

Report on the 42nd International Symposium: *Actual Tasks on Agricultural Engineering*, 25-28 February 2014, Opatija, Croatia

Prof. Silvio Kosutic, Convenor of the Symposium
Prof. Daniele De Wrachien, Past President of EurAgEng

The 42nd International Symposium Actual Tasks on Agricultural Engineering was held on 25th-28th February 2014 in Grand Hotel Adriatic Opatija, Republic of Croatia. The principal Organiser - the Agricultural Engineering Department, Faculty of Agriculture, University of Zagreb - was supported by the following frameworks: Department of Agricultural Engineering, Faculty of Agriculture, University J.J. Strossmayer, Osijek, Department of Bio-systems Engineering, Faculty of Agriculture, University of Maribor (Slovenia), Agricultural Institute of Slovenia, Hungarian Institute of Agricultural Engineering Gödöllö and Croatian Agricultural Engineering Society. In addition, CIGR, EurAgEng, AAAE bestowed their support and endorsement on the Event.

This year 56 participants from 9 countries attended the Symposium. It consisted of an Opening Session and six Topic Sessions covering all the broad subject-areas that fall under the scope of Agricultural Engineering. At the Opening Session Prof. Dr. Daniele De Wrachien, former president of the EurAgEng, in his speech highlighted briefly the main historical steps of the symposium emphasising its significant role as a gathering event for scientists, engineers and dealers from south-east European countries and brought the greetings of EurAgEng and CIGR. Prof. Dr. Sc. Zoran Grgic, vice dean of Faculty of Agriculture, University of Zagreb addressed audience bringing them greetings and good wishes for successful work and emphasizing long tradition, high quality level and importance of symposium within south European area. The Convenor, Prof. Dr. Silvio Kosutic ended the Opening Session with the greetings of the Croatian Society of Agricultural Engineering to the audience. A number of lectures followed, among which are worth mentioning: Modelling jet flow in sprinkler irrigation systems: Classical and Bohmian water droplet trajectories presented by Prof. Dr. Daniele De Wrachien from Italy, Fuel consumption working with economy PTO given by BSc Peter Vindis from Slovenia, Canopy adapted orchard spraying presented by BSc Aljaz Osterman form Slovenia, Controlled stems cutting module for SRC nurseries featured by Prof. Dr. Dumitru Tucu from Romania, Potatoes processing into fried products-an effect of growing technology on acrylamide precursor content into potatoes tubers performed by BSc Jaroslav Cepl from Czech Republic, Air temperature and relative humidity distribution in the different greenhouse construction delivered by Dr. Aleksandra Dimitrijevic from Serbia, Potentials, opportunities and barriers for biogas production and utilisation in Autonomous Province of Vojvodina proposed by Dr. sc. Djordje Djatkov from Serbia, Carbon footprint of conventional and ecological crop production introduced by Dr. sc. Viktor Jejcic from Slovenia, Lower fuel consumption as new challenge for sustainable agriculture and smaller carbon footprint highlighted by MSc Tomaz Poje from Slovenia and Mitigation of peak loads with solar



energy in an enterprise presented by Allo Allik from Estonia. In the Topic Sessions, each starting with a review report, 46 papers were discussed, in oral presentation. At the Closing Session the Convenor emphasised the role of EurAgEng and CIGR in the ecologically sustainable development of agriculture and in the preservation of the rural cultural heritage within the East-European countries. Participants were given electronic copies of the Proceedings consisting in volumes of 488 pages, containing 46 papers all peer reviewed. Papers from the Proceedings have been indexed in Thomson Reuters (The Conference Proceedings Citation Index, a Web of Science® database) since 1997. Maziva Zagreb d.d.-INA group (national petrol company) presented its latest palette of biodegradable oils emphasising the progress made in keeping pace with well known worldwide competitors. Especially interesting was an Open debate titled CAP of the EU: The role of mechanization in the viability and development of agriculture in the Republic of Croatia that gathered many Croatian experts from middle range agricultural enterprises and representatives of famous machinery producers. Coordinator of this Open Debate was Ruzica Gelo, director of the EU Centre within Croatian Commerce Chamber who made remarkable introduction presentation.

Downloadable electronic version of proceedings of the 42^{nd} symposium is available at symposium's web site http://atae.agr.hr/proceedings.htm Information regarding the 43^{rd} Symposium in the year 2015 will soon be available at the web site: http://atae.agr.hr

