

Post-Conference Report

International Conference Celebrating the 220th Anniversary of the First Theory of Electrolysis by Theodor von Grotthuss (TvG-220) (<https://www.grotthuss2025.ftmc.lt/>)



The year 2025 marks 220th anniversary of the publication of the first theory of electrolysis proposed by Theodor von Grotthuss (1785 – 1822), a scientist who spent most of his life in Lithuania. On this occasion the **International Conference Celebrating the 220th Anniversary of the First Theory of Electrolysis by Theodor von Grotthuss** was organized by the Center for Physical Sciences and Technology (FTMC) and the Lithuanian Chemical Society. The event took place in Vilnius, Lithuania on June 4–6, 2025 at the Center for Physical Sciences and Technology (FTMC) in Vilnius, Lithuania. Hosted as part of the Chemistry & Chemical Technology (CCT-2025) series, the event was supported by ISE.

The conference attracted approximately 130 participants, with about half coming from abroad, representing countries such as Poland, Latvia, Estonia, Finland, Slovenia, Romania, Germany, United Kingdom, France, Spain, Italy, Sweden, Brazil, Israel, Singapore, Czechia, the Netherlands, Croatia, and the USA. Notably, students made up around 40% of the attendees.

In his opening speech, conference chair Dr. Linas Vilčiauskas (ISE member) emphasized the enduring support of the ISE, noting that this is already the third event organized by Lithuanian electrochemists to honor Grotthuss's seminal work. Previous conferences dedicated to the 200th and 210th anniversaries of the Theory of Electrolysis were held in 2005 and 2016, respectively, and were also sponsored by the ISE.

The program featured four keynote lectures delivered by distinguished scientists: Richard G. Compton (University of Oxford, UK), Klaus-Dieter Kreuer (Max Planck Institute, Germany), Erik T. J. Nibbering (Max Born Institute, Germany), and Michael Eikerling (Forschungszentrum Jülich, Germany). In addition, the conference included 17 invited talks, 21 regular oral presentations, and 80 poster presentations. Two keynote speakers - Michael Eikerling and Erik Nibbering - were awarded the Theodor von Grotthuss Medals by Prof. Aivaras Kareiva, Chairman of the Theodor von Grotthuss Foundation Board. Notably, the other two keynote lecturers, Richard Compton and Klaus-Dieter Kreuer, are recipients of this award.

The conference covered a wide range of topics, including hydrogen bonding and proton transport, spectroscopy, electrolysis and fuel cells, photo(electro)chemistry, batteries, energy research, geochemistry etc. On the final day, an industrial session was held featuring presentations by representatives from companies such as Elcogen (Estonia), Ignitis (Lithuania), and Clausthal University of Technology (Germany).

The conference Gala Dinner was held on June 5 at the gastrobar “Valdovų sodas” in the Palace of the Grand Dukes of Lithuania. During the dinner the winners of the best student poster presentation awards were announced and presented with prizes.

On June 7, conference participants had the opportunity to attend the European Chemical Society (EuChemS) Historical Landmark Award ceremony, organized in collaboration with the Lithuanian Chemical Society and members of the ISE regional group, including regional representative J. Juodkazytė. EuChemS awarded the 2023 Historical Landmarks Award to the Theodor von Grotthuss Laboratory in Gedučiai, near Žeimelis, Lithuania. To commemorate this recognition, a memorial plaque was unveiled in Žeimelis, marking the site's historical significance in the development of chemical science. <https://www.euchems.eu/euchems-historical-landmark-award-grotthuss-laboratory-lithuania/>



Monument to Theodor von Grotthuss in Žeimelis, Lithuania



EuChemS Historical Landmark plaque in Žeimelis, Lithuania

TvG-220 achieved all of its objectives: celebrating a historic milestone, disseminating cutting-edge research, and forging strong international and interdisciplinary partnerships. Thanks to the ISE sponsorship, we were able to provide travel and accommodation support to invited speakers and organize awards for the best student poster presentations. The organizers extend their sincere appreciation for the support provided by the ISE.

Sincerely,

Jurga Juodkazytė

ISE Regional Representative, Lithuania