

http://www.tede.vgtu.lt

2006, Vol XII, No 1, 3

## *Editorial* **METAHEURISTICS AND LARGE-SCALE OPTIMIZATION**

Optimization techniques pierced through many chapters of OR, because that "facilitates the choice and the implementation of more effective solutions which, typically, may involve complex interactions among people, materials and money problems" (see, http://www.euro-online.org). The latter challenge stimulates a study of existing techniques as well as development of new, heuristic and metaheuristic concepts for optimization. The 5<sup>th</sup> EU/ME Workshop was held in Vilnius, Lithuania, May 18-20, 2005, on the theme "Metaheuristics and Large Scale Optimization", (http://www.mii.lt/EUME-2005).

Topics of EUME-2005 overview current trends and gain a common attitude towards:

- large-scale methods in global search;
- heuristics for large-scale linear and integer optimization;
- metaheuristics in data mining;
- large-scale data visualization for optimal decisions;
- analysis and engineering of algorithms;
- applications in engineering and sciences.

There were 47 participants in the workshop representing 15 countries in Europe, America and Asia,: Belarus, Canada, Estonia, France, Germany, Iran, Italy, Lithuania, Norway, Portugal, Russia, Spain, UK, Ukraine and USA. After the selection process, 29 contributed reports were accepted for presentation at the workshop. Three plenary speakers were invited, too. Prof. Panos Pardalos from the University of Florida in the USA, gave the talk: "Metaheuristics in Optimization". Prof. Vladimir Kotov from the Belarus University in Minsk, Belarus, gave the talk: "Algorithms for machine scheduling to minimize makespan with incomplete information". Prof. Stefan Voss from the Hamburg University in Germany, gave the talk: "Optimization Software Class Libraries in the Field of Metaheuristics".

After refereeing process 12 contributed papers were selected for publishing in the journal "Technological and Economic Development of Economy". The best papers are selected for the publishing in the top-rating journal "Journal of Global Optimization".

## Acknowledgments

We wish to acknowledge our sincere thanks to the sponsors who made EUME-2005 possible:

EURO (European Association of OR Societies)

Lithuanian Operational Research Society (LitORS)

Institute of Mathematics and Informatics (MII, Vilnius)

Vilnius Gediminas Technical University (VGTU)

Ministry of Science and Education of Lithuania

We also want to express our gratitude to members of EU/ME (European Chapter on Metaheuristics) and ECCO (European Chapter on Combinatorial Optimization) for their valuable cooperation in the development of the scientific programme and in the organisation of EUME-2005 as such:

## Leonidas Sakalauskas

Chairman, EUME-2005 Organising Committee

Vilnius Gediminas Technical University, Department of Information Technologies Saulėtekio al. 11, LT-10223 Vilnius-40, Lithuania, itors@ktl.mii.lt>