Annual Reports of Activities from member societies 2022-2023
BELGIUM .................................................................................................................. 2
DENMARK ................................................................................................................... 3
FRANCE ....................................................................................................................... 4
GERMANY .................................................................................................................... 8
NORWAY ...................................................................................................................... 11
PORTUGAL .................................................................................................................. 12
SERBIA ......................................................................................................................... 14
SPAIN .......................................................................................................................... 17
SWEDEN ...................................................................................................................... 19
UNITED KINGDOM ..................................................................................................... 23
The non-profit Mémosciences cooperates with the Division for the History of Chemistry from the Société Royale de Chimie (SRC) since the creation of that Division in 1999. The SRC gathers more than 300 members from the Frenchspeaking chemical community, including young chemists, corporate and academic chemists. The SRC organizes an annual event and publishes a quaterly magazine, Chimie Nouvelle. In 2009 the Division d’Histoire de la Chimie was merged with the Division d’Enseignement, however both groups have continued their own activities.

Due to the Covid the main activity which was the organization of conferences “Elément d’Histoire de la Chimie” has been put to a halt, with the exception of a conference planned for December 2021 continuing the topic of the history of the Periodic System:

Figures de l’ombre. La place des femmes dans l’histoire du système périodique des éléments chimiques
December 2, 2022 – 16.00 – Louvain-la-neuve

Online conferences as a regular programming possibility have not been considered up to now.

The Covid hiatus has on the other hand prompted discussions on the future of the SRC and in particular some reflections on two topics that relate to the history:
- managing the SRC archives most of which has been kept in the SRC secretariat
- considering a landmark scheme, in collaboration with the National Committee on Chemistry which gatehrs all actors in chemistry in Belgium

January 2024
Brigitte Van Tiggelen
DENMARK

Report on activities in The Danish Society for the History of Chemistry 2022

The year started with our General Assembly in November 2021.

At the annual meeting in August 2022 of The Danish Chemical Society the Historical Society hosted two quite well attended lectures:

(1) Helge Kragh: *The Childhood of Quantum Chemistry: A Danish Perspectiv.*

(2) Ture Damhus & Asbjørn Petersen: *A historic collection of compounds from the birth of coordination chemistry.*

The presentation from (2) was made public at the website of the society.

Also at this annual meeting the Society had a stand selling books from the Society's production, now counting 23 volumes.

The work with registration of the more than 800 samples from S. M. Jørgensen was continued.

After the termination of the corona we decided to revive the tradition of a summer excursion with a trip to the black powder mill in Frederiksværk. Unfortunately the number of registration was so small that we cancelled the trip.

The year ended with our general assembly in November. In the chemical feature before this Asbjørn Petersen showed experiments from some classical books with spectacular experiment for the common man.
The Groupe d’histoire de la chimie (GHC) of the Société chimique de France (SCF) has been organized into two independent entities since 2022. On the one hand, the group itself, which is specifically aimed at SCF chemists, and on the other hand the Société française d’histoire de la chimie (French Society for the History of Chemistry or SFHC), which is an independent organization open to members who are not chemists, but the SFHC is linked to the GHC by an agreement.

The GHC organizes meetings within the SCF, for its members, and training activities for teachers in the history of chemistry. The SFHC is responsible for organizing national or international conferences, in conjunction with the GHC. Members of both entities are informed of the activities of both entities. The list of activities of the two entities is accessible on:

https://new.societechimiquedefrance.fr/groupes/groupe-histoire-de-la-chimie/

and https://www.sfhc.fr/ . See the appendices at the end of this text.

During the years 2022-2023, the GHC produced regular webinars, lasting approximately 30 minutes, on Lavoisier, Chaptal, Hassenfratz, Ampère, Pasteur, and Goethe. (See Appendix 1, and YouTube). The GHC also publishes a Reading of the month relating to the rereading of a classic work of chemistry or on the history of chemistry

(see https://new.societechimiquedefrance.fr/groupes/groupe-histoire-de-la-chimie/lectures-du mois/)

These reviews are written by Xavier Bataille, Éric Jacques, Antoine Renier-Lajeunie. Several publications on the history of chemistry also appeared in l’Actualité Chimique, journal of the SCF, and several were written by members of the GHC. (See Appendix 2). Furthermore, its members give conferences or papers in various events: participation in the conference of the Société d’histoire de la pharmacie (Pasteur's notebooks by X. Bataille), at the SFHC sessions, and at the congress of the Société française d’histoire des sciences et des techniques (SFHST, Bordeaux, April 2023). (See Appendix 3).

Likewise, several teacher training days were organized by Éric Jacques, at the Maison pour la science in Nancy. Also note the participation in JIREC’s organized by the Education and Training Division of the SCF. (See Appendix 4).

Also noting the participation to the conference on the Heritage of Chemistry (co-organized by D. Fauque): The laboratory: its buildings, its instruments and its chemists, organized by three entities : the SFHC, Rennes en sciences and ASEISTE, in Rennes (France), on November 23 and 24, 2023. It was supported by the GHC. See https://www.sfhc.fr/actualites/
The joint activities of these two entities have therefore been numerous over the last two years. (See Appendix 5).

D. Fauque, delegate for the SCF, France

Appendices

Appendix 1 : Webinars


Appendix 2 : Papers in the Actualité Chimique (journal of the SCF)

- Éric Jacques, « Les chimistes nancéiens et le Traité de Grignard », n°489, novembre 2023,

- Id. « Jean-Henri Hassenfratz, entre collaboration et compétition au laboratoire de l’Arsenal (1786-1792) », n°486, juillet-août 2023,

- Id., « Le calorique : un modèle historique utile à l’enseignement scientifique (second part) », n°482, mars 2023,

- Id., « Le calorique : un modèle historique utile à l’enseignement scientifique (first part) », n°475, juillet-août 2022,


See: https://new.societechimiquedefrance.fr/auteur/jacques-eric/

Appendix 3 : Symposias, Lectures, papers

1. Symposium on the heritage of chemistry, co-organized by Danielle Fauque (23-24 November 23-24, 2023), ENSCR, Rennes. Programme :

Day 1 : Given Papers

- É. Jacques, « Lavoisier, ses expériences et son laboratoire » (keynote lecture),

- G. Le Guillanton, « Le chimiste Raymond PAUL et ses manuscrits »,

- S. Hjimans, « Travail scientifique et travail domestique : le laboratoire de Berzelius »,

- P. Pénicaud, « Quels statuts juridiques pour le patrimoine de la chimie ? »,

- G. Chatry, « La chimie en océanographie du XVIIIe au XXIe siècles »,

- S. Soomal, “Settler colonial laboratories and the infrastructures of chemical knowledge”,
- C. Bailly, « Le laboratoire et sa restauration : les collections de la salle de cours du laboratoire de chimie du MNHN, Paris »,
- C. Sterken, « “If you satisfy an astronomer, then you can satisfy anyone”: l’héritage scientifique des premières photographies célestes”.

