EDITORIAL

CEC and CABEQ: A Story of 35 Years

Introduction

My story begins 35 years ago, back in 1977.

The time when my colleague Ireneo Kikic and I were working on our projects could be considered a positive period for research, for our universities, for chemistry and the chemical industry in general.

At that time, we had various opportunities to visit laboratories and universities not only in our territory and the nearby European area, but also outside European borders. We could collect a lot of information that enabled us not only to start wide networking connections and collaborations but above all to have our research sponsored by research or industrial institutions and foreign universities.

We experienced the enthusiasm of "regional" conferences in many countries, such as the United States, Denmark, France, and all these meetings evidenced the importance for young researchers to have these

particular opportunities in order to develop their own education. In fact, during these conferences also participants that were at the beginning of their professional paths had the opportunity to introduce themselves in a right size meeting hall surrounded by their professors and other people well known in their field.

Starting from these considerations we asked ourselves: "Are we able to create something similar to what we have just seen and appreciated in other universities?"

The answer was strongly positive and since we did not know the real socio-political organizations that supported universities in Austria and the Yugo-slavian territories, our only hope was to get help from our local political institutions.

The organization of the first conference

Our first idea was about a meeting focused on a field wide enough to benefit also from some of our colleagues' experiences. We entitled the meeting "Advances in Separation Science".

The first problem we faced was the creation of a proper database of the institutions of the two countries closed to us.

Visits to Yugoslavian embassies and consulates gave no helpful results due to Yugoslavia's organization into republics, which complicated even more the irretrievability of the information related to the teaching structures and research centers.

Luckily, we took a step forward thanks to some Italian colleagues who helped us by giving us the names of some people with whom they had some past professional experiences, and also thanks to the discovery that in the International Journals at our disposal in the library were collected and listed, paper by paper, the names and institu-

Journals at our disposal in the library were collected and listed, paper by paper, the names and institutions that could be interested in that particular kind of conference.

The Austrian situation was easier since research and teaching were concentrated in few realities. For Italy's potential participation in the conference, we had to thank our many colleagues we met over the years and during the attendance of national meetings. This way, we managed to delineate the probable participants as well as the subjects to include in the conference.

So, after long and tedious work, we created the first structure of the meeting, its possible sections, and a list of probable or potential participants. Starting from this first data bank, we realized that the organization of a conference was indeed possible, so we began looking for sponsors and financial support with such positive outcomes that we could finally organize the conference. After forming an Organizing Committee, deciding the period and the headquarters, and after receiving positive replies from the guests invited to the opening, we sent letters to participants with all the necessary information



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At this point, the tension increased and so did questions and doubts: how many papers would arrive, who would come, how many sections, how many people, how many rooms to reserve, who should be the chairman of the sections....

Finally, papers began to arrive, and ultimately forty papers were included in the program, while nine Italian, five Yugoslavian, and two Austrian universities were represented, which presented their papers at the conference together with different research centers.

Due to numerous participants, the conference was structured with eight sessions distributed over three days with topics from phase equilibrium to transport phenomena, and separation processes.

Regarding the latter problem, i.e. the choice of the chairmen of the sections, the choices of the Italian and Austrian chairmen posed no problem since we knew our colleagues and only two Austrian universities were present. However, choosing the Yugoslavian chairmen turned out to be more difficult.

On the morning of September 19, 1978, at the arrival of the Yugoslavian colleagues we had brief chats with many of them who gave us very good suggestions enabling us to finalize the structure of the conference.

The introductory speech of the Conference "Advances in Separation Science" was held by prof. Aage Fredenslund from the University of Lingby (DK) who presented the work "Prediction of separation factors using group contribution". In those years, Prof. Fredenslund and Prof P. Rasmussen were diffusing the concepts connected to the Uniquac and Unifac group contribution theories.

At the end of the conference, all the attending colleagues agreed with the importance of this kind of meeting, especially with respect to the young researchers, and appreciated the scientific level of the conference leading to a very simple conclusion: after two years, we would meet again in Ljubljana.

