

Division 1 – Analytical Electrochemistry

Annual Report – September 2021

Agenda:

- 1. Division Officers
- Past, present and future meetings and symposia
- 3. Tutorials
- 4. Awards

- ISE 2021 Symposium 1
 Best Oral Presentation Prizes
- 6. Social Media
- 7. Division budget
- 8. Miscellaneous



Division 1 – Analytical Electrochemistry – Report 2021

1. Division Officers

Chair: Luigi Falciola (Università degli Studi di Milano, Italy)

Chair Elect: Guy DENUAULT (University of Southampton, UK)

Past Chair: Alain Walcarius (CNRS, Université de Lorraine, France)

Vice-Chairs:

Eleonora-Mihaela UNGUREANU

("Iuliu Haţieganu" University of Cluj-Napoca, Romania)

Neso SOJIC (University of Bordeaux, France)









Division 1 – Analytical Electrochemistry – Report 2021

Number of Div. 1 members: 1078 of 3468 (31.1%) in 2021

[1041 of 3815 (27.3%) in 2019; 1078 of 3674 (29.3%) in 2020]

PAST Division Officers

Daniel Mandler (Hebrew University, Israel)



Vice-Chairs: Rasa Pauliukaité (Vilnius University, Lithuania)
Lauro Kubota (Universidade de Campinas, Brazil)







Division 1 – Analytical Electrochemistry – Report 2021

2. Past, present and future meetings and symposia

In 2020 (71st ISE as "Belgrade Online", 30.8-4.9.2020) Division 1 has sponsored:

Symposium 2: "Nanomaterials in electroanalysis and nanoelectrochemical sensors" By Luigi Falciola (Coordinator), Alain Walcarius, James Rohan, Sotirios Sotiropoulos, Biljana Šljukić, Rasa Pauliukaite, Mariangela Longhi, Alessandro Minguzzi



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Division 1 has also co-sponsored:

Symposium 1: "Membrane-based electrodes: from traditional potentiometry to dynamic electrochemistry" (with Divisions 3 and 6)

By Maria Cuartero Botia (Coordinator), Gaston Crespo, Maria Assunta Navarra, Guobao Xu, Valentin Mirčeski

Symposium 6: "Advances in microbial electrochemistry for energy conversion, biotransformation, bioremediation and electroanalysis" (with Divisions 2, 3 and 4) By Elena Ferapontova (Coordinator), Lo Gorton, Carlo Santoro, Mathieu Etienne, Eileen Hao Yu, Tanja Vidakovic-Koch

Symposium 15: "When molecular electrochemistry meets luminescence: from fundamentals to analytical applications" (with Divisions 3 and 6)

By Olivier Buriez (Coordinator), Guobao Xu, Conor Hogan, Neso Sojic, Rastko Vasilić



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2. Past, present and future meetings and symposia

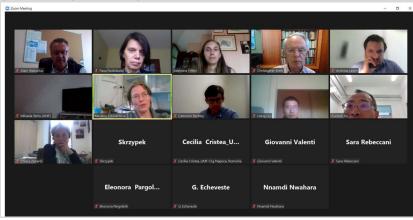
In 2021 (72st ISE in Jeju - Korea, 29.8-3.9.2021)

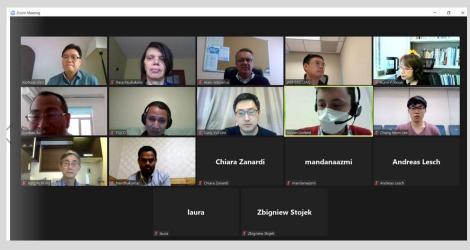
Division 1 has sponsored:

Symposium 1: "Recent developments in Analytical Electrochemistry: from Fundamentals to devices"

By Alain Walcarius (Coordinator), Won-Yong Lee, Rasa Pauliukaite, Joohoon Kim (local coordinator), Guy Denuault, Sung Yul Lim

15-30 participants per sub-session (Q&A)







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Division 1 has also co-sponsored:

Symposium 2: "Functional surfaces and electrochemically active materials: preparation and applications" (with Division 4)

By Daniel Mandler (Coordinator), Luca Magagnin, Mikhail Vorotyntsev, Youngmee Lee, Seongpil Hwang, Yuanzhe Piao

Symposium 3: "Electrochemistry at liquid/liquid interfaces: from fundamental to applications" (with Divisions 2 and 7)

By Hye Jin Lee (Coordinator), Hiroshima Nagatani, Zhifeng Ding, Grégoire Herzog

Symposium 5: "New electrochemical approaches and devices for monitoring diseases and human health" (with Division 2)

By Elena Ferapontova (Coordinator), Ilaria Palchetti, Haesik Yang, Zong-Hong Lin

Symposium 17: "Molecular Electroanalysis" (with Division 6)

