

HSR2017 - FINAL PROGRAM

Tuesday, July 11, 2017	
19:30-21:30	Welcome Reception at Curium Palace Hotel (Venue)
Wednesday, July 12, 2017	
08:00-08:25	Registration
08:25-08:30	<i>Opening</i>
08:30-09:10	<i>Keynote lecture: M. Gottlieb, Interfacial rheology of block copolymers</i>
09:10-10:50	<p>M.A.P. Mohammed, L. Wanigasooriya, S. Chakrabarti-Bell, M.N. Charalambides, <i>Extrusion of unleavened bread dough</i></p> <p>T.D. Papathanasiou, <i>Permeability models for saturated fluid flow across random and aggregated fiber arrays</i></p> <p>C. Saengow, A.J. Giacomin, <i>Oscillatory shear sweeps on complex fluids from the Oldroyd 8-constant framework</i></p> <p>L. Gury, D. Vlassopoulos, M. Cloitre, M. Gauthier, <i>Searching for rheological signatures of jamming transition in soft hairy colloids</i></p> <p>M. Das, G. Petekidis, <i>Flow induced vorticity aligned clusters of rod like particle suspension</i></p>
Chair: Dimitris Vlassopoulos	
10:50-11:20	<i>Coffee break</i>
11:20-13:00	<p>N. Antonova, <i>Evaluation of blood clotting by rheological and electrorheological methods</i></p> <p>I. Ivanov, N. Antonova, <i>The change of blood electrical conductivity - a marker for altered erythrocytes orientation under flow and electric field</i></p> <p>I. Velcheva, N. Antonova, N. Chaushev, V. Paskova, S. Podtaev, K. Tsiberkin, <i>Skin microvascular tone regulation in diabetic patients: Relation to blood rheology</i></p> <p>E. Kaliviotis, J.M. Sherwood, S. Balabani, <i>Red blood cell aggregate, shear and local viscosity distribution in bifurcating microscale blood flows</i></p> <p>W. Al-Kouz, S. Kiwan, H. Saadeh, <i>Heat transfer analysis of rarefied flow in cavities with two fins attached to the hot-sided wall</i></p>
Chair: Yannis Dimakopoulos	
13:00	<i>End of morning sessions</i>
16:00-16:30	<p>Poster Session - Coffee</p> <p>I.Ch. Tsimouri, C.K. Georgantopoulos, P.S. Stephanou, V.G. Mavrantzas, <i>Derivation of a recently proposed CCR model through the use of non-equilibrium thermodynamics</i></p> <p>P. Panaseti, G.C. Georgiou, A.-L. Vayssade, M. Cloitre, <i>Confined viscoplastic flows with heterogeneous wall slip</i></p> <p>D. Pasias, E. Kaliviotis, <i>Surface tension driven microfluidic blood flow: red blood cell aggregation and viscosity effects</i></p> <p>D. Parisi, D. Vlassopoulos, B. Loppinet, Y. Ruan, C. Yang, <i>Shape effects on the rheological behavior of polymer-grafted nanoparticles in solution</i></p> <p>K.D. Housiadas, G. Samanta, A.J. Young, A.N. Beris, <i>On the tails of probability density functions in Newtonian and viscoelastic turbulent channel flows</i></p> <p>P.S. Stephanou, V.G. Mavrantzas, <i>Multi-scale modelling of high-MW polymer melt viscoelasticity starting from the atomistic level</i></p> <p>P. Moschopoulos, Y. Dimakopoulos, J. Tsamopoulos, <i>Analytical expressions for the velocity field of polymeric fluids and polyelectrolyte in microchannels</i></p> <p>S.M. Fayyad, <i>Using new magnetic rheological fluids in automobiles suspension systems - Comparison study</i></p> <p>D.E. Apostolides, C.S. Patrickios, E. Leontidis, T. Sakai, <i>Rheological investigations on dynamic covalent four-armed star poly(ethylene glycol) model hydrogels</i></p> <p>G.C. Florides, A.N. Alexandrou, M. Modigell, G.C. Georgiou, <i>Squeeze flow of thixotropic semisolid slurries</i></p> <p>P.A. Panteli, C.S. Patrickios, <i>Synthesis and characterization of acrylamide-based dynamic covalent amphiphilic polymeric conetworks cross-linked via alkoxime bonds</i></p> <p>E. Antonopoulou, C. Rohmann-Shaw, T. Sykes, O. Cayre, T. Hunter, P. Jimack, <i>Physical separation of colloidal systems</i></p> <p>C. Machattos, M. Georgallas, C. Polydorou, E. Efthymiadou, T. Stylianopoulos, <i>Experimental analysis of nanoparticles binding through laminar flow between parallel plates</i></p> <p>T. Thornton, M. Corvill, A. Spanias, <i>Signal processing for silicon ion channel sensors</i></p>
Chair: Kostas Housiadas	
16:30-18:30	<p>D.G. Tsalikis, P.V. Alatas, V.G. Mavrantzas, <i>Ring polymers: scaling laws and topological interactions based on detailed molecular dynamics simulations</i></p> <p>V. Harmandaris, A.N. Rissanou, P. Bačová, <i>Molecular simulations of graphene-based polymeric nanostructured materials</i></p> <p>P.S. Stephanou, D.G. Tsalikis, E.N. Skountzos, V.G. Mavrantzas, <i>Multiscale modelling approach to the rheological behaviour of polymer nanocomposites: Nonequilibrium thermodynamics modelling coupled with NEMD simulations</i></p> <p>E. Muravleva, <i>Application of machine learning techniques to viscoplastic flow modelling</i></p> <p>Y. Dimakopoulos, G. Makrygiorgos, G. Georgiou, J. Tsamopoulos, <i>A fast and efficient algorithm for computing viscoplastic flows</i></p> <p>N.A. Gatsonis, <i>Non-isothermal smoothed dissipative particle dynamics for fluids in bounded mesoscopic domains</i></p>
18:30	<i>End of afternoon sessions</i>
19:30-23:30	<i>Limassol city tour by bus and Banquet Dinner (Mezedopagida)</i>

