


**CROATIAN SOCIETY OF
CHEMICAL ENGINEERS (CSCE)**



**HRVATSKO DRUŠTVO KEMIJSKIH INŽENJERA
I TEHNOLOGA (HDKI)**



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THE CROATIAN SOCIETY OF CHEMICAL ENGINEERS (CSCE)

HRVATSKO DRUŠTVO KEMIJSKIH INŽENJERA I TEHNOLOGA (HDKI)

History

The Croatian Society of Chemical Engineers – CSCE (*Hrvatsko društvo kemijskih inženjera i tehnologa* – HDKI) was founded by Prof. Franjo Hanaman, DSc., who, after graduating from the Polytechnic in Vienna, had become a world renowned innovator of the first applied light bulb with metal (tungsten) string, working as an assistant with Alexander Just. In the year 1922 he had been called to take a professorship in Inorganic Chemistry at the Technical Faculty of Zagreb. In 1928, he initiated the founding of the *Chemists Club* within *The Society of Yugoslavian Engineers and Architects*,



and this Society had been derived from *The Club of Engineers and Technicians* founded in Zagreb back in 1878. The first president had been Prof. Franjo Hanaman, DSc. The Club had been formed with the aim of advancing the chemical engineers' activities in industry and the university. At that time, the activity of the Club was to organize lectures and meetings of chemical engineers and also encourage its members to publish articles in *Arhiv za kemiju i farmaciju* (*Archive for Chemistry and Pharmacy*) which had changed its name into *Arhiv za kemiju i kemijsku tehnologiju* (*Archive for Chemistry and Chemical Technology*) in 1937, as well as in *Arhiv za kemiju i tehnologiju* (*Archive for Chemistry and Technology*) in 1939. Franjo Hanaman was the editor from 1934 to 1939. Participants in the activities of the Club were professors from the Technical Faculty – for example – Prof. Richard Podhorsky, Prof. Matija Krajčinović, Prof. Vladimir Njegovan, and others. *The Chemists Club* also supported the founding of the Department of Chemistry at the Technical Faculty of Zagreb. The Chemists club was active until 1939. During the hard years of WWII, the members of the club were active within the *Croatian Chemical Society* that had this name from 1939 and they upheld its activities until the end of the war.

In 1947, upon the initiative of the *Society of Engineers and Technicians of Croatia*, the *Section of Chemists* had been founded. The first president was Prof. Ivan Brihta, DSc., honorary lecturer of the Technical Faculty of Zagreb who held the courses Technical Catalysis and Technology of the Catalytic Processes. The section had already had 109 members at this time. The section was organizing lectures and consultations, and supported the journal *Arhiv za kemiju i kemijsku tehnologiju (Archive for Chemistry and Chemical Technology)* which had become the joint bulletin of the *Section and the Croatian Chemical Society*. The Section began to publish its own bulletin *Kemija u industriji (Chemistry in Industry)* in 1952, which is still being published today. The Section ceased to exist when the *Society of Chemists and Technologists of Croatia* was founded on July 6th, 1953. The first president was Jovan Dugošević. The Society continued with the activities of the Section. Besides lectures, colloquiums and consultations, it promoted the application of chemistry in the industry. Regional societies were founded within the Society in Zagreb, Rijeka, Split, etc. At the 5th regular meeting of the General Assembly, on March 18th 1962 in Zagreb, it was decided that the Society should be transformed into an Association. A New Statute was adopted and it was renamed as the *Association of Chemists and Technologists of Croatia*. The first president was Prof. Marijan Laćan, DSc., professor of organic chemistry at the Department of Biotechnology at the Technological Faculty of Zagreb. The Statute of the Association has been amended several times: February 10th 1967, November 10th 1972, July 12th 1980, and July 25th 1992. According to this Statute, the *Association of Chemists and Technologists of Croatia* changed its name into *The Croatian Society of Chemical Engineers and Technologists* (HDKI – Croatian acronym for *Hrvatsko društvo kemijskih inženjera i tehnologa*).

In 1993, CSCE became member of the *European Federation for Chemical Engineering*, and member of the *European Polymer Federation*. With the adoption of the Statute on April 24th 1998, the Society became a unique organization. Within CSCE there are also regional societies and professional sections.

