Guest editorial

Special issue on selected papers presented at IDAACS 2003

This special issue of the International Journal of Computer Standards and Interfaces includes a selection of papers presented at the Second IEEE International Workshop on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), which was held in Lviv, Ukraine, September 8–10, 2003.

The first IDAACS Workshop was held in Foros, Crimea, Ukraine, July 1–4, 2001 and the third one is going to be held in Sofia, Bulgaria, September 5–7, 2005. These IDAACS workshops are organized by the Institute of Computer Information Technologies of the Ternopil Academy of National Economy of Ukraine. The 2003 edition has been co-organized by the Institute of Computer Technologies, Automation and Metrology of the National University "Lviv Poliytechnic" of Ukraine.

In the first IDAACS Workshop, 30 papers were scheduled for oral presentations and 35 more for poster sessions. These papers were selected among 100 submissions after undergoing a review process by three independent reviewers. For the second IDAACS the number of submissions has increased dramatically. The program committee accepted 112 papers by authors coming from 28 different countries of Europe, Asia and the Americas. Among these, 60 papers were selected for oral and 52 for poster sessions. For this year's edition a further increase of submissions is expected.

IDAACS workshops are established as a forum for high quality reports on state-of-the-art theory, technology and applications of intelligent data acquisition and advanced computer systems as used in measurement, automation, and scientific research, in applications to industry or business. All these techniques and applications have experimented a rapid expansion in the last few years resulting in more intelligent, sensitive, and accurate methods of data acquisition and data processing applied to manufacturing, environmental monitoring, or medical monitoring, as well as in laboratory measurement equipment. In addition, advanced methods are being developed to enhance the gathering of information for automation, process inspection, quality control, diagnostics, and other processes.

The relevance of IDAACS arises not only for the importance of the topics it focuses on, but also because it has been intended as a forum for establishing scientific contacts between research teams and scientists from different countries. This purpose has become one of the main reasons for the rapid success of IDAACS, as it turns out to be one of the few events where former Eastern and Western European scientists can discuss and exchange ideas and information, allowing them to characterize common and articulated research activities and providing the environment for establishing joint research collaborations.

The coming edition, IDAACS'2005, is going to be co-organized by the Technical University of Sofia, Bulgaria. It will provide the opportunity to all participants for discussing topics with colleagues from different spheres such as academia, industry, instrumentation and computer manufacturing companies, and public and private research institutions and organizations. IDAACS'2005 with its truly international character will continue to promote the development of relationships between former Eastern and Western Europe, and with countries from all parts of the globe.

Finally, I would like to gratefully acknowledge the hard and nice work of the colleagues acting as reviewers for this issue. Many thanks to Naehyuck Chang (Korea), Dominique Dallet (France), Pasquale

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