While the first Italian–Yugoslav–Austrian Conference on Chemical Engineering entitled "Advances in Separation Science" was organized in Trieste by the "Istituto di Chimica Applicata e Industriale" of the University of Trieste, the second conference was organized by the University of Ljubljana in Bled in 1980.

The series of CEC meetings

The Organizing Committee of the 2nd meeting changed the title into "Chemical Engineering Conference" in order to extend the participation to scientists from all the different fields of Chemical Engineering.

The Program Committee of the 2nd Conference included numerous papers, sixty-eight contributions, while only fifty eight papers were included in the Proceedings.

The papers were arranged into five sections:

- Phase Equilibria and Thermodynamic Properties of Fluids (12 contributions)
 - Separation Processes (18 contributions)
 - Reaction Engineering (20 contributions)
- Fluid Flow, Heat and Mass Transfer (15 contributions)
 - Miscellaneous (3 contributions).

After Trieste and Bled, Graz had the honor to host the third meeting of the CEC.

The importance of the CEC in those years can be measured by the fact that the European Federation of Chemical Engineering decided to include this conference as the 276th event in their program.

At this point, it seems logical and important to report here the considerations present in the Preface of the Proceedings of two Political representatives, the Federal Minister *Dr. Hertha Firnbercj* and *Dr. Josef Krainer*, Governor of the Styria Federal State. In the Preface (1), the Federal Minister, Dr. Hertha Firnbercj evidenced some points as follows.

"Chemical engineering and chemical process technology are becoming one of the most comprehensive branches of technical sciences. As in few other disciplines, scientific research is closely followed by industrial and technological development. This close interaction between practical orientation on the one hand, and theoretical research on the other, makes this science not only an important economic factor, but, in particular, a model example of a modern, technologically oriented natural science. Chemical engineering has a special role to play in the fields of environmental protection and energy, and raw material conservation.

It was therefore the fundamental aim of the Austrian–Italian–Yugoslav Chemical Engineering Conference to encourage this cooperation between the three countries on the basis of good relations dating far back in history. The conferences had already fostered many personal contacts beyond the strictly scientific sphere between the participants. The third session of the conference, hosted by Austria, had attracted an especially great interest among scientists from all our neighboring countries, showing an interest in including scientists from all parts of Central Europe."

In the same Preface (1), the Governor of the Styria Federal State wrote: "For Europe and the whole world, the regions, countries and republics of the Eastern Alps are a living example of how, despite political and language differences, common

aims can be pursued and a fertile cooperation realized. The diversities of the regions of the Eastern Alps are not an expression of difference but of special manifestation within an original entity molded by common values and a long common tradition and culture. The CEC, like Trigon and the ARGE Alpen-Adria, is an essential part of these multilateral activities. These contacts at various levels not only enhanced the cooperation but initiated dynamic activity as a result of mutual understanding. The individual good relationships between the people of different countries translate into friendly relationships between neighboring countries".

Returning to the conference, we can now evaluate the evolution of participation. At the 1978 conference in Trieste, 40 papers were presented; the Program Committee of the 2nd conference held in Bled (1980) in the Proceedings included 58 papers and one plenary lecture of the 67 contributions and three plenary lectures given at the conference.

The 3rd conference held in Graz (Austria 1982) presented 114 contributions and 9 plenary lectures.

The 2nd and 3rd conferences clearly showed that this "regional" meeting spread its interests to other countries: Germany, Switzerland, Czechoslovakia, Hungary were slowly involved and brought to this Conference new experiences and understanding.

A total of 165 authors submitted their abstracts for the 4th conference organized in Grado (Italy 1984), while the Committee received 114 papers. Most of them were submitted by Yugoslav (40) and Italian authors (35); eighteen papers were sent by Austrian authors, eight papers from Germany, six from Hungary, five from Switzerland, one from Denmark, and one from Japan.

