

BIOMATH 2012

BIOMATH is by now an established international series of conferences on Mathematical Methods and Models in Biosciences. It follows a tradition of scientific meetings on biomathematics held at the Bulgarian Academy of Sciences (BAS) in Sofia since 1990 [1]. In contemporary science where mathematics is fast becoming an essential research tool of life sciences, meeting forums of biologists and mathematicians (both notions used in their broad sense) are of increasing importance [2]. BIOMATH a multidisciplinary forum for researchers who develop and apply mathematical and computational tools to study phenomena in the broad fields of life sciences, such as biology, ecology, medicine, biotechnology, bioengineering, environmental science, etc. Selected papers from previous conferences are published in volume 32 [3], and volume 64 [4] of this journal as well as in the special issues [5,6].

The 2012 International Conference on Mathematical Methods and Models in Biosciences and School for Young Scientists (BIOMATH 2012) [7] was held in Sofia, 17–22 June 2012 and attracted researchers from a very wide spectrum of disciplines who came from four different continents over 20 different countries. BIOMATH 2012 conference was supported by several research units of BAS and three Bulgarian Universities as well as by the Union of Bulgarian Mathematicians. A special session at the conference was dedicated to Blagovest Sendov, full member of the Bulgarian Academy of Sciences, on the occasion of his 80th anniversary. Prof. Sendov is a pioneer of mathematical modeling in Bulgaria and an enthusiastic supporter of the BIOMATH series of conferences.

The scientific programme of BIOMATH 2012 comprised about 70 presentations. This special issue contains a selection of 16 scientific papers focused on mathematical, numerical and computational tools with particular attention on differential equation models and their numerical analysis (finite difference method, finite element method). All papers have been subjected to the usual peer-review process of the journal based on the reports of at least two independent anonymous reviewers.

Acknowledgments

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References

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Guest Editors

Roumen Anguelov

*Dept. Mathematics and Applied Mathematics,
University of Pretoria, Pretoria 0002, South Africa
E-mail address: roumen.anguelov@up.ac.za.*

Svetoslav Markov

*Institute of Mathematics and Informatics, Bulgarian Academy of Sciences,
“Acad. G. Bonchev” st. Block 8, 1113 Sofia, Bulgaria
E-mail address: smarkov@bio.bas.bg.*