



OVERVIEW
of the International Scientific and Professional Conference
15th Ružička Days
“TODAY SCIENCE – TOMORROW INDUSTRY”
Vukovar, Croatia, 11th and 12th September 2014

The Croatian Society of Chemical Engineers, Josip Juraj Strossmayer University of Osijek – Faculty of Food Technology Osijek, EFFoST – European Federation of Food Science and Technology, EuCheMS – European Association for Chemical and Molecular Sciences and EHEDG – European Hygienic Engineering & Design Group organized an International Scientific and Professional conference, *15th Ružička Days*, traditionally held in Vukovar, Croatia, on 11th and 12th September 2014.

Ružička Days is a traditional gathering of scientists and experts from the fields of chemistry, chemical and biochemical engineering, food technology, biotechnology, medical biochemistry and pharmacy, chemistry in agriculture and forestry and environmental protection, held since 1978 and dedicated to Leopold (Lavoslav) Ružička, a Croatian Nobel Laureate in Chemistry. The Conference is held under the slogan “TODAY SCIENCE – TOMORROW INDUSTRY” and its goal is to promote excellence, interdisciplinary character, originality and innovation in scientific research, with an emphasis on the application of science and new technologies in industry.

The Conference was organized under the auspices of the Croatian Academy of Sciences and Arts – Department of Mathematical, Physical and Chemical Sciences and supported by: Ministry of Science, Education and Sports of the Republic of Croatia, Ministry of Agriculture of the Republic of Croatia, Ministry of Economy of the Republic of Croatia, Ministry of Environmental and Nature Protection of the Republic of Croatia, Croatian Academy of Engineering, Josip Juraj Strossmayer University of Osijek, Vukovar-Srijem County and City of Vukovar.

At the opening ceremony the participants were greeted by Professor Drago Šubarić, Chairman of the Scientific and Organizing Committee, Ivan Penava, Mayor of Vukovar City, Željko Cirba, Vukovar-Srijem County Deputy Prefect, Tomislav Mrčela, Vice-Rector of the Josip Juraj Strossmayer University of Osijek, Milena Mandić on behalf of the Croatian Academy of Engineering, and academician Vitomir Šunjić on behalf of the Croatian Academy of Sciences and Arts. After greetings, academician Vitomir Šunjić officially opened the Conference.



On the occasion of the 15th anniversary of the Ružička Days, the Croatian Society of Chemical Engineers also presented awards at the opening ceremony for special contribution in the work and development of the preceding conferences to: Vukovar-Srijem County, University of Zagreb – Faculty of Chemical Engineering and Technology, Petrokemija d.d., Tvoronica Gnojiva Kutina, Belupo d.d. company, Saponia d.d. company, Osječka pivovara d.d. company, academician Vlasta Piližota, Professor Drago Šubarić, Professor Ivanka Miličić, and Professor Srećko Tomas.



Scientific and professional papers were presented at the Conference as plenary lectures, invited lectures, oral presentations and poster presentations in six topics: chemical analysis and synthesis, chemical and biochemical engineering, food technology and biotechnology, medical biochemistry and pharmacy, chemistry in agriculture and forestry and environmental protection.

Altogether, there were 415 participants through plenary lectures, invited lectures, oral presentations, and poster presentations, from 15 different countries (Croatia, Czech Republic, Republic of Serbia, Bosnia and Herzegovina, Macedonia, Slovenia, Turkey, Germany, Austria, USA, Slovakia, Monaco, Poland, Greece, UK). Five plenary lectures, 1 invited lecture, 19 oral presentations and 106 poster presentations were given, with a total of 131 scientific and professional papers registered, while several companies exhibited their equipment and devices, and two companies also had sponsored lectures along with their equipment and devices being exhibited.

The plenary lectures at the Conference were as follows:

- **Vitimir Šunjić**, *Croatian Academy of Sciences and Arts: From science to industry – and back*
- **Josip Šimunović**, *Department of Food, Bioprocessing and Nutrition Sciences, North Carolina State University, Raleigh, NC, USA: Development and commercialization of new aseptic technologies for processing of foods and biomaterials: Continuous flow microwave sterilization and integrated systems for particle flow monitoring*
- **Takanobu Higashiyama**, *Global Product Development NAGASE (EUROPA) GmbH: Trehalose: multifunctional sugar and its applications*
- **Silvana Raić-Malić**, *University of Zagreb – Faculty of Chemical Engineering and Technology: Challenges in positron emission tomography application: from synthesis to testing on mice*
- **Ljubica Glavaš-Obrovac**, *Josip Juraj Strossmayer University of Osijek – Faculty of Medicine: Current trends in activity and selectivity profiling of therapeutic molecules*

One invited lecture was held at the opening ceremony as well:

- **Ivan Hubalek**, *a retired employee of the company Borovo d.d. Vukovar: Nobel Prize winner Leopold (Lavoslav) Ružička, born 1887 in Vukovar*

The Conference was accompanied by lots of other events: *4th Meeting of Young Chemists* held on 10th September 2014 at the Ružička House; Welcome Reception held on 10th September 2014 at the City Museum Vukovar–Eltz Manor, Gala dinner held on 11th September 2014 at Hotel Lav, and various other social activities during the Conference. Especially interesting was the *4th Meeting of Young Chemists* at which

secondary school pupils from Vukovar and Osijek presented their papers, and the two best rated papers were also presented at the closing of the Conference on 12th September 2014. The Scientific and Organizing Committee of the *15th Ružička Days* gave full support to this activity and already started activities aimed to further strengthen the meeting of young chemists so that a larger number of secondary school pupils and a regional character of the meeting can be expected in the future.

On 11th September 2014, an EHEDG Info Day was held by the international co-organizer of the Conference.

All events were held in three locations: the Ružička House, Hotel Lav Vukovar and City Museum Vukovar – Eltz Manor.

The interest in the Conference was great and the organizers were convinced in its success with a good reason. From our contacts with the participants of the Conference we found out that they were satisfied with the organization of the Conference, and that the lectures were interesting for them, which was visible from the occupancy of the hall during the entire Conference. Especially successful was the part of the Conference concerning poster presentations where almost all registered participants presented their posters.

The organization of the *15th Ružička Days* was supported by many institutions and companies, with special mentions to Vukovar-Srijem County and Vukovar City, who were altruistically helpful in the organization of the Conference. All of them recognized the importance of keeping the tradition and transferring the message of Lavoslav Ružička, expressed through his words which are also the slogan of the Conference, at the very house where he was born.

An organizers' wish is that this traditional festival of scientific and professional activity in the fields of chemistry, chemical and biochemical engineering, food technology, biotechnology, medical biochemistry and pharmacy, chemistry in agriculture and forestry and environmental protection, dedicated to remembering and honoring Leopold (Lavoslav) Ružička, the Croatian Nobel Laureate in Chemistry, continues to be an important place of meeting, exchange of experiences and establishment of cooperation between science and economy.

On behalf of all of us who participated in the organization, I hope that the participants of the *15th Ružička Days* took pleasant memories with them and I am looking forward to meeting you all again, at the *16th Ružička Days*, in 2016!

Sincerely,

Chairman of the Scientific and Organizing
Committee of the *15th Ružička Days*



Drago Šubarić, PhD, Full Professor