See all details and abstracts on: https://www.sfhc.fr/actualites/

Day 2: Guided tours of the collections in Rennes
- The collections of the University of Rennes,
- The heritage collections of the Émile Zola high school in Rennes,
- The Rennais Hospital Heritage Conservatory,
- The scientific and heritage collections of the Institut Agro Rennes-Angers,
- The Departmental Archives of Ille-et-Vilaine,
- The experimental psychology laboratory,
- The Des Abbayes lichen collections and its library at the Faculty of Pharmacy.

See details and concerned pages on https://www.sfhc.fr/actualites/


Appendix 4: Teacher training
Participation in the training of the Maison pour la Science, Nancy:
- É. Jacques, X. Bataille, A. Renier-Lajeunie, April 7, 2022, Practice of the History of Science and New Programs,
- É. Jacques, March 2, 2022. Bring into the classroom women and men who study science and its history, Lavoisier, Volta, Marie Curie…
- Reminder: É. Jacques, November 29 and December 5, 2021. Reproducing remarkable historical experiences,
- X. Bataille, participation in the organization of JIREC 2024 (Study days, organized by the Education and Training Division of the SCF: https://jirec.org/ and https://new.societechimiquedefrance.fr/divisions/enseignement-formation/)
Appendix 5: Collaboration with other organizations

- Partnerships with the SFHC: https://www.sfhc.fr/
- Support for the SFHC for participation in the conference on the heritage of chemistry with Rennes en sciences (http://www.rennesen sciences.fr/) and ASEISTE (http://www.aseiste.org/), at the ENSCR (National School of Chemistry of Rennes), Rennes, November 23 and 24, 2023.
- Website managing: https://new.societechemicaldefrance.fr/groupes/groupe-histoire-de-la-chemin/

Acronyms

**ENSCR**: École nationale supérieure de chimie de Rennes (High Engineering School in Chemistry).

**SFHST**: French Society for the History of Science and Technology.

**JIREC**: Journées d’étude de l’innovation et de la recherche pour l’enseignement de la chimie. Workshop of innovation and research for chemistry teaching.

**SFHST**: Société française d’histoire des sciences et des techniques. French Society for the History of Science and Technology.
GERMANY

Report 2022–2023 of the GDCh-Fachgruppe ‘Geschichte der Chemie’ (German Chemical Society: History of Chemistry Division)

The History Division (Fachgruppe ‘Geschichte der Chemie’) of the German Chemical Society (GDCh) has about 400 members, among them active and retired chemists, but also student members, young chemists and professional historians of science. The board has seven members. In early 2023 Carsten Reinhardt (chair until then) and Gisela Boeck (vice chair) swapped their positions so that Gisela Boeck, Universität Rostock, gisela.boeck@uni-rostock.de, is now in charge of the Fachgruppe. In the EuChemS Working Party Germany is represented by two delegates: Carmen Schmechel, Freie Universität Berlin, Philosophy Department, carmen.schmechel@gmail.com, and Christoph Meinel, Universität Regensburg, History of Science, christoph.meinel@ur.de.

Meetings

As a rule, the Fachgruppe meets every two years for a two-day conference attended on average by 80 people. Wherever possible, we choose a venue that is significant in the history of chemistry. A list of all meetings and their programmes since 1961 is to be found on the homepage.

The first regular meeting after the pandemic took place in Karlsruhe in June 2022; the next one is scheduled to be held in Giessen on 21–23 March 2024, and will include a visit to Liebig’s historic laboratory. Our conferences are usually the setting for the presentation of two prestigious awards: the Paul Bunge Prize for the history of scientific instruments, and the Bettina Haupt Prize.

As part of the GDCh Wissenschaftsforum Chemie 2023 in Dresden in September 2023, two sessions were devoted to the topic “Rethinking History of Chemistry”. For this occasion a special 1.5 hour podcast “#Rethinking Chemistry – Wie forschte man früher?” was produced to discuss how research, cooperation and interdisciplinarity worked in the past and what can be learned from this for today and the future.

Awards

The Bettina Haupt Prize of the GDCh-Fachgruppe ‘Geschichte der Chemie’ honours outstanding work by young historians of chemistry from the German-speaking world. It was established in commemoration of Bettina Haupt (1954–1985), author of a book on the history of chemistry textbooks (1987). In 2022, the Prize was awarded to Christopher Halm for his still unpublished PhD dissertation on the early history of agricultural chemistry.

Publications

Since 1988 the Fachgruppe has published the journal Mitteilungen, which is devoted to all aspects of the history of chemistry and the chemical industry. It is the only German-language journal of its kind. All issues are digitised and open access, and future issues will be published simultaneously in print and online. From volume 26 (2021) onwards, the
editorship of the journal has changed and is now in the hands of Carsten Reinhardt, Bielefeld.

In addition, a detailed annual calendar "Milestones in Chemistry", compiled by Yvonne Remane and Wladimir Reschetilowski in cooperation with the Fachgruppe, is published in the January issue of the GDCh membership journal Nachrichten aus der Chemie. The current issue is available by open access. Another calendar “Von Schuljahr zu Schuljahr” compiled by Gisela Boeck is published in the journal ChemKon of the GDCh Division of Chemical Education.

The new book series “Lives in Chemistry”, which was launched in 2021 with the support of the Fachgruppe and aims to publish autobiographies of eminent chemists, has had a remarkable start. Nine volumes have been published to date, and several more are currently in the pipeline. The series even won the Gold Medal Award of the Stiftung Buchkunst as one of the most beautifully designed books published in Germany in 2022.

