

FOREWORD

MATH/CHEM/COMP '99 (MCC'99), the Fourteenth Dubrovnik International Course & Conference on the Interfaces between Mathematics, Chemistry and Computer Sciences, was held at the Inter-University Centre, in Dubrovnik, Croatia, on June 21-26, 1999, under the joint auspices of the Inter-University Centre, Dubrovnik, Croatia, Rugjer Bošković Institute, Zagreb, Croatia, Universities of Zagreb & Split, Croatia, International Society for Mathematical Chemistry, and International Society for Theoretical Chemical Physics.

Three out of the six days of MCC'99 were devoted to the recent ideas in combinatorial, topological, and computational chemistry and physics. These topics were presented at sessions on the Theory and Applications of Mathematics in Chemistry, Computational and Experimental Chemistry, and Computations in Chemistry and Physics. One day of MCC'99 accommodated the Fifth Croatian Meeting on Fullerenes. To keep pace with the ever expanding interest in pharmaceutical chemistry and biomedical sciences, sessions on Combinatorial Chemistry, Combinatorics in Chemistry and Drug and Vaccine Modelling were organized as well.

The research results in some of the above mentioned areas and traditional topics of the MCC meetings are published in this special issue of *Croatica Chemica Acta*. Other papers from MCC'99 have already appeared in the *Journal of Chemical Information and Computer Sciences*, Vol. 40, No. 3, 2000. It should be emphasized that the MCC contributions are regularly published, which has so far resulted in 15 special issues in various international journals.

The organization of MCC'99 was made possible in the first place by the help of the Inter-University Centre in Dubrovnik, Rugjer Bošković Institute of Zagreb, University of Zagreb, and University of Split. The financial support of the Ministry of Science and Technology of the Republic of Croatia is gratefully acknowledged. We also wish to thank the European Office of Aerospace and Development for its support under Contract No. F61775-99-WF039. Special thanks for a partial financial support go to the German Academic Exchange Service (DAAD), City of Dubrovnik, Hrvatske vode (Zagreb), Institute of Mathematics, Physics and Mechanics (Ljubljana), Open Society Institute (Zagreb), and Hazardous Waste Management Agency (Zagreb).

The First International Dubrovnik NMR Course, DU'99 NMR, was held on June 27–30, 1999, at the Inter-University Centre in Dubrovnik, Croatia, under the joint auspices of the Inter-University Centre, Dubrovnik, Rugjer Bošković Institute, Zagreb, and Faculty of Food Technology and Biotechnology, University of Zagreb, Croatia. The idea of organizing the NMR course arose from a rather difficult situation in NMR spectroscopy in Croatia. Lack of modern instruments and the small number of NMR experts have drastically hindered Croatian science in keeping pace with advances in the high-field multidimensional NMR and its application in physics, chemistry, biochemistry, biology and medicine.

The DU'99 NMR attracted more than 60 participants from Croatia and five foreign countries. During the four days of the meeting, fundamental aspects and new trends in NMR were discussed: diffusion-ordered NMR (DOSY), techniques for organic structure elucidation, NMR of organomercurials, isotope effects and calculations of NMR parameters. Some of the results presented at the meeting are published in this issue of *Croatica Chemica Acta*.

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