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Dear friends, colleagues, and ISE members:

With the arrival of the new year 2023, I am following the President's tradition to look back at our Society and its activities in 2022. In fact this message has a special meaning for me since my tenure as ISE President ended at the end of 2022.

Let me start by summarizing the ISE activities of the last year of my Presidency. It was an eventful year in which the world hoped for a return to a steady development following two years disrupted by the Covid-19 pandemic. Sadly, the events of the past year just underlined the unstable and unpredictable state in which our world resides now. The world's development was still affected by continuing Covid-19 pandemic which caused severe disruptions of life mainly in some Asian countries. At the same time, the world has witnessed an escalation of tension in many regions, culminating in an armed conflict in Europe on a scale not seen in almost 80 years, with the dreadful consequences that war has on those directly involved. Although these events did not have a substantial effect on the functioning of the Society itself, they still hit hard our collective hearts and minds. It was particularly disturbing and difficult to adopt to a situation in which two countries with a sizeable ISE membership stood as enemies. It forced us to search our own conscience and we had to return to the core principles which have guided the ISE to navigate the Society in 2022. The ISE has been founded as a framework in which individuals with deep professional interest in fundamental electrochemistry and electrochemical technology can freely interact to promote the field and its positive impact on society. Driven by this principle, the Executive Committee decided to strengthen support of individual membership regardless of the members' origin. In this context the EC has taken an initiative to create an information hub on the ISE webpage providing information on specific help to academics who have been forced to leave their permanent posts because of natural disasters or wars. To stress the peaceful, open and inclusive nature of the ISE, the Executive Committee also decided to recuse the ISE from any activities involving official institutions associated with governments acting in violation of the UN charter.

Scientific Meetings

The effects of Covid-19 pandemic were disproportionally felt in different parts of the world. While the ISE Topical meetings were planned for Europe (Aachen, Stockholm) and South America (Santiago) where the pandemic was already receding in 2022 allowing thus for the organization of *in presence* meetings, the 73rd Annual Meeting was planned for Xiamen in China. Unfortunately the situation in China did not allow us to organize the

meeting in a way that would ensure significant international attendance. Therefore the Executive Committee decide to cancel the 73rd Annual Meeting with Xiamen. An online Annual Meeting was organized instead, from our office in Lausanne. Realizing that our Society did not organize any *in presence* meeting integrating all fields of electrochemistry since 2019, the EC decided to organize a special so-called Regional Meeting in Prague open to submissions from all fields of electrochemistry, as a one-time response to the extraordinary situation.

Topical Meetings

Although the Covid pandemic related restrictions allowed for organization of in-person meetings in Europe and South America, the momentum of the pandemic still affected the behaviour of conference participants. In contrast to pre-pandemic era, the actual participation was higher than that expected based on the submission numbers. That reflected the hesitation of the community to commit to attendance in advance, finalizing their travel plans at the last moment. Both Topical meetings organized in Europe were well attended attesting the interest of the community to meet in a real life after the Covid related break.

The 31st Topical Meeting of ISE took place in Aachen, Germany between 15th and 19th of May. Its Topic focused on "Theory and Computation in Electrochemistry: Seeking Synergies in Methods, Materials and Systems" attracted an attendance of 148 participants which is a very high number for a theory related meeting. The scientific program was organized around 6 themes i) Advances in first principles electrochemical methods; ii) Theory and computation of interfacial and nanoscale phenomena; iii) Modelling functional materials: microstructure to complex electrodes; iv) Modelling dynamic phenomena in electrochemical systems; v) Accelerated materials development: rapid path from idea to integration and vi) Modelling-based diagnostics of electrochemical materials and cells. The conference featured four Keynote Speakers (Alexei Kornyshev, Imperial College London; Ryoske Jinnouchi, Toyota Central R and D Laboratories; Tejs Vegge, Danish Technical University; Matthew Suss, Israel Institute of Technology) and seven Invited speakers (Payam Kaghazchi, FZ Jülich; Chao Zhang, Uppsala University; Kai Exner, University Duisburg-Essen; Jörg Behler, University Goettingen; Federico Calle-Vallejo, University of Barcelona; Andrei Kulikovsky, Research Centre Jülich; Iryna Zenyuk, University of California Irvine; Tanja Vidakovic-Koch, Max Planck Institute for Dynamics of Complex Technical Systems). The keynote and invited lectures provided the framework for more than 170 oral and poster presentations which outlined the recent progress in theoretical and modelling approaches in electrochemical research. The report of the 31st TM from the Organizing Committee Chairs is available on the ISE website.

