

Preface

The present volume of *Journal of Physics: Conference Series* represents contributions from participants of the Russian conference “Nonlinear waves: theory and new applications” held at the Technopark of Novosibirsk Akademgorodok, Russia, 29 February – 2 March 2016, organised by the Lavrentyev Institute of Hydrodynamics and the Novosibirsk State University.

The conference is longstanding and attracts the attention of mathematicians and physicists. This year the conference was dedicated to the 70th anniversary of the birth of an outstanding scientist in the field of mechanics, Professor Vladimir M. Teshukov (2 March 1946 – 22 April 2008), who was a director of the Lavrentyev Institute of Hydrodynamics from 2004–2008.

Scientific activities of the conference included a discussion of a wide range of problems, mainly related to mathematical theory of nonlinear wave processes in heterogeneous fluids, construction of new models of multiphase fluids and development of analytical and numerical methods for solving problems of mechanics. The conference programme included oral presentations (20 minutes) given by more than 100 participants from 15 cities of Russia (including Moscow, Novosibirsk, Kazan, Vladivostok, Ufa, Yekaterinburg, Krasnoyarsk and Irkutsk), and France (Marseille, Toulouse). A significant part of the talks (about 30%) were presented by young researchers and postgraduate students.

We would like to thank the speakers for their significant contributions to the conference. We also would like to thank the members of the Organizing Committee. We cannot end without expressing our many thanks to our sponsors (Russian Foundation for Basic Research and the technology company Schlumberger) for their financial support.

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