Remember, the Fachgruppe supports CHEM-HIST, the international mailing list for the history of chemistry. Historians of chemistry or chemists interested in the history of the discipline are welcome to join the list and share news with the international history of chemistry community.

**Historical Sites**

In a beautiful ceremony on 29 March 2023, Justus Liebig's old laboratory in Giessen was awarded the EuChemS Historical Landmarks Award at European level in recognition of its role in the history of chemistry. Liebig worked in this building from 1824 to 1852, and it was here that not only his famous calorimeter but also the idea of the research group was born. The event was widely publicised in the local and international press.

In 2022 the legacy of Karl Ziegler and Giulio Natta was given the same mark of distinction by EuChemS by giving a joint EuChemS Historical Landmarks Award to the historic laboratory building of the Max-Planck-Institut für Kohlenforschung in Mühlheim, built in 1914, where Ziegler’s team made its groundbreaking discoveries, together with the Giulio Natta Department of Chemistry, Materials and Chemical Engineering at the Politecnico in Milano.

The similar GDCh initiative Historische Stätten der Chemie, which runs very successfully since 1999, has added two additional Historic Sites to the list: Göttingen’s Old Chemical Laboratory of 1783 received the award to mark the place where Friedrich Stromeyer (1776–1835), Friedrich Wöhler (1800–1882), Hans Hübner (1837–1884), Victor Meyer (1848–1897), and Otto Wallach (1847–1931) worked and made Göttingen a centre of modern chemical education and research excellence.

In 2023, in an even more impressive ceremony, the Laboratorium für Farben und Textilchemie of the Technische Hochschule Dresden and its famous collection of colours and dyes received the most recent award in this programme. The impressive building was inaugurated in 1926 as a laboratory for colours and textile chemistry and the headquarters of the institute of the same name. The laboratory was founded in 1893 as the first university laboratory of its kind by Richard Möhlauf (1857–1940). Between 1913 and 1954, under the leadership of Walter König (1878–1964), the institute developed into a
world-leading institution for research into synthetic dyes and their applications, including the development of colour photography.

Also in 2023, the Max Planck Institute for Chemistry in Mainz received the Citations for Chemical Breakthrough Award from the ACS Division of History of Chemistry in recognition of the 1939 paper by Otto Hahn and Fritz Strassmann on the isolation of a radioactive barium isotope obtained by exposing uranium to neutron radiation.

Unfortunately, the German history of chemistry community was not informed of this event by our American colleagues.

**Networks**

The GDCh-Fachgruppe ‘Geschichte der Chemie’ has recently updated its website to provide even more information about its activities and related topics in the history of chemistry. With the help of many delegates from the EuChemS Working Party, we have also created the most comprehensive worldwide directory to date of historical divisions of chemical societies, independent societies for the history of chemistry, societies dedicated to the person and work of individual chemists, other relevant institutions, chemical heritage programmes, journals and newsletters in the history of chemistry, and other related resources. We offer this directory to the entire history of chemistry community and explicitly ask for your help in keeping it up to date. When using the GDCh homepages, please note that the English versions are machine-translated from the corresponding German pages, so mistranslations are inevitable.)

Carmen Schmechel, Berlin, and Christoph Meinel, Regensburg
In 2022 and 2023, the board of the history of chemistry group of the Norwegian Chemical Society has consisted of Annette Lykknes (chair), Jonas Persson (vice-chair 2022), Hartmut Kutzke (vice-chair 2023) and Leiv Sydnes (board member). Annette Lykknes is the official delegate of the Norwegian Chemical Society to the Working Party on the History of Chemistry.

The group has organized two meetings per year. Both years, the January meeting was held in Oslo. Both in 2022 and in 2023 the theme was chemistry for cultural heritage. In 2022, the meeting was combined with a tour of an exhibition at the Museum for Cultural History at the University of Oslo. In 2023, the group was given the unique opportunity to hold its meeting in the research section of the new Munch museum. The meeting included a tour of the laboratories as well as of the museum itself. The annual general assembly of the history group was held during the January meetings.

In 2022, a second meeting was held in Bergen in September, with a visit of the University Museum and a lecture on the history of mercury. In September 2023, a meeting was organized at the Museum of Archeology of the University of Stavanger, including a tour and a lecture on the use of chemical investigations of archeological materials.

The history of chemistry group has co-organized the 9th Norwegian Conference on the History of Science in Trondheim in November/December 2023 and sponsored a session on history of chemistry as part of the program.

The group has also initiated a nomination for the EuChemS Landmark Award on behalf of the Norwegian Chemical Society.
PORTUGAL

Report from the Portuguese Group on the History of Chemistry | 2023

The exhibition “What if Mendeleev were here?”, developed as a cultural and educational project for the commemorations of the International Year of the Periodic Table, in 2019, has been maintained in public presentation at the FÁBRICA - Centro Ciência Viva de Aveiro, since July 3, 2021, and until the end of December 2023. It will circulate from then on to other Portuguese institutions through the Ciência Viva network.

A book publication (Oct. 2022) - *Filhas de Prometeu* [Prometheus’ daughters] by João Paulo André, chemistry professor at the University of Minho.

At the Lisbon Academy of Sciences - Bernard Herold, retired chemistry professor from the Lisbon Technical University got a public lecture entitled "A Fantasia na Ciência na opinião de van't Hoff" [Fantasy in Science in van’t Hoff’s opinion] (March 2021).

During this last biennium, and promoting greater proximity among members, the Group intensified the experience of holding webinars, namely

- Mars 31, 2022 – A Idade do Mercúrio _ João Oliveira & Isabel Malaquias
- June 23, 2022 - O Laboratório Portátil do Instituto Superior Técnico – A capa da (in)visibilidade_ Cristina Marques
- October 14, 2022 - Aspetos históricos no desenvolvimento da química de coloides e implicações nas Nanociências _ Tito Trindade
- October 28, 2022 - Dois milénios de química no feminino _ João Paulo André
- Mars 9, 2023 – Fractais em Química _ João Oliveira & Helmuth Malonek
- June 1, 2023 - Para Ferreira da Silva, 100 anos depois: a reinvenção do ensino de Química na Academia do Porto (1877-1911) _ José Ferraz-Caetano

The Business Meeting of the Working Party, held virtually on May 20, 2021, was attended by the Portuguese representative and a participation also occurred at the Heritage and History of Chemistry: WPHC Online Event, 20 May 2021.

