

Editorial

## 3rd Annual European Rheology Conference (AERC 2006), Hersonisos, Crete, Greece, 27–29 April 2006



The meeting attracted 387 participants from 33 countries. The scientific program (from 08:30 to 19:00) consisted of 5 parallel sessions with 6 plenary and 6 keynote presentations, 219 oral communications, and 172 poster contributions, organized into 10 symposia focused on either mainstream or emerging areas of rheology, as follows (in parentheses the chairpersons): (1) blends, copolymers and nanocomposites (P. Moldenaers, I. Emri); (2) rheometry and beyond: advanced experimental methods (N. Willenbacher, T. Schweizer); (3) interfacial phenomena, surfactants and foams (L. Ramos, P. Fischer); (4) suspensions and colloids (G. Maitland, N.J. Wagner); (5) viscoplasticity, granular flows and jamming (M. Cloitre, O. Pouliquen); (6) biopolymers, biorheology and food rheology (T. Gisler, C. Gallegos); (7) liquid crystals, polyelectrolytes and associating fluids (N. Grizzuti, V. Kulichikhin); (8) entanglements, viscoelasticity and microstructural modelling (C. Bailly, A. Likhtman); (9) non-Newtonian fluid mechanics, turbulence and processing (H. Meijer, M. Webster); (10) flow-induced phase transitions and instabilities (N. El Kissi, P.L. Maffettone).



The 3rd Annual European Rheology Conference (AERC 2006) was held at the Creta Maris Hotel and Conference Center, Hersonisos, Crete, Greece. It was jointly organized by the Hellenic Society of Rheology (HSR), the Foundation for Research and Technology-Hellas (FORTH), the University of Crete, the University of Cyprus and the Technical University of Crete, under the auspices of the European Society of Rheology (ESR).

The plenary lectures were given by John F. Brady (“Micro-versus macro-rheology”), Paulo J. Oliveira (“Progress in computational rheology with the finite volume method”), Tom C.B. McLeish (“Molecular and flow-scale modelling and experiments of controlled-architecture polymer melts”), Fred C. MacKintosh (“Viscoelasticity of cytoskeletal biopolymer solutions and networks: Polymer physics and the cell”), Ralph

H. Colby (“Polyelectrolyte solution rheology”) and Jan K.G. Dhont (“Shear banding transitions of suspensions of rods”). The keynote lectures were given by Ralf Everaers (“Microscopic topology and macroscopic rheology of entangled polymer melts and networks”), Seung J. Lee (“Recent progress in computational rheology: high-resolution solutions”), Jan Vermant (“Structure and rheology of weakly aggregated 2D and 3D suspensions”), Francesco Greco (“Nonstandard statistical thermodynamics for entangled polymeric liquids”), Moshe Gottlieb (“Rheology and morphology in thermal gelation”) and François Lequeux (“Jamming and glassy behaviour of concentrated suspensions”).

During the conference, nine exhibitors displayed their products: TA Instruments, Anton-Paar, A&D Instruments Ltd., Linkam Scientific Instruments Ltd., MALVERN Instruments Ltd., XPANSION Instruments LLC, KSV Instruments, STABLE Microsystems and ThermoElectron GmbH. Naturally, the social program included visits to antiquities as well as traditional villages.

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LLC and ERGOSYSTEMS Ltd. We are also particularly grateful to a number of individuals who contributed to the success of the conference: R. Karali (AERC 2006 secretary), D. Bleses (ESR web master), G. Papaioannou and V. Kirkinis (technical support), and an enthusiastic team of students from the Universities of Crete, Cyprus, Patras and Athens.

In this special issue devoted to AERC 2006, we have assembled eleven full-length, peer-reviewed articles that are representative of scientific atmosphere in the meeting. We are grateful to the contributors and the reviewers for their diligent efforts.

Dimitris Vlassopoulos\*

*Institute of Electronic Structure & Laser, Foundation for Research and Technology-Hellas (FORTH), and Department of Materials Science & Technology, University of Crete, P.O. Box 1527, 71110 Heraklion, Crete, Greece*

Georgios Georgiou

*Department of Mathematics and Statistics, University of Cyprus, P.O. Box 20537, 1678 Nicosia, Cyprus*

\* Corresponding author. Fax: +30 2810 391 305.  
E-mail addresses: [dvllasso@iesl.forth.gr](mailto:dvllasso@iesl.forth.gr) (D. Vlassopoulos),  
[georgios@ucy.ac.cy](mailto:georgios@ucy.ac.cy) (G. Georgiou)