

# Report on the 41<sup>st</sup> International Symposium *Actual Tasks on Agricultural Engineering*, 19-22 February 2013, Opatija, Croatia

**Prof. Silvio Kosutic, Convenor of the Symposium**

**Prof. Daniele De Wrachien, Past President of EurAgEng**

The 41<sup>st</sup> International Symposium *Actual Tasks on Agricultural Engineering* was held on 19<sup>th</sup>-22<sup>nd</sup> February 2013 in Grand Hotel *Adriatic* Opatija, Republic of Croatia. The principal Organiser, 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 Gödöllő; and Croatian Agricultural Engineering Society. In addition, CIGR, EurAgEng, AAAE bestowed their support and endorsement to the Event.

This year, 60 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 southeast European countries and brought the greetings of EurAgEng and CIGR. Prof. Dr. Ines Han Dovedan, vice dean of Faculty of Agriculture, University of Zagreb addressed the audience bringing the greetings and good wishes for a successful work. 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: *Water droplets ballistics in a sprinkler spray flow: the classical and quantum dynamic frameworks for a single and many-particle systems* presented by Prof. Dr. Daniele De Wrachien from Italy, *Pulse width control of the solenoid valve for the application of pesticides using fuzzy logic controller* given by BSc Peter Berk from Slovenia, *Introduction of low-cost precision GPS/GSSN to agriculture* presented by BSc Aljoz Osterman from Slovenia, *Probabilistic approach regarding cleaning process efficiency from harvesting machines* featured by Prof. Dr. Nicolae Filip

from Romania, *Influence of different soil preparations and vehicle speed on process parameters at seeding of peas (*Pisum sativum*) with trailed pneumatic universal seed drill* performed by Dr. Gergard Moitzi from Austria, *Spatial distributions of air humidity in a cows barn under different rates of forced ventilation* delivered by Prof. Dr. Goran Topisirovic from Serbia, *Harvestable and on-field remaining crop residues of wheat and soybean* proposed by BSc Marko Golub from Serbia, *CO<sub>2</sub> emission in decentralized plant oil production* introduced by Dr. Viktor Jejcic from Slovenia, *The suitability of utilizing cotton stalk for low cost binderless panels* highlighted by Clara Eugenia Ferrandez Garcia from Spain and *Mechanical properties of profiles from recycled agricultural plastic waste mixed with wood powder* presented by Dr. Aleksandra Dimitrijevic from Serbia. In the Topic Sessions, each starting with a review report, 44 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 420 pages, containing 44 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 new palette of bio-degradable oils emphasising the progress made in keeping pace with well known worldwide competitors. Especially interesting commercial presentation titled *Countrywide ICT-backbone supporting farm-management, advisory services, logistics, precision farming and other chain partners as well as farmers integration into environmental caretaking and risk management* was performed by Walter H. Mayer, CEO of Progis Software GmbH, Austria

An electronic version of proceedings of the 40<sup>th</sup> symposium is available at Symposium's web-site <http://atae.agr.hr/proceedings.htm> Information regarding the 42<sup>nd</sup> Symposium in the year 2014 will soon be available at the web site: <http://atae.agr.hr>