By Patrizia Mussini (Coordinator), Luigi Falciola, Guobao Xu, Olivier Buriez, Dongil Lee, Jongwon Kim

Symposium 23: "Electrochemistry knowledge transfer: from academy to startup company and industries" (with Divisions 2, 3, 4, 5 and 6)

By Francesca Soavi (Coordinator), Francesco Di Franco, Gerardine Botte, Jose Zagal



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2. Past, present and future meetings and symposia

In 2022 (73st ISE in Xiamen – China, 23-28.10.2022)
Division 1 will sponsor:



Symposium 1: "Smart Materials for Innovative Wearable/Disposable/Renewable/Low-cost Electroanalytical devices"

By Luigi Falciola (coordinator), Alain Walcarius, Rasa Pauliukaite, Xu Hou (local coordinator)

Symposium 2: "Nanomaterials and Nanotechnology in Analytical Electrochemistry"

By Daniel Mandler (coordinator), Damien Arrigan, Maria Cuartero and Xinghua Xia (local coordinator)



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Division 1 will also co-sponsor:

Symposium 3: "From molecular to microbial electrochemical sensing and biosensing (with Division 2) By Ilaria Palchetti (coordinator), Wlodzimierz Kutner, Mathieu Etienne, Baohong Liu (local coordinator)

Symposium 13: "Electrochemistry Knowledge Transfer: from Academy to Startup Company and Industries" (with Divisions 5 and 3)

By Thierry Brousse (coordinator) and Yitao Long (local coordinator)

Symposium 19: "How Molecular Electrochemistry May Shine Light on Analytical Applications" (with Division 6)

By Olivier Buriez (coordinator), Neso Sojic, Conor Hogan, Guobao Xu (local coordinator)

Symposium 21: "In situ Characterization of Electrochemical Interfaces using X-rays, Electrons, and Neutrons" (with Divisions 7 and 4)

By Rik Mom (coordinator), Alessandro Minguzzi, Philippe Marcus, Hongliang Zhang (local coordinator)



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2. Past, present and future meetings and symposia

In 2023 (74st ISE in Lyon - France, 3-8.9.2023)

Division 1 has to start organizing Symposia.

New rules for limiting the number of Symposia

- → 2 Symposia per Division
- → The 3rd one has to be approved by the EC



→ Names of SOs (no more than 2 years consecutively)
Please email to Luigi.Falciola@unimi.it



Division 1 – Analytical Electrochemistry – Report 2021

2. Past, present and future meetings and symposia

Future Topical Meetings

Division 1 will co-sponsor:

2023: "Electrochemistry for energy, environment and health: key challenges and enabling solutions" (with Division 3). Gold Coast – Australia.

Debbie Silvester-Dean, Huijun Zhao, Chuan Zhao, Yulin Zhong

2024: "Modern Electrochemical aspects for environmental protection" (with Division 2). Šibenik, Croatia

Slađana Strmečki Kos, Marija Marguš, Irena Ciglenečki-Jušić

Think about the future ...



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Sponsored meetings

In 2020, Division 1 has sponsored:

- > Jean Pinson Symposium, September 18, 2020, Paris, France; Chair Frédéric Kanoufi
- ➢ ElecNano 9, 9th Meeting on Electrochemistry in Nanosciences, November 23-25, 2020, Paris, France; Chair: Vincent Vivier
- YISAC 2020, 27th Young Investigators' Seminar on Analytical Chemistry, September 22 25, 2020, Lodz, Poland; Chair: Lukasz Poltorak



Division 1 – Analytical Electrochemistry – Report 2021

Sponsored meetings

In 2021, Division 1 has sponsored / will sponsor:

- > 3rd Cross-Border Seminar on Electroanalytical Chemistry, April 8-9, 2021, Furth im Wald, Germany; Chairs: Jiri Barek & Frank-Michael Matysik
- ➤ 41st Meeting of the Electrochemistry Group of the Spanish Royal Society of Chemistry and 1st French-Spanish Atelier/Workshop on Electrochemistry, July 6-9, 2021, Paris, France; Chair: Carlos Sanchez-Sanchez
- ➤ BES 2021, XXVIth International Symposium on Bioelectrochemistry and Bioenergetics of the Bioelectrochemical Society, May 9-13, 2021, Cluj-Napoca, Romania; Chair: Robert Sandulescu
- 10th International Workshop on Surface Modification for Chemical and Biochemical Sensing, Poland (online), 5 9 November 2021; Chairs: Piyush Sindhu Sharma, Włodzimierz Kutner



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Sponsored meetings In 2022, Division 1 will sponsor:

➤ ESEAC 2022 (ex 2020), The 18th International Conference on Electroanalysis, June 4-8, 2022, Vilnius, Lithuania; Chair: Rasa Pauliukaite



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3. Divisional Tutorials

Proposal of organizing online Tutorials on topics related to Analytical Electrochemistry

