

EDITORIAL

Since the 1960s, the Chair of Molecular Physics of Taras Shevchenko National University of Kyiv organizes and holds international conferences on the physics of fluids. The regular conference called PLMMP (Physics of Liquid Matter: Modern Problems) took place at Taras Shevchenko National University of Kyiv on May 21–24, 2010 under the guidance of Academician of the NAS of Ukraine L.A. Bulavin. The Organizing Committee included such famous scientists as Academician of the NAS of Ukraine I.R. Yukhnovs'kyi, Prof. V.L. Aksenov (Russia), Prof. M.A. Anisimov (USA), Prof. J.-F. Legrand (France), Prof. W. Schröer (Germany) and others. During the conference, the following trends of the physics of fluids were considered:

- thermodynamics, structure, and intermolecular interaction in fluids and liquid systems;
- transport phenomena;
- phase transitions and critical phenomena;
- surface phenomena and fluids in confined geometry;
- water and aqueous systems in the normal and metastable states;
- solutions of low- and high-molecular substances;
- fluids in medical physics;
- nanophysics of liquid systems, ferrofluids, liquid systems with fullerenes;
- properties of quantum fluids;
- radiation physics of fluids.

The conference gathered together scientists from 32 countries of the world, including the Russian Federation, the USA, France, Canada, Germany, India, China, Algeria, Italy, Spain, Great Britain, Hungary, Romania, the Netherlands, Bulgaria, Chile, Belgium, etc., who presented 112 reports and about 200 posters. Some of these works are included in the present issue.

Scientific secretary of the PLMMP Conference
Yu.L. Ostapchuk