-type: none">1. Electrochemical Impedance Spectroscopy2. Rotating Ring-Disc Electrode3. Fabrication and application of microelectrodes4. Paper-Based Electrochemical Sensors - ePADs5. Espectro-electrochemistry: Electrochromism of Prussian Blue6. Electroanalysis Under Flowing Regime
17:00 – 17:30 h	Closing ceremony (Queijinho A5 Room)

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Cyclic Voltammetry

Tuesday, December 3rd, 2019

G1	Lab. Mauro Ali Chamazketi Laís Vernasqui Paula Perroni Ary Assuncao	G2	B1Sup - Room 161 – (Thiago) Beatriz Garrote Crystal Rapiet Bruna Lobo Josué Gonçalves
G3	B1Sup - Room 161 – (Thiago) Ricardo Escalona-Villalpando Sapokazi Timakwe Franciele Morawski Gisele Halfeld	G4	B1Sup - Room 161 – (Thiago) Povilas Šimonis Marina Soselia Jessica Gualberto Thágor Klein Jesimiel Glaycon Rodrigues Antônio
G5	B1Sup – Room 161 – (Roberto) Sofia Raviolo Hamsa Noreen Gabriel Carrijo Rodrigo Lira Garcia Barros	G6	B1Sup – Room 161 – (Roberto) Emerson Kohlrausch Tim wissink Jéssica Santos Stefano Ramon S. Vilela

Six experiments

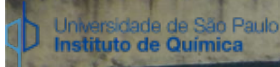
Time	Experiment	Wednesday, December 4 th	Thursday, December 5 th	Friday, December 6 th
13:30-15:30	1- Electrochemical Impedance Spectroscopy	G1	G4	G6
15:30-17:30	1- Electrochemical Impedance Spectroscopy	G2	G3	G5
13:30-15:30	2- Rotating Ring-Disc Electrode	G3	G6	G1
15:30-17:30	2- Rotating Ring-Disc Electrode	G4	G5	G2
13:30-15:30	3- Fabrication and application of microelectrodes	G5	G2	G4
15:30-17:30	3- Fabrication and application of microelectrodes	G6	G1	G3
13:30-15:30	4- Paper-Based Electrochemical Sensors	G2	G3	G5
15:30-17:30	4- Paper-Based Electrochemical Sensors	G1	G4	G6
13:30-15:30	5- Espectro-electrochemistry	G4	G5	G2
15:30-17:30	5- Espectro-electrochemistry	G3	G6	G1
13:30-15:30	6- Electroanalysis Under Flowing Regime	G6	G1	G3
15:30-17:30	6- Electroanalysis Under Flowing Regime	G5	G2	G4

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Group Photo

Next PTASchool of Electrochemistry

15th School of Electrochemistry
29th November to 2nd December 2020

Advanced Workshop
3rd to 4th December 2020

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Universidade de São Paulo
Instituto de Química

USP Pró-Reitoria de Pesquisa
Universidade de São Paulo

FAPESP
FUNDAÇÃO DE AMPARO À PESQUISA
DO ESTADO DE SÃO PAULO



Metrohm
Autolab S.V.