During this period, two national meetings were held on the History of Chemistry (the first one occurred on Sept. 17-18, 2021 and the second, on Sept. 7-8, 2023), both online. During the this last, a special attention was given to the commemorations of Ferreira da Silva’s centenary of death, the leading Portuguese chemist that was the first President of the Portuguese Chemical Society, and a bibliographical exhibition is still in public display at the main Library of the University of Aveiro and will circulate in January to other university centers in other towns.

The 2021 EuChemS Historical Landmark award (regional level) was awarded to the “Three laboratories” project of Portugal.

Participation in different events: Global Women Breakfast (Feb 9, 2021), Heritage and History of Chemistry, EuChemS Professional Networks meeting (Lisbon, Aug 27, 2022, as the WP vice- chair), at the 8th European Chemistry Congress (8thECC) public session "Chemical
collections and historical laboratories" (MUHNAC, Lisbon, Aug. 28, 2022), at the 8thECC) session "Chemistry and Heritage: preserving and sharing" (Lisbon, Aug. 30, 2022), and at the 13ICHC (Vilnius, May 23-26, 2023) and WPHC meeting (May 26, 2023, attended by the vice-chair of the Portuguese History of Chemistry Group).

Isabel Malaquias served as vice-chair of the WPHC during the period 2021-2023.

December 21, 2023

Isabel Malaquias
Portuguese Representative at the WP-HC
Abstract:

The activities of the SCS Working Party on the History of Chemistry during the period from January 2022 to December 2023 have been associated with: (i) organization of the scientific meetings; (ii) activities in the Great Serbian Chemists' Collection at the University of Belgrade - Faculty of Chemistry; (iii) commemoration of the 175th birth anniversary of chemist Sima Lozanić (iv) publication of the Chemical Review and the Journal of the Serbian Chemical Society.

1. Organization of the scientific meetings which include a section for the history of chemistry

The April days on chemistry teaching - the 31th national meeting of chemistry teachers was held online on 20 - 21 April 2022. The April days on chemistry teaching - the 32nd national meeting of chemistry teachers and the 4th Conference of Chemistry Didactics was held on 24 -25 April 2023. This event has been traditionally organized for more than 30 years by the University of Belgrade - Faculty of Chemistry and the Serbian Chemical Society. The conference is attended by chemistry teachers from primary and secondary schools in Serbia and students and staff from universities where chemistry teachers are educated. One of the conferences’ topics is History of chemistry in chemistry teaching.

2. Activities in the Great Serbian Chemists' Collection at the University of Belgrade - Faculty of Chemistry

The Great Serbian Chemists' Collection at the University of Belgrade - Faculty of Chemistry is in the Worldwide Database of University Museums and Collections (UMAC).


The Great Serbian Chemists' Collection was visited by 1882 visitors in 2022 year, and 1028 visitors in 2023 year. The majority of them were primary and secondary school students.

The Great Serbian Chemists' Collection participated in few national and international events in which academic heritage in domain of chemistry was presented. Sladana Savić, curator of the Great Serbian Chemists' Collection, participated in the public event in the frame of the 8th European Chemistry Congress "Chemical collections and historical laboratories" and held a presentation The chemical collection of the University of Belgrade (28th August 2022, Lisbon, Portugal)

https://cherry.chem.bg.ac.rs/handle/123456789/5911

University of Belgrade - Faculty of Chemistry took part in an online campaign European Academic Heritage Day, organised by the Universeum, European Academic Heritage Network, in 2022 and 2023.
University of Belgrade - Faculty of Chemistry was coordinator of the project Digitization of exhibits from Sima Lozanić’s legacy funded by the Ministry of Culture of the Republic of Serbia. The project includes (i) digital recording of exhibits from Sima Lozanić's legacy (bottles with chemicals, chemical instruments and equipment), which are preserved in the Great Serbian Chemists' Collection, and (ii) creating metadata of recorded objects and storing complete recordings in the repository of the Audiovisual Archive and the Serbian Academy of Sciences and Arts. During the project implementation in 2023, the photos of 260 objects are made and appropriate metadata are prepared. [https://www.chem.bg.ac.rs/projekti/233/index-en.html](https://www.chem.bg.ac.rs/projekti/233/index-en.html)

3. Commemoration of the 175th birth anniversary of chemist Sima Lozanić (The Year of Academician Sima Lozanić)

Sima Lozanić (1847-1935) was a chemist, professor and a rector of the Belgrade Higher School, the first rector in the history of the University of Belgrade, the president of the Serbian Royal Academy, envoy to London, minister of national industry and minister of foreign affairs. His scientific papers, some of which have been cited to this day, put him among our most significant scholars. Through his textbooks on inorganic and organic chemistry, he introduced modern chemistry to the Belgrade Higher School, during the period when it was being taught in the most developed European countries. Also, he worked on compiling a modern chemistry curriculum, textbook and introducing teaching through experiments in secondary schools. In his capacity as the minister of industry, he passed laws which sped up the development and industrialization of Serbia. He also made a significant achievement in the exploration of the natural resources of Serbia, where he analysed ore, minerals, meteorites, as well as mineral and potable water.