The 32nd Topical Meeting was organized in Stockholm, Sweden between 19th and 22nd of June. The meeting's topic **"**Experimental and Modelling tools for Electrochemical Energy Devices" attracted 285 participants, both theoreticians and experimentalists. The scientific program consisted of two parallel sessions which integrated oral presentations of six themes: i) Water electrolysis; ii) Fuel cells; iii) Other electrolysis, CO2 etc.; iv) Batteries for E-mobility; v) High power devices and vi) Stationary battery technologies. The meeting featured 2 keynote lectures, 7 invited talks, 74 oral and 105 poster presentations.

The keynote lectures were delivered by Hubert Gasteiger (Technical University Munich) and David Howey (Oxford University).

The 33th Topical Meeting was organized in Santiago de Chile, Chile, between 27th and 30th of November. The meetings focused at "Challenges in Molecular Electrochemistry and Surface Reactivity". The scientific program was organized in two parallel Symposia directed at a) Challenges in Molecular Electrochemistry and Surface Reactivity and at b) Experimental, Theoretical and Computational Advances in Electrochemistry and Electrocatalysis. The meeting attracted an attendance of 74 participants. The program was highlighted by 11 keynote lectures, 7 invited talks, 29 contributed talks and 28 posters. The keynote lectures were delivered by Deborah Jones (CNRS Montpelier), Jiri Ludvik (Heyrovsky Institute Prague), Lo Gorton (Lund University), Justus Masa (Max Planck Institute for Chemical Energy Conversion, Muelheim), Lior Elbaz (Bar Ilan University), Daniel Scherson (Case Western University, Cleveland), Matteo Grattieri (Universita degli Studi di Bari), Angel Cuesta (University Aberdeen), Walter Orellana (Universida Andres Bello, Satiago), Ernesto Calvo (University Buenos Aires) and Magdalena Hromadova (Heyrovsky Institute Prague).

I would like to thank here specifically Michael Eikerling, Rakel Wreland Lindström, Jose Zagal and Federico Tasca, respectively, and their organizing teams, for all the efforts that they put into organizing these three very successful topical meetings. It was my pleasure to attend all three of them.

Annual Meeting

The 73rd Annual Meeting of the International Society of Electrochemistry (ISE) took place online in response to travel restrictions imposed in China in 2022. The meeting was held between August 29th and September 3rd 2021. The main Theme of the Meeting was "Electrochemistry from Fundamentals to Products". The scientific program comprised of five Plenary lectures delivered by Jun Chen (Nankai University), Yuri Gogotsi (Drexel University), Jacek Lipkowski (Guelph University), Edward Sargent (University of Toronto) and Elena Savinova (University of Strasbourg). The contributed papers were presented in 25 individual Symposia and encompassed 76 Keynote, 92 invited, 325 oral presentations and 171 poster presentations.

Two Tutorial lectures were available online during the Annual Meeting. These workshops dealt with "Electrochemical Impedance Spectroscopy" given by Mark Orazem (University of Florida), and with "PEM Fuel Cell Technology – Basic Principle, Materials, Components and Testing" delivered by Frederic Hasche (Technical University Braunschweig).

