Where is European electroanalytical chemistry heading (the 20th International Conference on Electroanalysis –20th ESEAC Lisbon 2026)

From 7 to 11 June 2026, the 20th International Conference on Electroanalysis, organised by the European Society for ElectroAnalytical Chemistry (ESEAC), took place at the Faculty of Sciences of the University of Lisbon. Given the significance of this milestone for the flagship event of European electroanalytical chemistry, it is worth noting that the first edition of this conference took place in 1986 and was organized primarily by Prof. Malcolm R. Smyth (Dublin City University, Ireland), Prof. Paulino Tuñón-Blanco (University of Oviedo, Spain) and Prof. Ari Ivaska (Åbo Akademi University, Turku, Finland). Outstanding Czech electroanalytical chemists, Prof. Karel Štulík from the Department of Analytical Chemistry at the Faculty of Science, Charles University, and Prof. Karel Vytřas from the Department of Analytical Chemistry at what was then the University of Chemistry and Technology in Pardubice, who, at that time, represented Czech electroanalytical chemistry with great distinction on both the European and global analytical stages. The individual conferences were held in the following order and each made a significant contribution to expanding international collaboration in electroanalytical chemistry and enhancing its pan-European and global prestige: 1986 Dublin, Ireland; 1988 Turku, Finland; 1990 Gijón, Spain; 1992 Noordwijkerhout, the Netherlands; 1994 Venice, Italy; 1996 Durham, the United Kingdom; 1998 Coimbra, Portugal; 2000 Bonn, Germany[1]; 2002 Kraków, Poland[2]; 2004 Galway, Ireland[3], 2006 Bordeaux, France[4], 2008 Prague, Czech Republic[5], 2010 Gijón, Spain[6], 2012 Portorož, Slovenia[7], 2014 Malmö, Sweden[8], 2016 Bath, United Kingdom[9], 2018 Rhodes, Greece[10], 2020 postponed due to the COVID-19 pandemic, 2022 Vilnius, Lithuania[11], 2024 Ulm, Germany[12], 2026 Lisbon, Portugal[13].

In Lisbon, nearly 300 participants from 42 countries presented their findings in the rapidly developing fields of electroanalytical methods, namely micro- and nanoelectroanalysis, hybrid electrochemistry, new electrode materials and configurations, electrochemical sensors and biosensors, wearable sensors, 3D-printed sensors, photoelectrochemical systems and the applications of these methods in medicine, environmental analysis, the food industry, agriculture and other natural and technical disciplines. Four plenary, six keynote and twelve invited lectures, 96 oral presentations and 165 posters attest to the significance of this conference. (It is also worth noting that the Czech Republic, with nine participants, ranked as low as tenth among the participating countries, which represents a significant decline compared with ESEAC 2024 in Ulm. This decline undoubtedly reflects the deteriorating financial situation at chemistry-oriented universities and institutes of the Czech Academy of Sciences.)

Attention was also paid to the use of artificial intelligence and materials for energy conversion and storage. The plenary lectures focused on paper-based electrochemical (bio)sensors (Fabiana Arduini, University of Rome Tor Vergata, Italy), enzyme-mimicking nanoparticles (Justin Gooding, University of New South Wales, Australia), modern approaches to electroanalysis (Alexander Kuhn, University of Bordeaux, France) and the potential of electrocatalytic methods ranging from picoamperes to amperes (Kristina Tschulik, Ruhr University Bochum, Germany). I am delighted to inform our readers that Simona Baluchová from the Department of Analytical Chemistry at the Faculty of Science, Charles University in Prague, was among the twelve invited speakers. The representation of Czech electroanalytical groups in the oral presentations was also noteworthy (Zdeňka Sofer from the University of Chemistry and Technology, Prague; Petra Skládal from Masaryk University; and the author of this article from the Faculty of Science, Charles University). The same can be said of the local organising committee, of which Július Gajdár, a graduate of our department, was a member, and of the scientific committee of this conference, of which the author of this article was a member (as with most previous conferences in this impressive series). A Czech connection could also be found amongst the award-winning posters – Mia Ambuski (Colorado State University, USA), whose supervisor is Dr Romana Jarošová, an alumna of our department.

Those interested in conference materials may contact the author of this article, whose participation in the conference was made possible thanks to the support of the management of the Faculty of Science, Charles University (namely Assoc. Prof. RNDr. Vladimír Krylov, Ph.D., Dean of the Faculty of Science, Charles University, Prof. RNDr. Tomáš Obšil, Ph.D., Vice-Dean for the Chemistry Section of the Faculty of Science, Charles University, and Assoc. Prof. RNDr. Karel Nesměrák, Ph.D., Head of the Department of Analytical Chemistry at the Faculty of Science, Charles University). And my customary thanks also go to the companies Metrohm (https://www.metrohm.com/cs_cz.html), Nicolet CZ and ChromSpec for their significant support for the development of analytical chemistry in our country, even in these challenging times. The author would like to take this opportunity to thank them for their understanding and support for the activities of the Czech Chemical Society and the its Division of Analytical Chemistry. Czech electroanalytical chemists will certainly find it interesting to know that the next ESEAC 2028 conference will take

place in Naples, Italy, and that Simona Baluchová from the Faculty of Science, Charles University, will be a member of the scientific committee there, alongside the author of this article.

Jiří Barek, UNESCO Laboratory of Environmental Electrochemistry, Department of Analytical Chemistry, Faculty of Science, Charles University, Chair of the Division of Analytical Chemistry of the Czech Chemical Society, barek@natur.cuni.cz

REFERENCES

1. https://juser.fz-juelich.de/record/20791?ln=en, downloaded on 4 September 2026.
2. https://badap.agh.edu.pl/publikacja/9884, downloaded on 4 September 2026.
3. https://analyticalsciencejournals.onlinelibrary.wiley.com/toc/15214109/2005/17/5-6, downloaded on 4 September 2026.
4. https://analyticalsciencejournals.onlinelibrary.wiley.com/toc/15214109/2007/19/2-3, downloaded on 4 September 2026.
5. https://analyticalsciencejournals.onlinelibrary.wiley.com/toc/15214109/2009/21/3-5, downloaded on 4 September 2026.
6. https://analyticalsciencejournals.onlinelibrary.wiley.com/toc/15214109/2011/23/1, downloaded on 4 September 2026.
7. https://analyticalsciencejournals.onlinelibrary.wiley.com/toc/15214109/2013/25/1, downloaded on 4 September 2026.
8. https://analyticalsciencejournals.onlinelibrary.wiley.com/toc/15214109/2015/27/1, downloaded on 4 September 2026.
9. https://analyticalsciencejournals.onlinelibrary.wiley.com/toc/15214109/2017/29/1, downloaded on 4 September 2026.
10. https://analyticalsciencejournals.onlinelibrary.wiley.com/toc/15214109/2019/31/2, downloaded on 4 September 2026.
11. https://analyticalsciencejournals.onlinelibrary.wiley.com/toc/15214109/2023/35/7, downloaded on 4 September 2026.
12. https://www.uni-ulm.de/nawi/eseac-2024/, downloaded on 4 September 2026.
13. https://eseac2026.events.chemistry.pt/, downloaded on 4 September 2026.

Use of this work is governed by the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and copying of the work in any medium, provided the work title, authors, source and license are properly credited.