As part of the commemoration of the 175th birth anniversary of chemist Sima Lozanić, to whom the Serbian Academy of Science and Arts dedicated the year 2023, following activities were organized:

- The two-day scientific conference titled Sima Lozanić’s Contribution to Science, Education, Economy and Society was organized at the Serbian Academy of Sciences and Arts, on 10-11 May 2023 and the monograph of his work was prepared. [https://www.sanu.ac.rs/en/scientific-conference-sima-lozanic-s-contribution-to-science-education-economy-and-society/](https://www.sanu.ac.rs/en/scientific-conference-sima-lozanic-s-contribution-to-science-education-economy-and-society/)

- Exhibition with accompanied catalogue titled Sima Lozanić: Knight of Serbian Science, authored by Snežana Bojović has been organized in the Serbian Academy of Sciences and Arts Gallery. The author of the exhibition design is Ljiljana Radosavljević. The project has been realized in cooperation with the University of Belgrade - Faculty of Chemistry. The exhibition was opened on 26 December 2023 and will be on display until 25 February 2024. It has been realized with the financial support of the Assembly of the City of Belgrade. [https://www.sanu.ac.rs/en/exhibition-sima-lozanic-knight-of-serbian-science/](https://www.sanu.ac.rs/en/exhibition-sima-lozanic-knight-of-serbian-science/)
A film about Sima Lozanić’s life and work titled *Sima Lozanić, without tiredness and rest*, was recorded in a production of Alumni organization of Faculty of Philology University of Belgrade. A premier of the film was scheduled for the 31st January of 2024.

4. Publications

The Serbian Chemical Society publishes six issues of the journal *Chemical Review* per year. Every year, the cover page of this journal is dedicated to one person from the national or international history of chemistry or to some important historical events related to chemistry. The cover page of *Chemical Review* in 2022 had been dedicated to 125 year of foundation of the Serbian Chemical Society, while the cover page in 2023 was dedicated to 175 years of Sima Lozanić’s birth.

The Serbian Chemical Society publishes twelve issues of the *Journal of the Serbian Chemical Society* per year. This journal contains a section dedicated to the History of chemistry and chemistry education. The Impact Factor of this journal was 1.175 in 2021 and 1.100 in 2022.

Belgrade, Dr Vesna Milanović Maštrapović, Assistant Professor
2024/01/24 University of Belgrade - Faculty of Chemistry
Delegate from the Serbian Chemical Society
SPAIN


The specialised division on History of Science (GEHCi) of the Spanish Royal Society of Chemistry (RSEQ) currently has 101 members, and it is directed by Inés Pellón-González (professor at the University of the Basque Country, UPV/EHU). In the period 2022-2023, the GEHCi has been involved –either participating or funding- in the following activities:

-S1. Didáctica, Historia y Divulgación de la Química. It was a conference panel organized as a part of the XXIX Reunión Bienal de la RSEQ (Zaragoza, Spain, Feb 8, 2023).

-IX Escuela de Verano de Historia de la Química (Logroño, Spain, July 12-14, 2023). It was a summer school focused on the language of chemistry, considering both traductions and nomenclature. It included an opening plenary lecture by Inés Pellon on the chemical nomenclature by Lavoisier; followed by other papers and round tables, as well as a closing session with a paper by Javier García Martínez (president of the IUPAC).

-The GEHCi members José Ramón Bertomeu and Ignacio Suay Matallana has organized a seminar series titled Energy: Past and present in autumn 2022. The invited speakers were Roberto Cantoni, Cara Daggett, Tatiana Kasperski, and Anaël Marrec. Their talks are available online jointly with other divulgate materials and interviews. Additionally, these authors contributed to the online book Saberes en Acción published by the Lopez Piñero Interuniversity Institute. It includes a chapter (chapter 21) with an introduction by the organizers and the contributions of the four authors.

-Members of GEHCi of the Valencian region (Lopez Piñero Interuniversity Institute) organize every year a Master and doctoral online program on History of Science and Communication, including several lectures on history of chemistry.

-Members of GEHCi of the Valencian region organized a session on science and cinema with secondary school teachers: IX Matinal on History of Science and Teaching Science (February 2023).

-Members of GEHCi of Catalonia organize every year a Master and doctoral program on History of Science and Communication, including several lectures on history of chemistry.

-The GEHCi has an active communication activity, by sending updates and relevant news by email to all its members. It has also created a Facebook group titled “Historia de la Ciencia (GE de la RSEQ)” to inform about the activities of the group.
The following report covers the period between from November 2022 to June 2023.

- The eleventh volume of the collection “Classics of Chemistry” has been published in November 2022 (The Origins of Chemical Affinity). This volume contains the translation into Catalan of two milestone papers in the history of eighteenth century chemistry by Étienne-François Geoffroy: “Table des différents rapports observes en chimie entre différentes substances” (1720) and “Eclaircissements sur la table insérée dans les mémoires de 1718 concernant les rapports observes entre différentes substances” (1722). Pere Grapí carried out the translation, introduction and commentaries of the book.

- The monographic issue No. 29 of our journal Educació Química: EduQ was devoted to “Philosophy of Chemistry”. This monograph was coordinated by José-Antonio Chamizo and involved the collaboration of the following authors: Aureli Caamaño, José-Antonio Chamizo, Sibel Erduran, Antonio Garcia-Carmona, Pere Grapí, Mercè Izquierdo, Martín Labarca, Marcos-Antonio Pinto and Vicente Talanquer.

- On 10 November 2022, the Catalan Society of Chemistry held a ceremony to recognize the Edifici “El Sucre” (“The Sugar Building”) of Vic (Barcelona). This building housed the first factory in Catalonia to obtain sugar beet. The establishment of this sugar factory is considered a very significant advance in agricultural chemistry at the end of the 19th century, both in the agricultural field and in the extractive industry in Catalonia. This recognition is part of a project that began developing in 2021 with the aim of awarding those sites that memorialize important developments or historical events representative of chemistry in the Catalan-speaking territories.

- In December 2022 the Catalan Society of Chemistry submitted the nomination of the “Hospital de Pelegrins” (Hospital of Pilgrims) located in Altafulla, province of Tarragona, to the EuChemS Historical Landmarks Award 2022. In June 2023 the EuChemS Executive Board unanimously decided at its June meeting to follow the recommendation of the Historical Landmarks Selection Committee to award to that site the corresponding Historical Landmark Award 2022 at the regional level.

This building of Renaissance style (XVI – XVII centuries) housed the laboratory of the chemist and naturalist Antoni de Martí i Franquès (Altafulla, 1750 – Tarragona, 1832), where he developed a eudiometrical procedure to determine the composition of atmospheric air.

Pere Grapí

Delegate of the Catalan Society of Chemistry in the Working Party of History of Chemistry
The purpose of this exhibition about Jacob Berzelius (1779-1848) is to deepen and disseminate the knowledge about Berzelius and his work by including general statements about his scientific accomplishments, principles and successful way of working.