The 73rd Annual Meeting was attended by 698 registered participants. The highest participation was recorded from Germany (89 attendees) followed by China (70 attendees), Italy (48 attendees), France (46 attendees) and Japan (45 attendees). The online nature of the meeting also led to an unusually high participation of students. This is indeed positive news, and the Executive Committee will stimulate students and young colleagues to remain ISE member. The success of the online ISE Annual Meeting was mainly possible thanks to the extraordinary effort of the co-chairs of the Organizing Committee, Katharina Krischer and Andrea Russell, in collaboration with all the Symposia organizers and of

course all the participants, and to the efforts of the ISE Office, i.e. Raphael Berger and Gill Bourgeois.

Regional meeting

The Regional meeting was organized between August 15th and 19th in Prague, Czech Republic, as a one time activity aiming at restarting the main activities of the Society after Covid-19 pandemic. The meeting was organized by the Czech regional Section in record time with all the preparation taking place in just 8 months. Despite the lack of time to organize the meeting, Prague welcomed more than 460 participants mainly from Europe and the Americas, with participation from Asia lagging behind due to imposed Covid-19 related travel restrictions. The presented contributions were scheduled in seven parallel symposia aligned with the focus of individual Divisions with Division Officers acting as Symposia organizers. Moreover the Divisions decided to support the participation of young scientists (both on the PhD student and postdoctoral level) by covering the registration fee of 50 young scientists attending the meeting. To accentuate the fact that the Regional meeting was organized to complement and not to replace the Annual Meeting, the program featured no Plenary talks and Tutorial sessions and the Social program was restricted just to receptions accompanying the Poster sessions. The scientific program featured 70 invited lectures, 260 contributed lectures and 120 poster presentations. It ought to be stressed that the success of the regional meeting was made possible by the extraordinary efforts of our Czech colleagues, specifically Tomas Navratil and Miroslav Fojta, who chaired the Organizing Committee.

The ISE plans to organize two Topical meetings in 2023: 34th Topical Meetings in Mar del Plata, Argentina (20th -22nd March 2023) and 35th Topical Meeting at Gold Coast in Australia (7th-10th May 2023). The 74th Annual Meeting will take place in Lyon, France between 3rd-8th September 2023. Although we cannot completely rule out that the international travel will not be disrupted during 2023, we are optimistic that we will have the opportunity to meet again in person in larger numbers than in 2022.

Detailed information on all ISE meetings is available on the websites of each meeting, accessible from the ISE homepage. I look forward to meeting you at ISE meetings in 2023.

Sponsored Meetings

The Covid-19 pandemic still affected ISE sponsored activities in 2022. Many of the 33 meetings organized in 2022 with support from ISE were originally planned for 2020 and 2021 and the overall number of the sponsored meetings is comparable with pre-covid era. Nevertheless, given the fact that the pandemic receded in the second half of 2022, we expect to return to the pre-covid numbers during 2023. The sponsoring request form with the relevant rules, as well as an exhaustive list of sponsored events may be found on the website of the Society (https://www.ise-online.org/ise-sponsoring/sponsored.php) .

ISE Fellows

Four new ISE Fellows were appointed in 2022 in recognition of their outstanding scientific achievements. They are Gleb Yushin, Elzbieta Frackowiak, Thierry Brousse and Peter

Strasser. I would like to congratulate all of them for this achievement. The ISE Fellowship is perceived as one of the most prestigious recognitions of scientific excellence given by ISE. ISE receives numerous nominations every year. I would like to encourage you to nominate excellent scientists with particular attention to so far underrepresented groups, notably excellent female electrochemists, for this recognition. Details for preparing your nomination are here: https://www.ise-online.org/fellows.php .

Awards

Twelve ISE Prizes were awarded in 2022 and are announced at the ISE web.