- Minimum number of participants needed
- Topics: a survey will be organized



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4. Division Awards

The Early Career Analytical Electrochemistry Prize of ISE Division 1 (Sponsored by OrigaLys)

- 2014: Dr Jan Vacek (Palacky Univesity, Olomouc, Czech Republic)
- 2015: Dr. Bryan McCloskey (University of California, Berkeley, USA) in recognition of his contributions to a highly interdisciplinary teams on understanding the fundamental chemistry of lithium-air batteries
- 2016: Dr Kosuke Ino (Tohoku University, Sendai, Japan) for his research on integrated electrochemical devices based on micro/nanochemistry for bioassays





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➤ 2017: Prof. Kristina Tschulik (Ruhr-University, Bochum, Germany) in recognition of her excellent work applying electrochemistry for the physical and chemical characterization of nanostructures and in particular single nanoparticles



- 2018: Dr. Maria Cuartero (KTH, Stockholm, Sweden) for her contribution to the electrochemical detection of various species in aquatic systems based mostly on potentiometric methods
- 2019: Prof. Sabine Kuss (University of Manitoba, Winnipeg, Canada) for her fundamental contributions to analytical electrochemistry at the interface between electrochemistry and biology
- 2020: Dr. Cameron L. Bentley (University of Warwick, Coventry, UK) for his achievements in using nanoscale electrochemistry to understand various phenomena with broad impact in electrocatalysis, materials science and nanoscience







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4. Division Awards

The Early Career Analytical Electrochemistry Prize of ISE Division 1 (Sponsored by OrigaLys); 9 candidates

Winner for 2021: Dmitry MOMOTENKO (Head of a Junior Research Group/ERC Starting Grant 2020 winner; Department of Chemistry, Carl von Ossietzky University of Oldenburg, Germany)

for the development of new advanced instrumental analytical techniques for micro- and nanoscale analyses and for physico-chemical characterization of different materials and particularly for the extensive study of soft probe microelectrodes for SECM and for the integration of this advanced technique with mass spectrometry.







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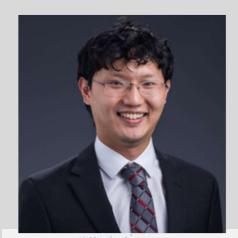
4. Division Awards

ISE-Elsevier prize for green electrochemistry (with Div. 3 and 5)

11 applications

Winner for 2021: Su Xiao
 (Assistant Professor, University of Illinois, Urbana-Champaign, USA)

for the independent results obtained in the field of green electrochemistry and in particular in the development of advanced materials for molecularly selective separations and process intensification for different applications (energy, environment, chemical manufacturing).







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4. Division Awards

Travel grants for PhD students

2018: Five awardees

2019: Two awardees:

Criteria for application:

- The applicant must be a certified PhD student by the time of the Annual Meeting and member of the ISE (Division 1).
- The applicant will present an oral contribution at one of the symposia organized (or co-organized) by Division 1.

Konrad RUDNICKI (University of Lodz, Poland)

Narshone SODA (Griffith University, Australia)

2020 and 2021: Unfortunately, no awardees because of hybrid modality of the ISE Annual Meetings Expecting more travel grants to be awarded for the future !!!



Division 1 – Analytical Electrochemistry – Report 2021

5. ISE 2021 Symposium 1 Best Oral Presentation Prizes



International Society of Electrochemistry

Division 1 of the ISE, Analytical Electrochemistry

Awards a

Best Oral Communication Prize

To

Laena D'ALTON

From La Trobe University, Australia
72th Annual Meeting, Jeju, August 30 – September 3, 2021

Prof. Luigi Falciola

Dr. Alain Walcarius

Chair Division 1

Coordinator Symposium 1



International Society of Electrochemistry

Division 1 of the ISE, Analytical Electrochemistry

Awards a

Best Oral Communication Prize

To

Simon SCHUMACHER

From Duisburg Essen University, Germany

72th Annual Meeting, Jeju, August 30 - September 3, 2021

Prof. Luigi Falciola Chair Division 1 Dr. Alain Walcarius

Coordinator Symposium 1





Division 1 – Analytical Electrochemistry – Report 2021

6. Social Media

@ISE.Division1.AnalyticalElectrochemistry





135 followers107 likes





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7. Division 1 Budget

Income: - remaining 2020: € 5753.41

- allocated 2021: € 3911.01

- unused from 2020: - € 1842.40 (in NON COVID ERA)

- meeting surplus: € 0.00 Total income: € 9664.42

Expenses: - meetings sponsoring:

- Jeju Poster prizes:

- Best Oral Presentation Prizes (2)

€ 550.00 + ? (next months/year)

€ 875.00

€ 600.00

Total expenses: € 2025.00 + ?

Available to Div. 1 in 2021: € 7639.42 - ?

The Covid crisis has generated less expenses than expected in 2020 but also in 2021!