Organization Today



The **Croatian Society of Chemical Engineers – CSCE** (Hrvatsko društvo kemijskih inženjera i tehnologa – HDKI) is a unique association of chemists, chemical engineers and technologists, persons and legal subjects, which functions in the Republic of Croatia and abroad. The seat of CSCE is in

Zagreb, Berislavićeva 6/I, phone: +385 1 4872 499, e-mail: hdki@zg.t-com.hr (www.hdki.hr).

CSCE gathers chemists, chemical engineers and technologists to improve chemical and chemical engineering professions and similar professions also. It is permanently acting on the improvement of natural and technical sciences and their application in practice. It is also always in contact with the development in science and technology; it provides opinions on technical and technological solutions to problems and on the planning of building, regulating and protecting the environment. It encourages all kinds of engineering activities aimed at the optimization of technical and economic development, welfare, security, health, environmental protection and social well-being. It helps and encourages engineers in their professional work and in organizing corresponding forms of professional education. It nourishes and develops the ethics of the engineers' profession. It encourages, edits and publishes scientific and professional publications. CSCE achieves its goals and aims through organizing congresses, meetings, conferences, seminars, consultations, colloquiums, round tables, lectures, discussions, and by other means of member gatherings.

Members List

The following **regional societies** are members as legal subjects:

- Society of Chemical Engineers and Technologists, Osijek
- Society of Chemists and Technologists, Koprivnica
- Society of Chemists and Technologists, Kutina
- Society of Chemists and Technologists, Požega
- Society of Chemists and Technologists, Belišće
- Society of Chemical Engineers and Technologists, Rijeka
- Society of Chemical Engineers, Split

Within CSCE, apart from regional societies, there are also sections that gather engineers and technologists who share interests in special fields. They also work within plans and programs of CSCE.

The following **sections** are now active:

- Section of Education and Personnel
- Section of Chromatography
- Section of Chemical Engineering
- Section of Biochemical Engineering
- Section of Organic Chemistry Nomenclature
- Section of Ecological Engineering
- Section of Macromolecules
- Section of Electrochemistry and Electrochemical Engineering
- Student Section

The **bodies** of the Society are:

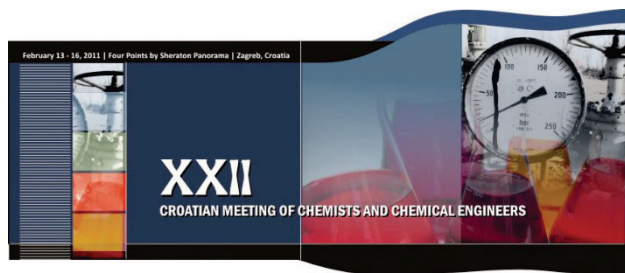
- General Assembly
- Executive Committee
- Supervising Committee
- Court of Honor

The President of the Society is Prof. Ante Jukić, PhD (2016–), elected; Deputy President is Prof. Tomislav Bolanča, PhD, (2016–). The Executive Committee is the principal executive body of the General Assembly that coordinates all activities and is responsible for implementing the decisions of the General Assembly; it undertakes other activities in accordance with the Statute as well.

Organization of Conferences

CSCE is the organizer of scientific and professional, national and international conferences. There is a tradition of organizing *The Croatian Meeting of Chemists and Chemical Engineers* every second year, the international symposium *Ružička Days* and the *Meeting of Young Chemical Engineers* every two years, international symposium *New Achievements in Chromatography*, and conferences in the fields of electrochemistry and electrochemical engineering.

The Croatian Meeting of Chemists and Chemical Engineers



This is the most important gathering of chemists and chemical engineers in Croatia. The mission of this meeting is to become a converging place for scientists and experts coming from universities, institutes, schools and industry in Croatia and the region.

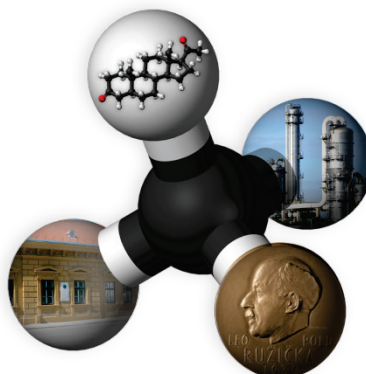
The main purpose is to promote new achievements, innovative ideas and technologies in the field of chemistry, chemical engineering and related fields to encourage interdisciplinary exchange of knowledge and experience, as well as to be a forum for scientists, engineers, teachers and managers. An exhibition of chemical industrial and laboratory equipment and instrumentation, computer software and hardware, literature and other relevant material is usually organized as an accompanying manifestation.