The number of contributions reached a stationary level and confirmed the validity of this biennial meeting.

In order to leave time for discussions and exchange of ideas during the conference, the Committee organized a poster session which was introduced by a Chairman before the session itself.

With the Graz conference (1982) we concluded the first loop, for this reason a round table "Research in Chemical Engineering in Italy, Yugoslavia and Austria" was included in the final program of the meeting.

The round table was a good opportunity for a mature meditation about the validity of the conference and the possibility of improving cooperation among the neighboring countries of Central Europe.

With the guide of Prof Biardi (University of Milan), Prof. Levec (University of Ljubljana), and prof. Moser (University of Graz), the round table investigated different points of view and different solutions.

The 5th CEC was designated as the 342nd event of the EFCE and the contributed papers, plenary lectures, roundtable and posters were presented in the following topics: Fundamentals, Separation Processes, Reaction Engineering Biotechnology and Environmental Engineering.

Exhibitions of books on chemical engineering and illustrations of several important industrial processes were a further feature of the 5th CEC.

The papers were carefully selected in order that they closely matched the topics announced and met international scientific standards. The six plenary speakers who had been invited to present the state of the art in chemical engineering were all experts of high professional reputation, and undoubtedly increased the value of the conference.

Of the 140 abstracts submitted to the 5th CEC, 81 papers were accepted and published in the proceedings, along with the text of the six plenary lectures. The authors came from Austria, Canada, Czechoslovakia, England, Germany, Greece, Hungary, Italy, the Netherlands, Poland, Spain, Switzerland, the United States, and Yugoslavia.

The aim of the CEC was to bring scientists together, regardless of their age, nationality or institution, but because of their knowledge and experience in the field and also to offer a challenge to young scientists to test themselves on the scientific scene, and this was always done. In this context, we could enjoy intensive and positive sensations when important colleagues, invited or just as participants, such as Dr. Carbonell, Dr. Zlokarnick, Dr. Nagata, Dr. Wenzel, Dr. Fredenslund, Dr Dudukovic and Dr. Rasmussen, could speak and present their experiences in front of many young researchers sitting down and listening to the presentations with pleasure!

Due to the many positive results obtained in the five meetings, we sincerely hoped that the CEC would have the opportunity of attaining most, if not all, of the expected goals, and that the CEC series would have the opportunity to continue in future owing to its wide recognition as an important meeting for chemical engineers from throughout Europe.

The surprise came in 1987, when Graz decided to stop the organization of these meetings, so the CEC conference that should have been organized by Austrian Colleagues in 1988 was cancelled despite the clear and strong positions declared in 1982 by the political representatives with a very positive influence during the opening of the Graz CEC.

Any kind of effort offered from other colleagues was not accepted and no reasons were given by the Austrian colleagues.

This is the story of the CEC conference but behind the real and official duties associated with or-

ganizing the meetings, one other story was evolving, that of the CABEQ Journal published in Zagreb in March 1987. In March 2012 – after 25 years – we celebrated its 25th anniversary.(2)

The story of CABEQ

In the early 1980s, the activity of the Croatian Society of Chemical Engineers was particularly significant within the Section for chemical engineering headed by Dr. Dinko Sincic. The Section also gave the initiative for the creation of the Yugoslav Committee for Chemical Engineering.

In that period, the European initiative Alpe-Adria for regional co-operation had started and the Section participated with Austrian and Italian associations in the meetings of chemical engineers under the name of Austrian-Italian-Yugoslav Chemical Engineering Conferences (AIY CEC).

