

SWEP Workshop

SURFACE WETTABILITY EFFECTS ON PHASE CHANGE PHENOMENA

The times are in London time, BST

WEDNESDAY 6 OCTOBER 2021

13.00 On-site registration desk & Coffee

14.00 Introduction to the workshop – Joel De Coninck / Marco Marengo

14.15 **Wetting and Capillary Condensation from a Nanoscopic Perspective, Prof. Fengchao Wang**, Department of Modern Mechanics, University of Science and Technology of China, China – Chair: JdC

15.15 **Dropwise condensation and radiative heat transfer, Dr. Daniel Beysens**, Physique et Mécanique des Milieux Hétérogènes, CNRS, ESPCI Paris - PSL University, Sorbonne Université, Sorbonne Paris Cité, 75005, Paris, France - Chair: MM

16.15 **Active colloids and droplets steered by surface wetting, Prof. Hartmut Löwen**, Heinrich-Heine Universität Düsseldorf, 40225 Düsseldorf, Germany - Chair: JdC

17.15 Open Discussion – PhD questions - Chair: MM

17.45 Conclusions

THURSDAY 7 OCTOBER 2021

10.00 Coffee Area (only for participants in person)

10.30 Introduction – Joel De Coninck / Marco Marengo

10.45 **Surface effects on slow and rapid Onset of Nucleate Boiling (ONB), Prof. Tali Bar-Kohany**, School of Mechanical Engineering, The Iby and Aladar Fleischman Faculty of Engineering, Tel Aviv University, Israel - Chair: MM

11.45 **Numerical simulation of nucleate boiling : micro-region and micro-layer modelling, Prof Sébastien Tanguy**, Institut de Mécanique des Fluides de Toulouse, Université Paul Sabatier-Toulouse 3, Toulouse, France - Chair: JdC

12.45 On-Site Lunch

13.30 Poster Session 1 – Virtual Discussion

14.30 **Machine Learning predictive tools for nozzle flows and sprays, Prof Manolis Gavaises**, School of Mathematics, Computer Science and Engineering, City University of London, London, UK - Chair: MM

15.30 Open Discussion - PhD questions - Chair: JdC

16.00 Conclusions

18.30 Social Dinner (only for participants in person)

FRIDAY 8 OCTOBER 2021

10.00 Coffee Area (only for participants in person)

10.30 Introduction – Joel De Coninck / Marco Marengo

10.45 **Atmosphere-Mediated Wetting to Non-Wetting Transitions on Solid Surfaces for Dropwise Condensation, Dr Daniel Orejon**, Institute for Multiscale Thermofluids, The University of Edinburgh, Edinburgh, UK - Chair: MM

11.45 **Supercooled Water Droplets Impacting On Superhydrophobic Surfaces: Do's, Don'ts And Open Questions Related To Icephobicity, Dr Elmar Bonaccorso**, Airbus Technology, Central R&T, Green Materials and Coatings, Germany - Chair: JdC

12.45 On-Site Lunch

13.30 Poster Session 2 – Virtual Discussion

14.30 **How heterogeneous wettability can enhance heat transfer, Dr Juan Carlos Toledano**, University of Mons, Mons, Belgium - Chair: MM

15.30 Open Discussion - PhD questions - Chair: JdC

16.00 Conclusion and On-Site Coffee Break