• The Electrochimica Acta Gold Medal was awarded to Alexei Kornyshev, Imperial College, London UK, in recognition of his theoretical contributions to the understanding of electrochemical interfaces, encompassing aspects of solvation, electron/proton transfers in complex environments, and the electrical double layer in ionic liquids, together providing significant theoretical maps to guide experiments in new areas of electrochemistry.

• The ISE-Elsevier Prize for Experimental Electrochemistry was awarded to Bing Joe Hwang, National University of Science and Technology, Taiwan, for his contribution to the development of in-situ spectroscopic and imaging analyses of Li ion batteries.

• The Bioelectrochemistry Prize of Division 2 was awarded to Renata Bilewicz, University of Warsaw, Poland, for her use of lipidic cubic phase matrices for the study of membrane proteins and innovative biofuel cell designs.

• The Brian Conway Prize for Physical Electrochemistry was awarded to Scott Donne, University of Newcastle, Australia, for extensive fundamental studies characterizing mechanism of carbon oxidation and catalysis for the development of the direct carbon fuel cell.

• The Jaroslav Heyrovsky Prize for Molecular Electrochemistry was awarded to Diane Smith, San Diego State University, USA, for her pioneering work exploring coupled electron and proton transfer mechanisms in reversible organic redox reactions for the design of redox-responsive smart materials.

• The Tajima Prize was awarded to Debbie Silvester Dean, Curtin University, Australia, for her outstanding research achievements in the field of electrochemical sensing.

• The ISE Prize for General Electrochemical Materials Science was awarded to Kelsey Stoerzinger, Oregon State University, USA, for her excellent research in the development of materials for electrocatalytic applications, mainly for water electrolysis.

• The Zhaowu Tian Prize for Energy Electrochemistry was awarded Volker Presser, Leibnitz Institute for New Materials, Germany, for his comprehensive contributions to energy nano-materials research.

• The ISE-Elsevier Prize for Green Electrochemistry was awarded to Ruggiero Rossi, Pennsylvania State University, USA, for his contribution to scaling up and increasing power of microbial fuel cells, microbial electrolysis cells, and water electrolyzers.

• The ISE-Elsevier Prize for Applied Electrochemistry was awarded to Michelle Browne, Helmholtz Zentrum Berlin, Germany, for outstanding contributions in Applied Electrochemistry, particularly in the field in electrocatalysis.

• The Early Career Analytical Electrochemistry Prize of ISE Division 1 was awarded to Stefano Cinti, University of Rome, Italy, for the development of innovative

electrochemical sensors (tattoo-sensors, microfluidic paper-based devices and nanomotors) applied to user-friendly analytical chemistry for applications in healthcare (point of care), clinical, pharmaceutical, environmental and agri-food sectors.

• The Oronzio and Niccolò De Nora Foundation Young Author Prize 2022 was awarded to Sara Grechi, University of Milan , Italy, for her article "Natural-based chiral task-specific deep eutectic solvents: A novel, effective tool for enantiodiscrimination in electroanalysis", published in Electrochimica Acta. 380 (2021), 138189.

Nominations and applications for the 2023 ISE Prizes will be invited and must be submitted to the ISE Office between March 1st and May 1st, 2023.

Three Electrochimica Acta Travel Awards for Young Electrochemists, sponsored by Elsevier, and six ISE Travel Awards, aimed at encouraging the participation of young scientists in the 73rd ISE Annual Meeting, were awarded to Alexander Bagger, Bjorn Hasa, Luis Fernando Arenas, André Dourado, Paloma Almodóvar, Alessandro Pameté Facchin, Emmanuel Yambou, Samuel Perry, and Mariana Monteiro. Since the Annual Meeting was shifted to online, the awardees are allowed to use their award to cover the registration fees at ISE meetings in the next 3 years. The same number of Travel Awards will be awarded in 2023.