Thursday, July 13, 2017	
08:30-09:10	<i>Keynote lecture: M. Cloitre, Bottlebrush polymers in colloidal suspensions and nanocomposites</i>
09:10-10:50	<p>J. Vlachopoulos, <i>Modeling of sintering from rotational molding to additive manufacturing</i></p> <p>H. Chakibi, I. Henaut, J.-F. Argillier, <i>Bubbles motion in polymer solutions: influence of rheology</i></p> <p>A.N. Beris, P.M. Mwasame, N.J. Wagner, <i>Modeling the rheology of dilute emulsions</i></p>
Chair: Maria Charalambides	<p>J. Laeuger, <i>New rheometric tools for complex materials</i></p> <p>T. Athanasiou, D. Vlassopoulos, G. Petekidis, <i>Probing viscoelastic properties of complex fluids by piezo-rheometry in the intermediate frequency range</i></p>
10:50-11:20	<i>Coffee break</i>
11:20-13:20	<p>X. Zhang, E. Lorenceau, T. Bourouina, P. Bassett, F. Rouyer, J. Goyon, P. Coussot, <i>Wall slip: a lubricated frictional process?</i></p> <p>E. Khoshbakhti, N. Golshan Ebrahimi, M. Khabazian Esfahani, <i>Prediction of long chain branching in uniaxial elongational flow</i></p> <p>V.K. Konaganti, E. Mitsoulis, S.G. Hatzikiriakos, <i>The dependence of extrudate swell on rheological parameters</i></p> <p>E. Chatzigiannakis, M. Ebrahimi, M.H. Wagner, S.G. Hatzikiriakos, <i>Wall slip and melt fracture of polyisobutylenes</i></p>
Chair: Thanassis Papathanasiou	<p>S. Costanzo, D. Vlassopoulos, <i>Attempts to measure shear viscosity and normal stresses in polymer melts</i></p> <p>A. Louhichi, V. Metri, J. Yan, K. Matyjaszewski, W. Briels, D. Vlassopoulos, <i>Dynamics of associating star polymers with self-healing performance, studied by rheology and Brownian dynamic simulation</i></p>
13:20-14:00	<i>Poster session & HSR Executive Meeting</i>
14:00	<i>End of morning sessions</i>
15:30-22:00	<i>Excursion to Curium and Paphos</i>

Friday, July 14, 2017	
08:30-09:10	<i>Keynote lecture: F. Pinho, Turbulence models for non-Newtonian fluid flows</i>
09:10-10:50	<p>A. Kalogirou, M.G. Blyth, D.T. Papageorgiou, <i>Surfactant destabilisation in thin-film shear flows</i></p> <p>P.K. Ray, T.A. Zaki, D.T. Papageorgiou, <i>Linear stability of viscoelastic oscillatory shear flow</i></p> <p>D.T. Papageorgiou, P.K. Ray, J. Hauge, <i>Weakly-nonlinear interfacial instabilities in two-layer viscoelastic Couette flow</i></p>
Chair: Vagelis Harmandaris	<p>A. Lytra, K. Efthimiou, M. Vlachomitrou, N. Pelekasis, <i>Static and dynamic response of coated microbubbles</i></p> <p>K.D. Housiadas, <i>Improved convergence based on linear and non-linear transformations at low and high Weissenberg number</i></p>
10:50-11:20	<i>Coffee break</i>
11:20-13:40	<p>G. Makrygiorgos, D. Fragedakis, Y. Dimakopoulos, J. Tsamopoulos, <i>Structural processes in elastoviscoplastic materials</i></p> <p>L. Muravleva, <i>Squeeze axisymmetric flow of a viscoplastic Bingham medium</i></p> <p>D.M. Salmanidou, A. Georgioupolou, S. Guillas, F. Dias, <i>Rheological considerations for modelling of submarine mass failure processes at the Rockall Bank</i></p> <p>H. Huang, A. Zilian, <i>Numerical prediction of the rheological properties of fresh selfcompacting concrete</i></p> <p>A. Syrakos, Y. Dimakopoulos, J. Tsamopoulos, <i>Flow in a fluid damper: investigation of the effects of shear thinning and viscoelasticity through numerical simulations</i></p> <p>P. Panaseti, Y. Damianou, K.D. Housiadas, G.C. Georgiou, <i>Analysis of pressure-driven flow in long channels of a Herschel-Bulkley fluid with pressure-dependent rheological parameters</i></p>
Chair: Evan Mitsoulis	E. Klerides , N. Kanaris, F. Stylianou, S. Kassinos, A. Alexandrou, <i>The lock-on regime in the wake of a periodically perturbed flow of a viscoplastic fluid past a confined circular cylinder</i>
13:40	<i>End of HSR2017</i>