The papers from these conferences were published in the proceedings of the conferences and in part by Croatian journal "Kemija u industiriji" (KUI) which was distributed only to the republics of former Yugoslavia. In order to increase the impact of the events, the Section for Chemical Engineering of the Croatian Society of Chemical Engineers proposed to publish an international edition of KUI journal. The Editor-in-chief of KUI, Prof. I. Butula, with the assistance of Prof. E. Bauman, Dr. D. Sincic and Mr. sc. E. Beer, members of the Editorial Board, made all the necessary preparations for starting the new journal. Dr. D. Sincic proposed the new journal be named "Chemical and Biochem-Engineering Quarterly", abbreviated as CABEQ. The idea, endorsed at the AIY CEC meeting held in Portorož, Slovenia in September 1986, was to bring together faculty and students from chemical and biochemical engineering departments and industry in the Alpe-Adria region, and enlarge the area of interest to Central Europe and the Mediterranean countries.

After the conference in Portorož, an editorial board was formed.

A CABEQ editorial office was established at the address of the Croatian Society of Chemical Engineers in Zagreb, Croatia. Prof. E. Bauman from the University of Zagreb was elected as chief editor, and Prof. Anton Moser from University of Graz and I, Prof. Paolo Alessi from the University of Trieste, were elected as associate editors.

Later, Prof. T. Koloini was added as an associate editor from Slovenia. The Editorial Board was made up of Faculty members of chemical engineering departments from the Universities of Graz, Ljubljana, Maribor, Trieste and Zagreb. Prof. I. Butula was elected as the chief co-editor. After

Prof. E. Bauman retired at the end of 1988, Prof. Z. Kurtanjek from the University of Zagreb replaced him. The Editorial Board meets twice a year at the chemical engineering departments in Ljubljana, Graz, Trieste and Zagreb in rotating order.

Publishing frequency of four issues per year was adopted. The journal accepts contributions of original scientific papers, reviews, notes, preliminary communications, professional, conference, and opinion papers. The first issue of CABEQ appeared in March 1987.

The CABEQ journal has a circulation of about 600 copies, mostly distributed among chemical engineering department libraries, scientific institutes, and national libraries around the world. There are relatively few individual subscriptions.

The Journal has so far attracted numerous authors from almost all European countries, as well as from USA, Canada, and India.

For the first 15 years of publishing, authors from Italy gave the most contributions to the Journal, 23 % of all papers, followed by Croatia with 14 %. The founding countries, Slovenia and Austria, gave 7 % and 6 % contributions respectively. Over 60% of the contributions are from Mediterranean countries. In the first period, papers on chemical engineering dominated over biochemical engineering, then for many years the ratio was about equal, but in recent years contributions from the field of biochemical engineering have become dominant. In the last ten years, a large number of authors have come from Asia, Africa, and America enlarging positively the area of interest and the knowledge of new realities and new research groups.

CABEQ has also been present on the Internet. The Journal's website is available at URL address http://www.pbf.hr/cabeq. The page provides essential information for contacts with CABEQ Editorial Office and any necessary information for authors.

In the near future, CABEQ's Editorial Board should make an effort to increase the impact factors by publishing special issues edited by guest editors selected from outstanding scientists. CABEQ should play a more pronounced role in the exchange of information between chemical and biochemical engineering departments in the Alpe-Adria region. Information on undergraduate and postgraduate studies should be currently available in CABEQ, as well as information for exchange of students, announcements on open research positions in projects and staff, announcements on scheduled PhD theses defenses. The social and political impact of CABEQ can be established also for activating student and faculty exchange in the Alpe-Adria region.

Conclusions and evolution

We have reached the end of the story, but at the same time, we have signed the line of the future of this long story. Even if reality changes, sometimes in positive sometimes in negative direction, the global result can be considered positive. Over these 35 years, the feeling of friendship and collaboration was always present in this interesting part of Eu-

rope, and what we had created was positively accepted, which is why we feel that this story will continue in its positive evolution.

- 1. Preface of Proceedings Vol. I, 276th Event of the European Federation of Chemical Engineering, 1982
- 2. E. Bauman, Z. Kurtaniek, 15 Years of Chemical and Biochemical Engineering Quarterly, Initiative, Present and Future, CABEQ, 1, 2012

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