Society Journal

The Board of Editors of *Electrochimica Acta* during the past 12 months consisted of Robert Hillman (Editor-in-Chief), Sotiris Sotiropoulos (Special Issues Editor), Philippe Allongue, Gary Attard, Nick Birbilis, Aicheng Chen, Elena Ferapontova, Laurence Hardwick, Deborah Jones, Robert Kostecki, Rüdiger Kötz, Pawel Kulesza, Tomokazu Matsue, Angela Molina, Shi-Gang Sun and Jiang-Ping Tu.

The Impact Factor of the Society journal currently is at 7.336, up from 6.906 reported last year, and above the journal's impact factor recorded in all previous years. This result confirms the strength and position of *Electrochimica Acta* among electrochemistry journals *(Electrochimica Acta* ranks currently as 7th out of 30 journals in electrochemistry). It is important to note that *Electrochimica Acta* was able to adjust to the Covid-19 situation without losing its competitive edge, despite the decreased number of submissions which has not yet returned to the pre-covid level. Despite the lower number of submissions, the journal was able to attract a sufficient number of high quality submissions and to process them through the peer review process. The strong position of the journal in the electrochemical community is also attested by the large number of colleagues accepting reviewer assignments. The usage of the journal as projected from the number of downloads remains similar to that experienced in 2021. Thanks to the improved situation with organization of the scientific meetings in 2022, *Electrochimica Acta* will start to publish dedicated Special Issues collecting papers presented at the Society Meetings; topically oriented Special Issues will be produced in parallel. *Electrochimica Acta* was also included in a new initiative of the Publisher Elsevier: the so-called Cassyni project, in which selected papers published in the journal gain further visibility through online video seminars where the audience can meet the authors and discuss the research summarized in the paper. The first seminar of the series was dedicated to the paper *The rate-determining term of electrocatalytic reactions with first-order kinetics*", by Jun Huang, Xinwei Zhu and

Michael Eikerling. The seminar was well attended and it may be expected that the participation of *Electrochimica Acta* in the Cassyni project will further cement its position as a leading electrochemical journal.

Executive Committee

Elections were held in spring 2022, to refill three positions on the Executive Committee in accordance with the ISE Constitution and Bylaws. Plamen Atanassov was elected in an extremely close election run as a new ISE President Elect. Plamen will serve on the Executive Committee in this capacity in the period 2023-2024. I am pleased to welcome him and I am sure that he will greatly contribute to the future of our Society. I am grateful to Robert Kostecki who agreed to stand as candidate and, although not elected, received a large number of votes. Plamen Atanassov replaces on the Executive Committee Zhong-Qun Tian, who served as President Elect, President and Immediate Past president since 2017. Zhong-Qun has navigated our Society through the most confusing period of the Covid pandemic and we all are deeply indebted to him for his excellent leadership and service to the Society.

Monica Santamaria and Shelley Minteer were also elected to the Executive Committee and will serve as Treasurer and Vice President, respectively, in the term 2023-2025. They replace on the Executive Committee Gunther Wittstock and Robert Kostecki. Both Gunther and Robert have done an excellent job as Treasurer (2017-2022) and as Vice President (2020-2022) and our Society is in great debt to them for their outstanding service.

The elections of Secretary General (2024-2026) and two Vice-Presidents (2024-2026) will take place during the spring of 2023. A Nominating Committee chaired by Katharina Krischer (as the President), comprising Janice Limson, Krzysztof Fic, Elisabeth Lojou and Marc Koper (as the Immediate Past President), will select the candidates.

Divisions

The Division Officers, supported by Division members, play a central role in the life of the Society, by promoting scientific activities in their respective fields, preparing and implementing the scientific programs of the symposia of meetings of the Society, and organising divisional activities at Annual Meetings. In accordance with the two-year cycle, the Society held the election of Division Chair Elects in 2022. The following colleagues were elected to serve as Chair Elects in the period 2023-2024: Maria Cuartero Botia (Division 1), Carlo Santoro (Division 2), Sonia Dsoke (Division 3), Carmen Perez (Division 4), Carlos Ponce de Leon (Division 5), Ismael Diez Perez (Division 6), Mark Symes (Division 7). I would like to thank all Immediate past chairs who stepped down after 6 years of service to the Society for their efforts.