The exhibition is shown in a thematic way in ten show cases, located on levels 3–10 respectively in Biomedicum at the Karolinska Institutet (KI) in Stockholm. Most of the objects on display are taken from the Berzelius collection at the Center for History of Sciences, Royal Academy of Sciences.

Level 3 (Entrance level) Jacob Berzelius – Clarity and Truth - Introduction and Summary

Level 4 Chemistry’s legislator and communicator

Level 5 Jacob Berzelius and The Medical Education at Karolinska Institutet

Level 6 Berzelius’ Animal Chemistry: The Foundations of Medicinal Chemistry and Physiology

Level 7 The Teacher

Level 8 The Man Behind the Scientific Achievements

Level 9. The Practical and Innovative Chemist

Level 10 Remembering Jacob Berzelius

The entrance level is available to the public. Here we may look at a film (13 min) about Berzelius and his connection to Karolinska Institutet. Further information about the availability of the complete exhibition, opening hours etc will soon be available on the KI Cultural Council homepage https://ki.se/om-ki/kulturradet

Jacob Berzelius and life science

“…the sciences could be regarded as a collection of experience, a collection of knowledge about phenomena, from which one may find the causes and from there on the laws. Each even minor collection of knowledge is then a gained intellectual fortune, leading to brighter concepts, intelligible views and greater usefulness.” (Berzelius in the Annual Report on the Progress of the Sciences, Stockholm, 1821).

“The fields of sciences expand every year, our knowledge increases with clarified ideas, with more certain proofs gained for our theoretical opinions, or by refutation of wrongly understood concepts, and it is truly an enviable lot to be able to follow this path to our kindred higher refinement, as, how the outlook for the rest may be around us; not for a moment leaves us in doubt that we are relentlessly moving forward.” (Berzelius in the Annual Report on the Progress of the Sciences, Stockholm, 1824).

Berzelius believed that a person versed in chemistry had much to accomplish in physiology. He emphatically expressed his belief in the importance of chemistry for the development of medicine in the preface of his textbook on the matter:

“Of all the sciences contributing to medicine, chemistry is the primary one, and, apart from the general light it throws on the entire art of healing, it will soon bestow on some of its branches a perfection such as one never could have anticipated.” (Lectures in Animal Chemistry, Stockholm, (1806), preface).
The scientific accomplishments of Jacob Berzelius

Berzelius’ scientific production covered the entire field of chemistry. He became a legislator in chemistry, and his most important contributions were:

• The presently used chemical symbols and nomenclature system
• Extensive work and establishment of the doctrine of definite proportions and the dualistic theory
• Several new and comprehensive concepts such as catalysis, isomerism, protein and polymer.
• Discovery of the elements cerium, selenium, silicon, zirconium and thorium
• Laying the foundations of Karolinska Institutet as a research university, and showing that knowledge in chemistry is crucial for the understanding of medicine, physiology and disease
• Fundamental and thorough experimental investigations and methodologies and clarity and comprehensibility in critical writing
• In annual reports, he published critical summaries of the past year’s progress in chemical science, groundbreaking efforts in animal chemistry (clinical chemistry, physiological chemistry, etc.).

From Jacob Berzelius’ collection of selenium compounds

selenbunden jern (seleniuret of iron), selenbunden zink (seleniuret of zinc), AgSe.

Jacob Berzelius views – and its meaning for scientific research of today

Berzelius’ principles and successful methodology

Every year from 1821, in conjunction with the Royal Academy of Sciences’ Annual Meeting on March 31, Berzelius wrote a critical summary of past year’s progress in the natural sciences, primarily the chemical sciences. Each of these annual reports were usually several hundred pages in print. The aim was to spread knowledge through an easily understandable written story to a wider audience, and at the same time yield a professional account and critical review of the progress of the sciences during the past year. In practice, these annual reports also served as a forum for Berzelius to express his views and to make additions or comments to published works. Several times he repeats his opinion about the scientific principles and the importance of sound knowledge – opinions that are just as relevant today, 200 years later! Some of the titles of his annual reports were as follows:

• The good thing that you as a scientist do belongs to everyone (1821).
• Clarification of ideas brings incremental progress (1824)
• Knowledge and diligence bring new scientific findings (1825)
• Has your human capital increased during the year and benefited the public? (1827)
• International contacts with open dialogues between researchers are of great importance – the motto then: light among men and peace on earth (1828)
• Science and Development (1838)
• Probabilities interpreted as reliable truths are incompatible with the principles of science (1843)

Berzelius was able, with his solid knowledge combined with good research methodology, lively discussions and an interdisciplinary approach, to successfully guide science to ever greater achievements. The spirit and teachings of Berzelius will hopefully stay alive and be adhered to as long as humankind is engaged in the pursuit of chemical science.

Organizing committee: Elias Arnér, MMB and KI Cultural Council, Karolinska Institutet; Rickard Becker, FM Biomedicum, Karolinska Institutet; Ingemar Ernberg, MTC and KI Cultural Council (chair), Karolinska Institutet; Hjalmar Fors, MHK, the Hagströmer library, Karolinska Institutet; Karl Grandin, Center for History of Science, Royal Swedish Academy of Sciences; Sten Linnarsson, MBB, Biomedicum, Karolinska Institutet; Jan Trofast, The Berzelius Society and Fredrik Skog, Curator.

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Further reading about Jacob Berzelius


The discovery of a new element is not an isolated event. Several small consecutive observations often lead to new approaches of a problem. The present treatment is limited to the discoveries that could be linked to Berzelius himself. The availability of his laboratory note books, letters, chemical samples etc. will give us authentic sources.

