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Editorial

Recent Advances in Applied and Computational Mathematics: ICACM-IAM-METU*

This special issue has been realized in connection with the International Conference on Applied and Computational Mathematics (ICACM, http://icacm.iam.metu.edu.tr/) that was held in Ankara, Turkey, October 3–6, 2012. ICACM was organized to celebrate the 10th anniversary of the foundation of Institute of Applied Mathematics (IAM) at Middle East Technical University (METU). The conference attracted more than 300 participants. Of those, about 210 were registered and they were from 29 different countries. In addition to the scientific program, a social program was arranged for the participants which included a city tour, a guided visit to Anıtkabir (Mausoleum of Atatürk) and the Museum of Anatolian Civilizations, a gala dinner, and a show of Folk Dance Ensemble.

The aim of ICACM was to highlight the recent advances in applied and computational mathematics as well as to demonstrate their applicability in science, engineering, and industry. In addition to the traditional and strong focus in applied and computational mathematics, the special emphasis was given to information security and cryptology, financial mathematics, actuarial sciences, scientific computing, and their applications. The conference opened with the plenary talk "Adaptive Multilevel Finite Methods in Virtual Medicine" given by Peter Deuflhard (Germany). The invited speakers were Ersan Akyıldız (Turkey), Marc Goovaerts (Belgium), Gary McGuire (Ireland), Florian Heß (Germany), Monique Jeanblanc (France), Ralf Korn (Germany), Karl Kunisch (Austria), Bernt Øksendal (Norway), Krzysztof M. Ostaszewski (USA), Monique Pontier (France), Bart Preneel (Belgium), Halil Mete Soner (Switzerland), and M. Grazia Speranza (Italy). More than 350 extended abstract submissions were received out of which 161 of them were accepted for presentation. The contributed papers were presented in six simultaneous sessions during the conference.

This special issue, ICACM-IAM-METU, contains the papers of the conference that have resulted from conscientious and rigorous reviewing process. We are very grateful to the referees who contributed to the editorial work of this process. Their efforts on corrections, suggestions, and improvements made it possible to publish scientific papers of high quality. In this issue there are 66 articles that are grouped in 3 categories as follows:

- Financial Mathematics and Actuarial Sciences: 15 articles
- Mathematical Cryptology: 16 articles
- Scientific Computing, Optimization and Differential Equations: 35 articles

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[🌣] On the occasion of 10th anniversary of the foundation of Institute of Applied Mathematics Middle East Technical University Ankara, Turkey.

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