

Programme FD146

Sunday 11 April 2010

19.00 - 21:00	Registration and Welcome Reception – Virginia Commonwealth University VCU School of Business, Snead Hall Atrium, 301 West Main Street
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Monday 12 April 2010

08.45 – 09.15	Registration - Jefferson Hotel
09.15 – 09.30	Welcome and introductions Hugo Christenson and Alenka Luzar
09.30 -10.30 Paper 1	Introductory lecture Peter J Rossy, The University of Austin at Texas, USA
Session 1	Superhydrophobic Surfaces Session Chair: Alenka Luzar, <i>Virginia Commonwealth University, USA</i>
10.30 -10.35 Paper 2	Dynamical superhydrophobicity Mathilde Reyssat, Denis Richard, Christophe Clanet and David Quéré* <i>ESPCI, France</i>
10.35 – 10.40 Paper 3	Superhydrophobic surfaces prepared by hybrid raspberry-like particles Maria D'Acunzi, Lena Mammen, Maninderjit Singh, Xu Deng, Marcel Roth, Günter K Auernhammer, Hans-Jurgen Butt* and Doris Vollmer <i>Max Planck Institut for Polymer Research, Germany</i>
10.40 – 11.30	General discussion followed by group photo in Jefferson Hotel
12.00	Lunch (all delegates invited)
Session 2	Superhydrophobic Surfaces Session Chair: Hugo Christenson, <i>University of Leeds, UK</i>
13.30 – 13.35 Paper 4	Microscopic shape and contact angle measurement at a superhydrophobic surface Helmut Rathgen and Frieder Mugele* <i>University of Twente, The Netherlands</i>
13:35 -13.40 Paper 5	Transparent superhydrophobic and highly oleophobic coatings Liangliang Cao and Di Gao* <i>University of Pittsburgh, USA</i>
13.40-13.45 Paper 6	The influence of molecular-scale roughness on the surface spreading of an aqueous nanodrop Christopher D Daub*, Jihang Wang, Shobhit Kudesia, Dusan Bratko and Alenka Luzar <i>Virginia Commonwealth University, USA</i>
13.45 – 15:00	General discussion
15:00	Coffee Break
15.30 – 17.30	Flash poster presentations (2-minute talks, Alenka Luzar presiding)
18:00 - 19:00	Welcome/Poster reception
19:00 – 22:00	Poster session

Tuesday 13 April 2010

Session 3	Dynamic Transitions Session Chair: Kenneth Wynne, <i>Virginia Commonwealth University, USA</i>
9:00-9:05 Paper 7	Contact angle hysteresis: a different view and a trivial recipe for low-hysteresis hydrophobic surfaces Joseph W Krumpfer and Thomas J McCarthy* <i>University of Massachusetts Amherst, USA</i>
9:05-9:10 Paper 8	Amplification of electro-osmotic flows by wall slippage: direct measurements on OTS-surfaces Marie-Charlotte Audry, Agnès Piednoir, Pierre Joseph and Elisabeth Charlaix* <i>University of Lyon, France</i>
9:10-9:15 Paper 9	Electrowetting and droplet impalement experiments on superhydrophobic multiscale structures F Lapierre, P Brunet, Y Coffinier, V Thomy*, R Blossey and R Boukherroub <i>IEMN, France</i>
9:15-9:20 Paper 10	Flat and smooth superhydrophobic surfaces: heating induced wetting transitions up to the Leidenfrost temperature Guangming Liu and Vincent S J Craig* <i>The Australian National University, Australia</i>
9:20-11:00	General discussion
11:00	Coffee Break
Session 4	Dynamic Transitions Session Chair: Michael Klein, <i>University of Pennsylvania, USA</i>
11:30-11:35 Paper 11	Drop dynamics on hydrophobic and superhydrophobic surfaces B M Mognetti, H Kusumaatmaja and J M Yeomans* <i>University of Oxford, UK</i>
11:35-11:40 Paper 12	Dynamic mean field theory of condensation and evaporation processes for fluids in porous materials: application to partial drying and drying J R Edison and P A Monson* <i>University of Massachusetts Amherst, USA</i>
11:40-11:45 Paper 13	Molecular dynamics simulations of urea-water binary droplets on flat and pillared hydrophobic surfaces Takahiro Koishi*, Kenji Yasuoka, Xiao C Zeng and Shigenori Fujikwa <i>University of Fukui, Japan</i>
11:45-13:00	General discussion
13:00	Lunch (all delegates invited)