• Cerium – A Fascinating Story (1804) - with Wilhelm Hisinger
• Selenium – An Unforeseen Occurrence (1818)
• Silicon – Pioneering work (1824)
• Zirconium – A Methodological Success (1824)
• Thorium – The Triumph of Science (1829)


Genom att sammanvälja Berzelius vetenskapliga verksamhet med hans personliga och sociala liv kan vi få en mera heltäckande bild av den berömde mannen. Undertecknad har i denna anda under en längre tid skrivit och utgivit ett antal mindre uppsatser med olika teman ur Berzelius liv. Dessa uppsatser (21) har här sammanställts, bearbetats och kompletterats till en enhet, ej nödvändigtvis kronologiskt. Innehållsförteckningen lyder:

• Jacob Berzelius – En eldsjäl i vetenskapens tjänst
• Jacob Berzelius – Hålsokurer och vattenanalyser
• Jacob Berzelius och Svenska Läkaresällskapet
• Jacob Berzelius och Johan Gottlieb Gahn
• Anna Sundström – Berzelius hushållerska och hjälpreda
• Jacob Berzelius och utgivningen av ”Afhandlingar i Fysik, Kemi och Mineralogi”
• Jacob Berzelius – Brevskrivaren
• Några drag i utvecklingen av kemisternas språk vid tiden för den moderna kemins genombrott
• Jacob Berzelius och atomvikterna
• Platserna för Jacob Berzelius kemiska verksamhet
• Utvecklingen av filterpapperet som revolutionerade den analytiska kemin
• Jacob Berzelius – upptäckten av cerium, selen, kisel, zirkonium och torium
• Jacob Berzelius insatser vid tillkomsten av ett apotek i Vetlanda
• Jacob Berzelius som lärare
• Jac. Berzelius och H. G. Trolle Wachtmeister – en vänskap skildrad i en korrespondens av över 700 brev under 30 års tid
• Några episoder i relationerna mellan Jacob Berzelius och Justus Liebig
• Jacob Berzelius åsikter och betydelse för dagens naturvetenskapliga forskning
• Festligheterna vid firandet av Jacob Berzelius som Vetenskapsakademiens sekreterare under 25 år (1818-1843)
• Minnestalet över Jacob Berzelius i Svenska Akademien
• Jacob Berzelius och hans park
• Berzelius-Sällskapet – dess historia och verksamhet 1990-2020
• Referenser
• Personregister

For further information on Jacob Berzelius and ordering of the books (the book ”Jacob Berzelius – Klarhet och Sanning” preferably through your book shop or the publisher Fri Tanke (www.fritanke.se)) could be made to: Ligatum AB, c/o Jan Trofast, Vapenroken 34, S-226 47 Lund, Sweden or e-mail ligatum@gmail.com

Jan Trofast
Chairman of the Berzelius Society

22
As we did not send a report for 2020-2021, this report covers four years.

The main activities of the group are our twice-annual meetings, almost invariably held in the London centre of the RSC at Burlington House, Piccadilly, and our twice-annual newsletter edited throughout this period by Dr Anna Simmons. The newsletter includes short articles on the history of chemistry, book reviews, reports of meetings and summaries of online lectures. It is free to all to access online with issues back to 2010 available. See https://www.rsc.org/membership-and-community/connect-with-others/through-interests/interest-groups/historical/newsletters/. Since the summer of 2020, we have also had online lectures once a month.

Meetings

Our meetings were badly affected by the lockdowns and the closure of Burlington House between March 2020 and October 2021. The first four meetings in the list below had to be postponed.

The Handed World - 150 Years of Molecular Chirality, 13 October 2021

John Steeds “Discovery of the Phenomenon of Polarisation of Light”
Alan Dronsfield, “Optical Activity – A Century of Perplexity”
Henry Rzepa, “From d and l to R and S: Discovery of Absolute Configuration”
Giuliano Siligardi, “Molecular and Supramolecular Chirality”
Ian Blagbrough, “Does the Right Hand know what the Left Hand is Doing? Chirality in Real Life”

Life and Work of George Porter, Lord Porter of Luddenham (1920-2002), 6 December 2021

Wheeler Lecture by Mary Archer, “George Porter: A Peer among Scientists”
John and Andrew Porter, “Living Above the Shop: Our Memories of the Royal Institution”
David Phillips, “Chemistry in Microtime”
Rupert Cole “‘Popular Champion for Science’s Fight’: George Porter’s Career as a Public Scientist”
Sir Geoffrey Wilkinson: An Anniversary Celebration, 23 March 2022

held jointly with Imperial College London Chemistry Department

Martin Bennett, “‘Not hot potatoes’: The Early Days with Geoffrey Wilkinson at Imperial College”
Deborah Kays, “Small Molecule Scission and Homologation Using Coordinatively Unsaturated Complexes”
James W. Walton, “Reactivity of [(η6-arene)RuCp]+ Complexes and Catalysis Via Arene Exchange”
Ernesto Carmona, “Coordination of Li–H and Li–C Bonds to Hydride Complexes of Mo–Mo Quadruple Bonds”
Louise Natrajan, “A Coordination Chemistry Approach to Optical Imaging of Uranium Biotransformations in Model Conditions”
Anne Hardy, “Geoffrey, the Family Man”
Ruth Webster, “Iron Catalysed Hydrogenation and Deuteration Reactions”
Mark Chadwick, “Some Adventures with Early Transition Metal Pincer Complexes”
Silvia Diez-Gonzalez, “Well Defined Catalysts for Azide-Alkyne Cycloadditions, The Good, the Not So Bad and the Unexpected”
Andy Barron, “From Aluminum Catalysts to COVID”
Gregory Girolami, “Solution NMR Studies of Transition Metal Alkane”
Bob Tooze, “Geoffrey Wilkinson and Me - The Story So Far”

Women in Chemistry, 13 October 2022

Wheeler Lecture by Sally Horrocks, “The ‘Two Person Career’ and the British Chemical Community in the Mid-Twentieth Century”
Anne Barrett, “How Archives Can Reveal Hidden Women in Chemistry”
Patricia Fara, “Listening to the Canaries: Munitions Workers in World War One”
Annette Lykknes, “A Seat at the Table: Women and the Periodic System”
Marelene Rayner-Canham and Geoff Rayner-Canham, “‘Let us in!’: The Opposition to the Admission of Women to the Professional Societies”
Gill Reid, “My Journey with Chemistry”
“Pot-pourri” (Open) Meeting, 14 March 2023

