



HOW FAMOUS IS THEODOR GROTHUSS IN LITHUANIA?

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Summary. With the encouragement of Theodor Grothuss Fund in Vilnius, the Wroblewski Library of the Lithuanian Academy of Sciences published a bibliographical index of works by and about Theodor Grothuss (1996). The work, compiled by bibliographers Kulikauskienė and Vitkauskienė was the first attempt ever to register references not only by the famous scholar, but also publications about him and his creative work in one edition. The index was compiled using the works by F. Recke, K. Napiersky, A. Žvironas, J. Stradinš, J. A. Krikštopaitis, also the holdings of the major libraries in Lithuania. A biography of T. Grothuss with an extensive list of literature was published by J. A. Krikštopaitis (2005).

A bibliographical work to register all information about T. Grothuss including a list of important dates in his life and his scientific activities as well as the list of dates commemorating the name of T. Grothuss is still ongoing at the Wroblewski Library of the Lithuanian Academy of Sciences.

Keywords: Theodor Grothuss; bibliography; list of literature; history of science.

Work and activity of Theodor Grothuss

Scholars are the community deeply involved in their research; they burn their lives and think little about the ancestors who will be interested not only in their scientific heritage but their biography as well. By no means, registering their works scientific schools cherish the heritage of their teachers and leaders. But in the history of scientific ideas one can easily learn about scholars who chose the life of loners. And sometimes they were loners not only as scholars, but also preferred the isolated way of life.

Theodor Grothuss (1785–1822), a son of Kurlandian (Latvia) landlord, the world famous founder of the theory of electrolysis, chose a solitary life. Except for five years (1803–1808) devoted for studies and research in Western Europe (Leipzig, Naples, Rome, Paris) and some time in St. Petersburg in 1812, all his life he stayed at his mother's estate in Gedučiai (Geddutz) village. During the years of his studies in Europe, chemistry became the most popular subject at the University of Vilnius, the Lithuanian main school-. Prominent scholar Jędrzej Sniadecki (1768–1838) was the professor of chemistry. It was a big loss for the University of Vilnius not to have such a talented student as Theodor Grothuss.

After studies abroad, Theodor Grotthuss returned home where he had an intention to continue the scientific work. He equipped a home laboratory where chemical and physical experiments were carried out. The acquired knowledge, scientific method, personal acquaintance with the prominent scholars was turned into a strong motivation for research. The same year he returned home he was elected as a corresponding member of the Academy of Sciences and Arts of Turin (1808). For the following three years the young scholar was investigating the phenomenon of gas combustion and explosion and was among the pioneers to study chain reactions. Though a loner, Theodor Grotthuss left for Russia for the period of half a year where he stayed in St. Petersburg. It was the last time he was known to leave home. The position of professor at the University of Dorpat (Tartu)

was not accepted, though he eagerly corresponded with the scientific community. In 1814 he was elected a corresponding member of the Munich Academy of Sciences, later became a member of Kurland Literature and Art Society (Krikštopaitis 2001).

With works published in different scientific journals Theodor Grotthuss earned the name of a pioneer in electrochemistry. Though 102 works were published during the period of 1805–1822, neither of them appeared in the Lithuanian press. The only suitable magazine for popular scientific articles was *Dziennik Wileński*, published by the professors of the University of Vilnius, the founder and the first editor of which was prof. Jędrzej Sniadecki. Because of the professional interest of the editor, many topics on chemistry were published, but not the works of Theodor Grotthuss who preferred *Annales de chimie et de physique* (7 publications), *Gehlen's Journal für die Physik, Chemie und Mineralogie* (8), *Gilbert's Annalen der Physik und der physikalischen Chemie* (11), *Scherer's Allgemeine Nordischen Annalen der Chemie* (28), *Schweigger's Journal für Chemie und Physik* (34), etc. It was only a review of the works by T. Grotthuss, published by A. Dudik that appeared in scientific magazine *Dziennik Wileński* (published in Vilnius). Among other surveys on light phenomenon over 20 years the article also described an experiment of phosphorescence (Dudik 1822: 311–313).

T. Grotthuss published his world famous work on electrolysis *Mémoire sur la décomposition de l'eau et des corps, qu'elle tient en dissolution à l'aide de l'électricité galvanique* in 1805 (Grotthuss 1805). As a separate issue it was published again in Mitau in 1806 (Grotthuss 1805), translated into English language and published in *Tilloch's Philosophic Magazine* (1806), *Repertory of Arts* (1806). The first translation to Russian language appeared in 1956 in selected works on electricity.



With the encouragement of Theodor Grotthuss Fund in Vilnius, the Library of the Lithuanian Academy of Sciences in 1996 published a bibliographical index of works by and about Theodor Grotthuss (Kulikauskiene *et al.* 1996). The work compiled by bibliographers J. Kulikauskienė and A. Vitkauskienė was the first ever attempt not only to register the references by the famous scholar, but also publications about him and his creative work in one edition. The index was compiled using the works by F. Recke, K. Napiersky, A. Žvironas, J. Stradinš, J. A. Krikštopaitis, also the holdings of the major libraries in Lithuania. The bibliographical work was followed by a book on the life and works of Theodor Grotthuss (Krikštopaitis 2001).