In the past 30 years, the plenary lecturers at our Meetings were many distinguished scientists, such as Nobel prize winners Vladimir Prelog, Roald Hoffmann, Jean-Marie Lehn, Robert Huber, Harold W. Kroto, Richard R. Ernst, Ada E. Yonath; distinguished professors such as G. F. Froment, B. Delmon, E. U. Schlunder, P. W. Atkins, K. B. Wiberg, B. M. Trost, G. Baldi, R. Huber, J. R. Flower, A. and F. Moser, D. W. T. Rippin, M. Zlokarnik, L. Riekert, K. Schügerl, and many others.

The *XXV Croatian Meeting of Chemists and Chemical Engineers* was held on April 19–22, 2017 in Zagreb, Croatia and organized in association with the Croatian Chemical Society.

Ružička Days

The goal of this conference is to present scientific and professional achievements in chemistry, chemical and biochemical engineering, food technology, biotechnology, medical biochemistry, pharmacy, agriculture and forestry, environmental protection and related disciplines, with an emphasis on the application of science and new technologies in industry. The Conference includes lectures, posters and sponsored presentations. It assembles scientists and professionals from Croatia and abroad. The Conference also includes exhibitions and presentations of equipment and devices as well as various social events.



The 16th *Ružička Days* were held on September 21st and 23rd, 2016, in Vukovar, Croatia, under the slogan *TODAY SCIENCE – TOMORROW INDUSTRY* and organized in association with the Faculty of Food Technology Osijek, University of Josip Juraj Strossmayer in Osijek.

Meetings of Young Chemical Engineers



The Croatian Society of Chemical Engineers, together with Faculty of Chemical Engineering and Technology, University of Zagreb, have been organizing *Meetings of Young Chemical Engineers* for fourteen years now.

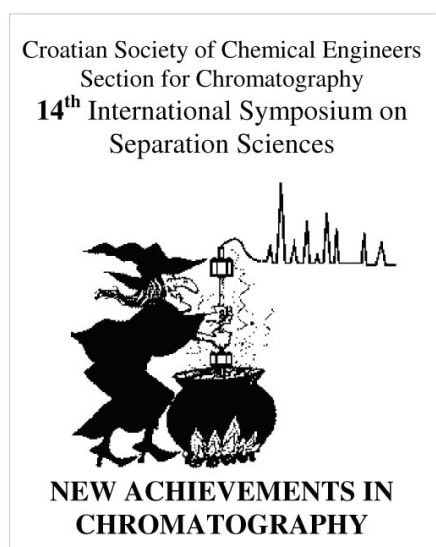
Meetings of young chemical engineers as a professional and scientific gathering provides young engineers, scientists, technologists, and students a place to present their research results, exchange ideas, and learn a thing or two in the process. Participants in past meetings were largely young scientists from Croatia with participation of foreign institutions. Also, we see an increase in response of scientists from institutes each year.

The primary task of these meetings is to draw the attention of young scientists and professionals to the necessity of an interdisciplinary approach to research, development

and implementation of production processes. We hope to witness a rise in the number of submitted papers at the meetings, as we trust these meetings will contribute to better cooperation between economic and research institutions, and thus generate new possibilities for employing young scientists.

The 11th Meeting of Young Chemical Engineers was held on February 18th and 19th, 2016 in Zagreb, Croatia.

New Achievements in Chromatography



The symposiums are a continuation of a series of seminars and conferences on GC held in Zagreb since 1967, and later on at the Plitvice Lakes until 1988. Over the years, the meetings extended to all chromatographic and even more to other separation techniques. Since 1990, these meetings have become international, organized alternatively at Bled (Slovenia) and Opatija (Croatia). At the 4th Symposium held in Opatija in October 1996, the idea was born to let the symposium cross the neighboring border into Central European countries and strengthen

mutual scientific cooperation with the help of the nominated steering committee. The idea was formalized at the 5th ISSS held at Bled in October 1998, resulting in the formation of the Central European Group for Separation Sciences led by the steering committee.