Robert Palgrave, “When is a lattice not a lattice?”
John Nicholson, "Perkin's other legacy to chemistry: The life and Careers of his Sons”
Andrea Sella, “History of distillation glassware”
Jenny Wilson, “Dame Kathleen Lonsdale FRS (1903-1971) and the Pugwash Conferences on Science and World Affairs”
John Hudson, “Pre-history of infrared spectroscopy”
Robert Slinn, “The discovery of Intal”

British X-ray Crystallographers, 18 October 2023

John Finney, “Desmond Bernal”
Jenny Wilson, “Kathleen Lonsdale”
Mike Glazer, “Helen Megaw”
Elspeth Garman, “John Kendrew”
Georgina Ferry, “Max Perutz”
Tom Blundell, “David Phillips”
Stephen Neidle, “Rosalind Franklin”
Judith Howard, “Dorothy Crowfoot Hodgkin”
Ian Wood, “Judith Milledge”

Online Talks

2020

July: “Bichloride of Methylene: Anaesthetic or Paint-stripper?” by Alan Dronsfield
August: “Cocaine to Novocaine: A Chemical Journey” by Alan Dronsfield
September: “Joseph Priestley's Formative Years” by Helen Cooke†
October: “William Perkin and the Story of Mauveine” by Henry Rzepa
November: “Development of NMR in Britain, 1946-1973” by Peter Morris
December: “A History of Pigments from Cave-painting to the Twentieth Century” by Christine Holdstock

2021

January: “Joseph Priestley's later years” by Helen Cooke†
February: “Davy, Faraday and Electro-chemistry” by Frank James
March: “Paraquat: A Historical Reflection” by Diana Leitch
April: “Drugs, ICI and the Molecularisation of Disease” by Viviane Quirke*
May: “History of Dyes: from Ancient Egypt to Modern Times” by Christine Holdstock
June: “The History of Chemical Laboratories, 1600-2000” by Peter Morris*
July: “Madame Curie, radium and its early use in medical therapy” by Alan Dronsfield
September: “A Century of Global Synthetic Ammonia 1921 – 2021” by Tony Travis*
October: “The Ordeal Poison” by Ann Ferguson*
November: “Structures: The Key to Chemistry Communication” by Helen Cooke*
December: “The History and Chemistry of Frankincense and Myrrh” by Peter Morris*

2022

January: “Alchemy, or How to Make Gold” by John Hudson*
February: “Sir John Tomlinson Brunner and Henry Brunner- Their Lives and Legacy” by Diana Leitch*
March: “Insulin: The Crooked Timber, From Thick Brown Muck to Wall Street Gold” by Kersten Hall*
April: “Discovery of the Elements Predicted by Mendeleev’s Table” by Mary Virginia Orna*
May: “Pills, Powders and Purgatives” by Anna Simmons*
June: “Material Matters: Looking Through Paintings” by Aviva Burnstock*
July: “Optical Activity: A Century of Perplexity” by Alan Dronsfield*
September: “The Discovery of Sodium Chromoglycate (Intal)” by Robert Slinn*
October: “History and Practice of Scientific Glassblowing from the Viewpoint of Glassblowers” by Ayako Tani and John Liddell*
November: “Chemistry and Inuit Life and Culture” by Geoff Rayner-Canham*

December: “The Chemistry of Christmas” by Peter Morris

2023

January: “Newton and the Apothecary” by Anna Marie Roos*

February: “Eighty Years of Astrochemistry: From the First Detections of Molecules in Space to the Present Day” by Catherine Walsh*

March: “Putting the Chemistry Back into the History and Philosophy of Chemistry” by Jeff Seeman*

April: “Henry Enfield Roscoe: A Campaigning Chemist” by Peter Morris*

May: “A Life-Changing Story: Harriet Brooks (1866-1933)” by Geoff Rayner Canham*

June: “Quinine-Urea: A Local Anaesthetic that Possibly Didn’t Work” by Alan Dronsfield*

July: “A Hundred Years of Conservation Research at the British Museum” by Vincent Daniels*

September: “Creative Chemistry Inside the Eighteenth-Century Crutchley Dye Houses, London” by Anita Quye*

October: “100 years of Paediatric Clinical Chemistry 1923-2023: A Tribute to Evelyn Hickmans” by Anne Green*

November: “Chemical Information: Pioneering People and Publications” by Helen Cooke*

December: “A Chemistry Christmas Carol” by Dan Cornwell-Groves

*these talks were recorded and are available on the RSC’s YouTube channel at https://www.youtube.com/playlist?list=PLLnAFJxOjzZu7N0f5-nVtHcLNxU2tKmpC

†These talks were combined into one talk, “Joseph Priestley” and recorded without an audience, available as above.

Online talk series: “History of Chemistry from its Origins to the Present Day”


April 2023: “Alchemy in Graeco-Roman Egypt” by Matteo Martelli

March 2023: “Medieval Alchemy in the Arab-Muslim World” by Sébastien Moureau [not recorded]

February 2023: “Medieval Alchemy” by Peter Forshaw

January 2023: “Paracelsus and the World of Renaissance Magic and Science” by Philip Ball
November 2022: “Where were Women in Chemistry in the 1600s?” by Michelle DiMeo
October 2022: “A Stroll Through 18th Century Chemistry” by John Powers
September 2022: “Revolution and Reaction: Politics and Chemistry” by Victor Boantza
June 2022: “Chemistry Becomes the Central Science, 1815-1914” by Peter Ramberg
May 2022: “Training, Theory, Industry: Creating Modern Chemistry, 1815-1914” by Peter Ramberg
April 2022: “History of the Chemical Industry in the Twentieth Century” by Peter Morris
March 2022: “The History of Chemistry between 1914 and 2019” by Peter Morris

All these talks were recorded and are available at the above YouTube site, except for the talk in March 2023

Committee Membership

In 2020, the committee had thirteen members. Richard Buscall stepped down as treasurer and resigned from the committee in October 2021. Stanley Langer joined the committee and became treasurer in his place. John Hudson retired from the committee at the end of 2022. At the same time, Peter Morris (chair) and John Nicholson (secretary) swapped their positions. In our first ever ballot, five new members were elected to the committee in October 2023 and Chris Cooksey retired from the committee. The committee currently has sixteen members.

Peter J.T. Morris, Secretary