Commemorating the 200th anniversary of the theory of electrolysis, the bibliographical work was continued at the Library of Lithuanian Academy of Sciences. The bibliographical list of 655 records was compiled, an abbreviated part of it was published during the Theodor Grotthuss Electrochemistry Conference in Vilnius in 2005 (Kulikauskienė 2005).

The name of this prominent scholar is known and honoured in Lithuania by:

- Commemorating the 150th anniversary of Theodor Grotthuss, a biographical article and bibliography compiled by A. Žvironas were published in 1938.
- A group of the Institute of History of the Lithuanian Academy of Sciences worked in Gedučiai to trace the relic of the scholar and to establish places of memory (1971).
- Commemorating the 150th anniversary of the death of the scholar, the 9th international conference of the historians of science was organised in Vilnius. A documentary film by archaeologist V. Urbanavičius was demonstrated, a memorial stone was unclosed in Gedučiai (project by I. Barakauskaitė, brass bas-relief by R. Daugintis) and a porter cutting was created by artist A. Makūnaitė (1972).
- Play “Keisuolių akademija” by J. Marcinkevičius was staged at the Theatre of the University of Vilnius. Prototype of the main hero was Theodor Grotthuss (1979).
- Commemorating the 200th anniversary of the birth of Theodor Grotthuss the conference “Theodor Grotthuss and his scientific heritage” took place in Vilnius and Kaunas (1985).
- Sculpture of Theodor Grotthuss was created by sculptor K. Balčiūnas (1985–1986) and is placed at *Žiemgala* museum in town Žeimeliai, Lithuania. Moreover, the memorial exhibition for the Grotthuss’ family is arranged at the museum.
- The Theodor Grotthuss foundation was established (1994) in the premises of the Lithuanian Academy of Sciences which provides an annual stipend for the outstanding pupils, followed by the medal by artist S. Žilienė. In the same year artist A. Makūnaitė created two new versions of the portrait.
- Conference of the Baltic historians of science “Scientia et Historia” was dedicated to the 210th birth anniversary of Theodor Grotthuss (1995).
- With the support of the Theodor Grotthuss foundation a bibliographical index *Teodoras Grotusas, 1785–1822 = Theodor von Grotthuss, 1785–1822* was published (1996).

- An anniversary session at the Academy of Sciences of Lithuania commemorated the 215th birth anniversary of Theodor Grotthuss, after a street in Žeimelis town (district Pakruojis) was called by his name (2000).
- Book *Pralenkęs laiką: Theodor Grotthuss* by J. A. Krikštopaitis was presented at the Lithuanian Academy of Sciences and the University of Šiauliai (2001).
- First readings of works by Theodor Grotthuss at the University of Šiauliai, a literature event at the palace of culture in Pasvalys, with a poem by S. Naglienė (2002).
- Archaeological expedition in Gedučiai, the place where Theodor Grotthuss lived.
- Theodor Grotthuss Electrochemistry Conference commemorating the 200th anniversary of the theory was held in Vilnius (2005).

The events mentioned above were registered in an extensive list of literature, which is still in a process. The Lithuanian chemists, historians, archaeologists and philosophers are deeply interested in the personality of this famous chemist. Articles and facts about this prominent scholar were published in scientific journal *Fizikių žinios* (3 articles), popular scientific magazines: *Mokslas ir gyvenimas* (16), *Mokslas ir technika* (10), scientific newspaper *Mokslo Lietuva* (29), daily newspapers: *Kauno tiesa* (3), *Komjaunimo tiesa* (3), local newspapers: *Šiaulių kraštas* (3), *Šiaulių naujienos* (3) and many other publications: periodicals, reference books, encyclopaedias, historical books.

Besides the bibliographical information on the topic “How much Theodor Grotthuss is known in Lithuania” bibliographers traced a big amount of references originating from other countries such as: Germany, Latvia, Belarus, Ukraine and USA. Though the bibliographers like to say “a bibliography is never complete”, with the help of enthusiasts we hope at least to try to unite the efforts and compile “almost complete” bibliography of the literature about Theodor Grotthuss.

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KĄ MES ŽINOME APIE THEODORĄ GROTTUSSĄ LIETUVOJE?

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Straipsnyje apžvelgta žymaus elektrochemiko Theodoro Grotthusso (1785–1822), darbų ir literatūros apie jį visuma. Šis mokslininkas didžiąją gyvenimo dalį praleido Gedučiuose, kur ir sukūrė elektrolizės teoriją. Bibliografinės medžiagos chronologinės ribos – nuo pirmosios T. Grotthusso publikacijos 1805 m. iki 1822 m. Per šį laikotarpį buvo išspausdinti 102 jo darbai, 1802–2005 m. paskelbti 543 kitų autorių darbai apie T. Grotthussą. Remiantis šia informacija, skelbta Lietuvoje ir kitose šalyse, sudaryta T. Grotthusso vardą įamžinančių datų lentelė.

Reikšminiai žodžiai: Theodoras Grotthussas; bibliografija; literatūros sąrašas; mokslo istorija.

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