

A Report on the 40th International Symposium Actual Tasks on Agricultural Engineering

21-24 February 2012, Opatija, Croatia

Prof. Silvio Kosutic, Symposium Chairman

Prof. Daniele De Wrachien, Former President of the EurAgEng

The 40th International Symposium, *Actual Tasks on Agricultural Engineering*, was held on 21-24 February 2012 in the "Grand Hotel Adriatic", Opatija, in the Republic of Croatia. It was organized by the Agricultural Engineering Department of the Faculty of Agriculture of the University of Zagreb, and was supported by the Department of Agricultural Engineering of the Faculty of Agriculture of the J.J. Strossmayer University, Osijek, the Department of Bio-Systems Engineering of the Faculty of Agriculture of the University of Maribor, Slovenia, the Agricultural Institute of Slovenia, the Hungarian Institute of Agricultural Engineering Gödöllő, and the Croatian Agricultural Engineering Society. The Symposium also enjoyed the support of the CIGR publishing house, the EurAgEng (the European Society of Agricultural Engineers), the AAEE (the American Association for Agricultural Education), the AAEESEE (the Association of Agricultural Engineers of South Eastern Europe), and the ASABE (the American Society of Agricultural and Biological Engineers).

Seventy members took part in this year's Symposium, from 9 different countries. After the Opening Session, there were six Topic Sessions covering all the broad subject-areas that lie within the scope of Agricultural Engineering. In his speech at the Opening Session, Prof. Peter Schulze-Lammers, president of the EurAgEng, briefly highlighted the main historical landmarks of the Symposium and emphasized the importance of its role in bringing together scientists, engineers and dealers from the countries of South Eastern Europe. He also brought greetings from the EurAgEng and the CIGR. The Session Chairman, Prof. Silvio Kosutic, ended the Opening Session with greetings from the Croatian Society of Agricultural Engineering.

A number of lectures followed, among which it is worth mentioning: *Water droplet trajectories in an irrigation spray: the classical and quantum mechanical pictures* by Prof. Daniele De Wrachien, Italy; *Actual tasks of the technical development in agriculture* by Prof. Istvan Husti and Miklos Daroczi BSc, Hungary; *Researches regarding the noise con-*

version from tractor engine in order the intake manifold noise by Prof. Nicolae Filip, Romania; *Development of a method for assessing the performance of agricultural biogas plants* by Djordje Djatkov MSc, Serbia; *Dynamics of heat exchange in strawberries in an open field at night-frost conditions* by Madis Pennar, Estonia; *Introduction to the greenhouse decision support model* by Dr. Aleksandra Dimitrijevic, Serbia; *Possibilities of OSR energy production grown at heavy metals contaminated areas* by Dr. Viktor Jejcic, Slovenia; and *Determining the cost matrix of straw cereals combine harvesters, according to equipment quality and engine power* by Prof. Valentin Vladut, Romania.

Each Topic Session opened with a review report. Altogether, the speakers presented 45 papers that were then discussed during the sessions. At the Closing Session, the Chairman emphasized the role of the EurAgEng and the CIGR in the ecologically sustainable development of agriculture and in the preservation of the rural cultural heritage within Eastern Europe. All the participants were given printed copies of the Proceedings, consisting of 57 papers (a total of 597 pages) all of which had been peer reviewed. Since 1997, papers from the Proceedings have been indexed in Thomson Reuters (The Conference Proceedings Citation Index, a Web of Science®. Available from: <http://thomsonreuters.com>). Maziva Zagreb of the INA d.d. Group (a national oil and gas company) presented their new range of biodegradable oils emphasizing the progress made in keeping pace with their well known international competitors. During the afternoon sessions, other companies, such as Same-Deutz Fahr, Celli, and Trimble and Hardy, presented their current programmes with the use of video material. An electronic version of the Proceedings of the 40th symposium can be downloaded from the Symposium's web site at <http://atae.agr.hr/proceedings.htm> while information about the 41st Symposium that will take place in 2013 will soon be available from: <http://atae.agr.hr>