Regional Sections

In the calendar year 2022, the ISE had 43 recognized Regional Sections. The reports on the activities of most Regional Sections are available on the website of the Society (https://www.ise-online.org/ise-committees/RRreports/RR_Reports_2022).

Elections of Regional Representatives for the term 2023-2025 were held in various Regions. Peka Peljo (Finland), Lin Zhuang (China), Olivier Buriez (France), Csaba Janaky (Hungary), Ashish Satpati (India), Malachi Noked (Israel), Jelena Bajat (Serbia), Maria Escudero Escribano (Spain), Burak Ulgut (Turkey), Mark Symes (UK) and Adam Weber (USA) will serve as Regional Representatives in 2023-2025.
I gratefully thank the former Regional Representatives for their activities for ISE and I congratulate the new Regional Representatives on their election. Their active participation in the life of the Society, especially in recruiting new members and in maintaining and strengthening the links between the ISE and the local electrochemical communities, is of primary importance.

Committees
The term of Janice Limson as member of the Scientific Meetings Committee (SMC) ended on 31st December 2022. Rakel Wreland Lindstrom will replace her and will serve on the SMC for 3 years (2023-2025). Enrique Herrero will chair the SMC in 2023, the final year of his term.
In the Fellows Nominating Committee (FNC), Bingwei Mao was appointed to replace Hasuck Kim, whose regular five-year term ended on 31st December 2022. Being elected to the Executive Committee, Shelley Minteer cannot serve on the Fellow Nominating Committee and she will be replaced by Hubert Gasteiger for the duration of her tenure at the EC. Wolfgang Schuhmann will chair the committee in 2023.
I wish to thank Janice and Hasuck, for their numerous valuable contributions to the activities of the ISE committees, and Rakel, Hubert and Bingwei for agreeing to serve.

Membership
This year ISE recorded 3683 active members (including 15% students and 4% retired members). This number is slightly higher than the number that ISE recorded in 2021. This membership increase can be contributed to the extremely successful Annual Meeting in Jeju in 2021, which brought into the ISE family more than 600 new members from Asia. We expect that the membership remains stable in 2023 thanks to the return to the in-presence meetings. The ISE membership includes members from 80 countries and regions, which is the highest number of regions in the ISE history. The membership fees for 2023 have been maintained at the 2022 level, i.e. 50 € for ordinary members and 15 € for young and emeritus members. ISE will continue to improve service to its members through various online and on-site activities, and through topical and regional meetings.

The end of the 2022 also marks the end of my Presidency. In retrospect, it has turned out to be far more challenging than I originally expected. I must admit that ISE it is not the same as it was before the pandemic. The ISE has remained strong and active despite the adverse circumstances. In this light I want to sincerely thank all those people who have helped to guide our Society through the last two years. I have to mention the contribution of the Executive Committee (EC) and the ISE Office and I also would like to stress the contribution of all members supporting the Society. It was a privilege work with all of you!
At the end of my term I see clearly that the our society is reshaping and we need to adjust

to these developments. Many of our past ways and approaches may turn out to be inadequate to the challenges which lie ahead. On the other hand, I am sure that our Society is based on sound grounds and it will find this situation as an opportunity to rebuild itself to continue to successfully support electrochemistry all over the world.
It was a great honour to serve ISE and I hand over the office of the ISE President to Katharina Krischer who will lead the ISE in the next two years. I wish her all the luck in her task and I do hope she can count on your support in the coming years.
May I end this detailed letter with my best wishes to all of you for a healthy, peaceful, and happy New Year, and with the hope that we will meet again in person at an ISE Meeting in 2023.

Sincerely yours,

Marc Koper
ISE President 2021-2022
Leiden, December 31st, 2022