The main goal of the symposium has always been to offer an opportunity for younger researchers to learn more about current progress in chromatography and other separations, hyphenated as well as sample preparation techniques. The symposium is organized by Section of Chromatography.

The 19th International Symposium on Separation Sciences "New Achievements in Chromatography" was held from 25th to 28th September 2013 in Poreč, Croatia.

Planned future meetings and symposiums:

- *XII. Meeting of Young Chemical Engineers 2018, Zagreb, Croatia*
- *The XVII Ružička Days 2018, Vukovar, Croatia*
- *The XXVI Croatian Meeting of Chemists and Chemical Engineers 2019, Croatia*

Publishing Activities

Kemija u industriji



The Croatian Society of Chemical Engineers – CSCE (Hrvatsko društvo kemijskih inženjera i tehnologa, HDKI) has been publishing the scientific journal **Kemija u industriji** (Chemistry in Industry, *Kem. Ind.*, www.hdki.hr/kui/) for more than 60 years.

From the very beginning, *Kemija u industriji* has been a journal for chemists and chemical engineers (founded in 1952). It is the official journal of the Croatian Society of Chemists and Chemical Engineers (publisher), and the Croatian Chemical Society. The journal publishes scientific

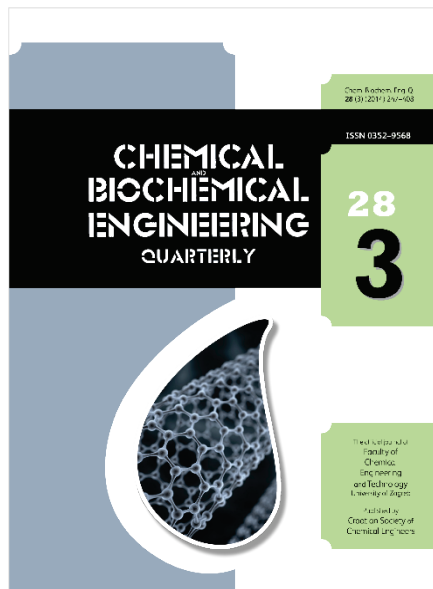
and professional papers, opinions, commentaries, reviews and information from practice and contributions under permanent or periodical headings.

The journal is referred to in the following international secondary publications and databases: Analytical Abstracts, Cabell's Directory, Chemical Abstracts, Chemical Engineering Abstracts, Chemical Engineering and Biotechnology Abstracts, Chemischer Informationsdienst, EBSCO Host – Academic Search Complete, Google Scholar, Referativnyi Zhurnal, Ei Compendex, SCOPUS, SHERPA/RoMEO, Theoretical Chemical Engineering Abstracts, Web of Science™ Core Collection – Emerging Sources Citation Index (ESCI), ULRICHSWEB – Global Serials Directory and many other databases. The journal is sponsored by the Croatian Ministry of Science and Technology, and partly by other companies.

Editor-in-Chief is Prof. Nenad Bolf, PhD.

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Chemical and Biochemical Engineering Quarterly



In 1987, the Association of Chemists and Technologists of Croatia began to publish an international journal in English **Chemical and Biochemical Engineering Quarterly** (*Chem. Bio. Eng. Q.*, www.hdki.hr/cabeq/), issued four times *per* year.

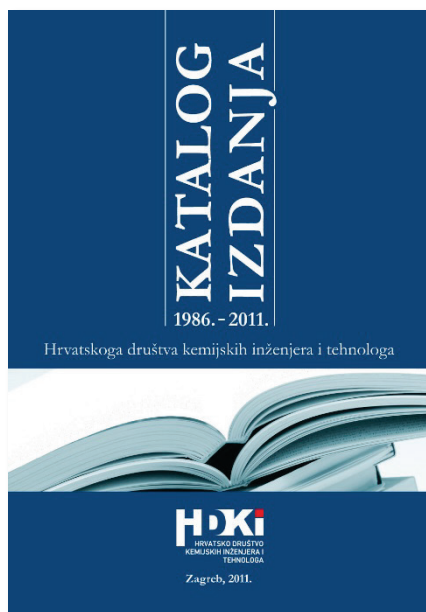
The initiative to start with publication of the new journal *Chemical and Biochemical Engineering Quarterly* (CABEQ) was part of the European Alpine-Adria initiative for regional co-operation between Austria, Croatia, Italy and Slovenia. The aim of the journal was to advance communication between

