Vol. 5, No. 1, 2011 Current Events

Gennady Zaikov and Larisa Madyuskina

INTERNATIONAL SYMPOSIUM "RESEARCH AND EDUCATION IN INNOVATION ERA"

N.M. Emanuel Institute of Biochemical Physics Russian Academy of Sciences, 4 Kosygin str., 119334 Moscow, Russia; chembio@sky.chph.ras.ru

International symposium "Research and Education in Innovation Era" was held during the period of November 10–12, 2010 in Arad (Romania) on the base of "Aurel Valicu" University (AVU). The organizers of the conference were The Ministry of Education, Research, Youth and Sport of Romania (Bucharest) and AVU (Arad). About 200 scientists and students from 25 research centers of Romania, Poland, the Netherlands, Russia, Italy, Portugal, Germany, UK, Croatia, Serbia, USA, Spain and Switherland took part in this symposium.

The Organizing Committee included 34 world well-known scientists from these countries. The program of the conference included plenary lectures, parallel sessions and poster session. Rector of AVU Prof. Lizica Mihut took part in the opening ceremony of the conference. Two plenary lectures were delivered by Prof. Rodica Zafiu, University of Bucharest ("Present-Day Tendencies in the Romanian Language") and Dr. Patricia Davies, The European Association for University Lifelong Learning, Director of European Dolceta Project ("Dolceta European Project - education for responsible and sustainable consumers").

The Program included 8 parallel sessions.

"Chemistry and Application Field" session had 4 sections. Section one ("Novel Biochemical Methods and Their Applications") included keynote lecture ("Mass spectrometric approaches for elucidation of "misfolding" and aggregation structures of neurodegenerative proteins: ion mobility-MS and affinity-MS" Michael Przybylski, Laboratory of Analytical Chemistry and Biopolymer Structure Analysis, Department of Chemistry, University of Konstanz) and 5 oral presentations.

The second section "Trends in Biotechnology" of the first session included four keynote lectures: "Technology transfer-an important tool of effective cooperation" (Ryszard Kozlowski, Institute of Natural Fibers, Poznan, Poland); "Kinetics for chemistry, biology, medicine and agriculture" (Gennady Zaikov, N.M.Emanuel Institute of Biochemical Physics, Russian Academy of Sciences, Moscow Russia); "Novel insect repellent textiles" (Vincent Nierstraz, University of Ghent, Belgium); "Statistical analysis of the microscopic images as a way for investigation of chemical and physical processes in polymers" (Sergei Bronnikov, Russian Academy of Science, Institute of Macromolecular Compounds, Sankt Petersburg, Russia) and two oral presentations.

The third section "Environmental Protection" included 3 oral presentations and the fourth section "Food Engineering and Food Safety" had 3 oral presentations. Ten posters were included in the first session of the symposium.

The second session "Mechanical, Electrical and Textile Engineering" had 7 sections. First section (plenary section) included 4 lectures: "La gestion de activos electromecanicos ferroviarios: adaptacion de herramienta informatica, modelado y analisis de sensibilidad de costes lcc en funcion de la fiabilidad" (Manuel Pocino Pasias, Fernando Pascual Andreu, Luis Lezaun Martinez de Ubago, Emilio Larrode Pellicer, Universidad de Zaragoza, Espana); "About the Possibility of Optimization and/or Replacing a Thermal Treatment, by Using a Concentrated Energy Source During Machining" (Corina Bokor, Sorin M. Itu, Claudiu Isarie, "Lucian Blaga" University of Sibiu); "DMG – Tehnologii modern de prelucrare pe masinile unelte cu CNC" (Lilian Cirstea, S.C. DMG S.R.L., Arad); "A New Adaptive Teaching Method for Engineering School" (Dorin Isoc, Teodora Isoc, Technical University of Cluj-Napoca).

The second section "Modern Technologies" had one plenary lecture "Optimization of the Manufacturing Cycles by Means of the Continuous Improvement" (Constantin Bungau, Traian Buidos, Mihai-Dan Groza, Mircea-Petru Ursu, University of Oradea) and 8 oral presentations.

Section 3 "Automation and Electrical Engineering" included 9 oral presentations where scientists discussed the next problems: CMOS image sensors and the perspective of the sequential cumulative exposure; artificial neural network for electromyographic classification; the transient operating conditions of the dual-windings stator induction generator; the romanian energy market.

Section 4 "Theoretical Mechanics, Strength of Materials, and Machine Parts" included information about

study of the execution elements with piston modeling and simulation, effect of shear deformations on bending beams, investigation of the forced gearing.

Section 5 “Mechatronics, Precision Mechanics and Micro-Mechanics” and Section 6 “Education and Innovation; Railway Vehicles and Transport Systems” included 7 and 5 oral presentations, correspondingly.

Session “Education Sciences” had 4 invited presentations in 3 sections: “Postmodern values and problems of oral communications”, “Curricular reform and school development in the 21st century”, “Paradigms of social work in postmodern society”.

The next 4 sessions were outside the interests of the contributor of this paper and information about them is not included in this article. It was also a problem to visit all sessions because all of them were in parallel.

The next fourth similar symposium will be in two years in AVU (Arad).