Tuesday 13 April 2010

Session 5	Liquid-Vapour Interfaces and Nanobubbles Session Chair: Pablo Debenedetti, <i>Princeton University, USA</i>
14.30-14:35 Paper 14	First- and second-order wetting transitions at liquid-vapour interfaces K Koga, J O Indekeu and B Widom* <i>Cornell University, USA</i>
14:35-14:40 Paper 15	Hierarchical surfaces: an <i>in-situ</i> investigation into nano and microscale wettability Alex H F Wu*, K L Cho, Irving I Liaw, Grainne Moran, Nick Roberts, Nigel Kirby and Robert N Lamb <i>The University of New South Wales, Australia</i>
14:40-14:45 Paper 16	An experimental study of interactions between droplets and a nonwetting microfluidic capillary Geoff R Willmott*, Chiara Neto and Shaun C Hendy <i>Industrial Research Limited, New Zealand</i>
14:45-16:00	General discussion
16:00	Coffee Break
Session 6	Hydrophobic Surfaces Session Chair: Jim Henderson, <i>University of Leeds, UK</i>
16.30-16.35 Paper 17	Hydrophobic interactions in model enclosures from small to large length scales: nonadditivity in explicit and implicit solvent models Lingle Wang, Richard A Friesner and Bruce J Berne* <i>Columbia University, USA</i>
16:35-16:40 Paper 18	Water reorientation, hydrogen-bond dynamics and 2D-IR spectroscopy next to an extended hydrophobic surface Guillaume Stirnemann*, Peter J Rossky, James T Hynes and Damien Laage <i>Ecole Normale Supérieure, France</i>
16:40-17:30	General discussion
17:30-17:45	Close of session and RSC/ACS student-poster prizes
19:00	Pre-dinner drinks reception (pre-booking required)
19.30	Conference dinner (pre-booking required)

Wednesday 14 April 2010

Session 7	Heterogeneous Surfaces Session Chair: Bob Evans, <i>University of Bristol, UK</i>
09:00-9:05 Paper 19	The search for the hydrophobic force law Malte U Hammer, Travers H Anderson, Aviel Chaimovich, M Scott Shell and Jacob Israelachvili* <i>University of California, Santa Barbara, USA</i>
9:05-9:10 Paper 20	The effect of counterions on surfactant-hydrophobized surfaces Gilad Silbert, Jacob Klein and Susan Perkin* <i>University College London, UK</i>
9:10-9:15 Paper 21	Hydrophobic forces in wetting films of water formed on xanthate-coated gold surfaces Lei Pan and Roe-Hoan Yoon* <i>Virginia Tech, USA</i>
9:15-10:30	General discussion
10:30	Coffee Break
Session 8	Heterogeneous Surfaces Session Chair: John Weeks, <i>University of Maryland, USA</i>
11:00-11:05 Paper 22	Interfacial thermodynamics of confined water near molecularly rough surfaces Jeetain Mittal and Gerhard Hummer* <i>National Institute of Diabetes and Digestive and Kidney Diseases, USA</i>
11:05-11:10 Paper 23	Mapping hydrophobicity at the nanoscale: applications to heterogeneous surfaces and proteins Hari Acharya, Srivathsan Ranganathan, Sumanth N Jamadagni and Shekhar Garde* <i>Rensselaer Polytechnic Institute, USA</i>
11:10-12:00	General discussion
12:00-12:30 Paper 24	Concluding remarks Frank H Stillinger <i>Princeton University, USA</i>
12:30-12:50	Acknowledgements and close of meeting
12:50	Lunch (pre-booking required)