PREFACE

We are very pleased to introduce the proceedings of the *Sixteenth International Conference on Geometry, Integrability and Quantization*. As always the Conference was held during 6-11 June 2014 in Sts. Constantine and Elena, Varna, Bulgaria, a location of pleasant surroundings providing a delightful place for the meeting. Notably, this Conference was dedicated to the 70th anniversary of Professor Jan J. Sławianowski from the Polish Academy of Sciences.

As for previous conferences, the theme was the deep connection between mathematics (especially differential geometry, partial differential equations and boundary conditions, Morse theory) and physics (especially foundations of quantum mechanics, integrable systems, gravitation, nonlinear systems and solitons). For the physicists and computational science researchers the interaction with mathematicians represented a source of enhancing specific and deeper technical knowledge and a platform for exchanging problems and for abstract research on fundamentals. This conference series is organized by the Bulgarian Academy of Sciences with gracious assistance at times from the European Mathematical Society, and many other universities in the world. This year the conference was organized by the Bulgarian Academy of Science in collaboration with Embry-Riddle Aeronautical University (Daytona, USA) and Tokyo University of Science (Tokyo, Japan).

The level of interest in the subject matter of the conference was maintained from previous events, and 28 suitable subjects were submitted for presentation at the conference. This required the program to be organized in a number of Lectures and Plenary Talks, each on a specific theme, to provide each subject with sufficient time for presentation and to accommodate all of them within the overall time allocated. The Conference provided the conditions for many fruitful discussions and exchanges that contributed to the success of the conference. Participants from 12 countries made the conference truly international in scope.

The talks were split almost equally between the three main conference areas, i.e., geometry, integrability and quantization. Almost all presentations are included in this proceedings volume.

There were three lectures series covering the different areas of the conference:

1. Toshiyuki Kobayashi (The University of Tokyo) talked on *Visible Actions and Multiplicity-Free Representations*