chemical and biochemical engineers and scientists from Central Europe and Mediterranean countries. The journal accepts contributions of original scientific papers, reviews, preliminary communications, professional papers, conference papers, opinion papers and notes. The first issue of CABEQ appeared in March 1987, and since then it has been continuously published for 26 years, four issues per year. CABEQ is referred to in the following databases: Chemical and Biochemical Engineering Quarterly is cited by: Current Contents, Web of Science – Science Citation Index Expanded, Scopus, El Compendex, Inspec, PASCAL, Science Citation Index, Chemical Abstracts, Chemical Engineering Abstracts, Chemical Engineering and Biotechnology Abstracts, Current Biotechnology Abstracts, Chemischer Informationsdienst, EBSCO Host – Academic Search Complete, Knovel®, Kurzberüchte Chemische Technik und Biotechnologie, Referativnyi Zhurnal, Theoretical Chemical Engineering Abstracts, SHERPA/RoMEO, Biotechnology Citation Index, Directory of Open Access Journals (DOAJ), ULRICHSWEB i BIOSIS Previews. Offprints of the articles are available through The Genuine Article© delivery program of the American Institute for Scientific Information (ISI).

Editor-in-Chief is Prof. Želimir Kurtanjek, PhD. (retired)

E-mail: cabeq@pbf.hr

Other CSCE publications



Apart from the aforementioned journals, CSCE publishes scientific and professional books in the fields of chemistry and chemical engineering.

You are kindly invited to view the list of 32 published editions and 9 offprints on the invoice. If you would like to order some of the editions, you could fill the order, print it out and send it by post to our address; or, you can order the journals via e-mail.

All the editions can be purchased through the web shop window on our web site:

<http://www.hdki.hr/hdki/knjige>.

We proudly emphasize, in particular, two series of our published editions:

- *Croatian Nomenclature of Organic Chemistry*
(IUPAC rules and recommendations translated and adopted in Croatian)
- *Croatian Chemists and Chemical Engineers*

Other Activities:

CSCE Awards

Every two years, the Croatian Society of Chemical Engineers awards Young Chemical Engineers. The award is given to young chemical engineers, members of CSCE, to emphasize their scientific or professional contributions (published or accepted work in journals such as *Kemija u industriji*, *Chemical and Biochemical Engineering Quarterly*, or other appropriate journal, patent, innovation or technical advancement).

The award is usually announced at the *Meetings of Young Chemical Engineers*, where the winner exhibits his contribution to scientific and professional work.

Received Prizes and Awards

The Croatian Society of Chemical Engineers has been awarded and praised many times during its existence. The prizes and awards include:

- Prize of the regional Society of Engineers and Technicians "Borovo" for help and continuing cooperation in professional and social activities, 1982.
- Gold medal of the Intercontinental Zagreb Hotel, for successful cooperation over many years, 1985.
- Medal of the Vukovar City Museum on the opening of the memorial museum of the Nobel Prize winner Lavoslav Ružička.
- Award – certificate of Petrokem, Zagreb, for successful cooperation.
- Gratitude of the Archbishop of Zagreb, Josip Bozanić, as a gift for renovating the Zagreb Cathedral, 1998.
- Award of the Croatian Chemical Society Rijeka for successful cooperation over many years, 1998, etc.

Cooperation

CSCE is member of the *Croatian Engineering Association*; it closely cooperates with the *Croatian Chemical Society (Hrvatsko kemijsko društvo, HKD)*, which publishes the journal *Croatica Chemica Acta (CCA)*, with the Faculty of Food Technology and Biotechnology which publishes the journal *Food Technology and Biotechnology (FTB)*, with the Faculty of Chemical Engineering and Technology (common organization of *Meetings of Young Chemical Engineers*), the *European Federation for Biotechnology (EFB)* from 1998, the *European Federation for Chemical Engineering (EFCE)* from 1992, and the *European Polymer Federation (EPF)* from 1992, as well as with many other similar national and international societies. CSCE is initiating the founding of the workgroup for separation sciences in Central Europe (CEGSS).

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