



"Gheorghe Asachi" Technical University of Iasi, Romania



INNOVATIVE MATERIALS AND PROCESSES

2nd INTERNATIONAL CONFERENCE ON CHEMICAL ENGINEERING, ICCE 2014, 5 - 8 NOVEMBER 2014, IASI, ROMANIA

As many of us know, ten years ago we started to organize the *Days of Faculty of Chemical Engineering and Environmental Protection*, event focused mainly on the scientific results of the PhD and master students. Every year this initiative has grown and got more and more consistency. Thus, as a consequence of our faculty's position in the national top of scientific research, this conference became an international reference since 2012.

In fact, **the first edition of this international event has been dedicated to the celebration of 100 years of chemical engineering education in Iasi**, and I can affirm that **we represent the promoters of the oldest school on chemical engineering in Romania**, just considering the age, but not only. Because, as the result of its great promoters' initiatives, Moldova was destined for creating and developing the education on technical chemistry, which **appeared in 1882 with the first chemistry laboratory designed by Petru Poni at the University of Iasi**.

The field of chemistry will acquire more and more engineering valences, so the introduction and evolution of the Technological Chemistry Department and its specific courses leading to the approval by the Ministry of Religious Affairs and Public Education of the initiative to create **the Applied Chemistry specialization in 1906**, which will become **the Industrial Chemistry specialization, at the University of Iasi, in 1912**.

The *International Conference on Chemical Engineering (ICCE)* completes successfully the other traditional international event of the Faculty, more experienced and recognized, the *International Conference on Environmental Engineering and Management (ICEEM)*, which will be at the **8th edition** in 2015, being also organized every two years. The continuous alternation of these two important

scientific events underlines the attractiveness of the scientific areas that are found in the activity of our faculty members.

This year, we were happy to consider over 160 papers included in the conference program, an increased number from the previous edition. The authors of these communications or posters were coming from 13 countries. We were also pleased to attend to eight plenary conferences and six key-lectures, presented by scientific personalities in the field, from Romania or abroad.

At few days after Halloween, with any association with, only by coincidence, we celebrated during these three days the Chemical Engineering, which, together with the chemistry is considered a "horror" science for someones, an inaccessible area for others, a not at all easy profession, which apparently loses its attractiveness by many people. This is the trend observed with various magnitudes in different developed geographic regions of the world. However, it is really an artificial trend.

Even in the context of the less favorable economic environment, we never cease to believe that the progress of any human society can not be achieved without engineers and, obviously, without the large contribution of chemical engineers.

We, all the participants to this conference, through which we will present and expose, we have to show that chemical engineering is too far from losing even a bit of its creative and practical potential. Also, we have to underline that **the development of human society depends essentially and dramatically on the development of chemistry and chemical engineering**. Because, if something could give color, flavor, fascination, and trust to such technical field as engineering is, if something can create and perpetuate

life, if something can give value and brightness to an universe and can improve our universe, that "something" is the chemistry and chemical engineering.

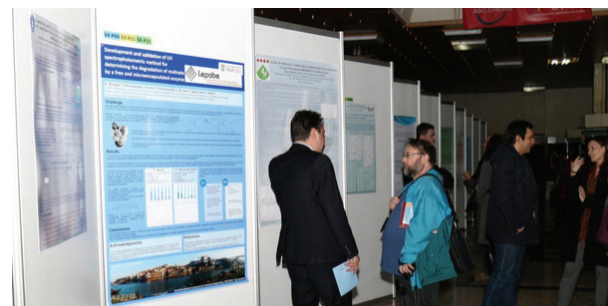
Thanks to all colleagues from our country and abroad who have honored us these days and joined our joy to celebrate the Chemical Engineering.

I'd like to thank very much all my colleagues involved in the organization of this conference. Special thanks to the Alumni Association of Industrial Chemistry Faculty for its consistent support.

I am waiting to meet you again in 2016, at the next edition of the International Conference on Chemical Engineering.

Guest editor:

Professor Dan Cascaval
Dean of the Faculty of Chemical Engineering
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Professor DAN CAȘCAVAL, PhD, is the Dean of the Faculty of Chemical Engineering and Environmental Protection since 2008, being formerly the Head of the Organic and Biochemical Engineering Department and Director of Doctoral School of the Faculty.

Professor Dan Cascaval is specialist in the fields of biochemical engineering and biotechnology, being the promoter of the biochemical engineering courses in this academic curriculum. His competences and major scientific contributions are focused on bioseparations (*separation of biosynthetic compounds by liquid-liquid extraction with and without chemical reaction, extraction and transport through liquid membranes – free and facilitated pertraction, synergetic extraction and pertraction, direct extraction from unfiltered broths*) and bioreactors (*rheology of fermentation broths, efficiency and distribution of mixing into the stirred bioreactors, optimization of mixing, oxygen and substrate mass transfer, improvement of oxygen transfer by using oxygen-vectors, new bioreactors with mobile and packed beds of immobilized cells/enzymes*).

Professor Dan Cascaval is PhD supervisor and post-doctoral programs coordinator. His main contributions on the research areas are included in over 250 publications (125 papers in ISI ranked journals; 12 books and chapters; 8 patents) and 34 international and national grants. He was invited professor at The University of Manchester, Vienna University of Technology University, Karlsruhe University of Technology, University College London.

Professor Dan Cascaval is member of the Editorial Boards of 11 journals and of the Advisory Boards of over 30 journals, being also member of 5 scientific and professional organizations in the field of chemical and biochemical engineering and biotechnology