

3rd International Workshop on Near-Wall Reactive Flows 2022

Scientific Program

Program for Thursday 3rd, November 2022

12:00	Registration
12:45-13:00	Welcome & Opening Remarks by Prof. Dr. Andreas Dreizler

Session 1: Chair – Dr. Federica Ferraro

13:00-14:00	P. Domingo, Dr.: <i>Impact of wall thermal condition in combustion high fidelity simulations: from narrow channels to industrial furnaces</i> , Centre National de la Recherche Scientifique, Saint-Etienne-du-Rouvray, France
14:00-15:00	D. Mira, Dr.: <i>Recent advances in HPC methodologies for reacting flow simulations</i> , CASE – Propulsion Technologies Group, Barcelona Supercomputing Center, Spain
15:00-15:30	Coffee/Tea Break – check into hotel rooms - registration

Session 2: Chair – Prof. Dr. Andreas Dreizler

15:30-16:30	F. Sacomano Filho, Ass. Prof.: <i>Large Eddy Simulation of sprays: from single to multi-component fuels</i> , Department of mechanical Engineering, Escola Politécnica da Universidade de Sao Paulo, Brazil
16:30-17:00	Farewell for Prof. Dr. A. Sadiki , Institute for Energy and Powerplant Technology at RSM, TU Darmstadt, Germany

Session 3: Posters

(Remark: Posters related to all topics including various applications)

17:00-18:00	Break + Hang up Posters
18:00-19:00	Dinner at Welcome Hotel
18:30-21:30	Poster Viewing and Drinks

Program for Friday 4th, November 2022

Session 4: Chair - Prof. Dr. Matthias Olzmann

08:30-09:30	B. Atakan, Prof. Dr.: <i>Transport, Pyrolysis and Combustion of two Flame Retardants in Polymers and Alkanes</i> , Institute for Combustion and Gas Dynamics, Chair of Thermodynamics, Universität Duisburg Essen, Germany
09:30-10:30	O. Deutschmann, Prof. Dr.: <i>Controlling emissions of global and local pollutants by heterogeneous reactions</i> , Institute for Chemical Technology and Polymer Chemistry, Chair of Chemical Technology, KIT – Karlsruher Institut für Technologie, Germany
10:30-11:00	Coffee/Tea Break

Session 5: Chair – Dr. Hendrik Nicolai

11:00-12:00	U. Maas, Prof. Dr.: <i>Hierarchical Models for the coupling of chemical reactions, molecular transport and flow</i> , Institute of Technical Thermodynamics, KIT – Karlsruher Institut für Technologie, Germany
12:00-13:00	Lunch

Session 6: Chair – Dr. Heiko Kubach

13:00-14:00	B. Peterson, Dr.: <i>Understanding flame-wall dynamics and underlying heat losses for single- and two-wall configurations using advanced diagnostics</i> , Mechanical Engineering, Multiscale Thermofluids, The University of Edinburgh, UK
14:00-15:00	B. Böhm, Dr.-Ing.: <i>Experimental characterization of near-wall multiphase flows in direct injection spark ignition engines</i> , Mechanical Engineering, Reactive Flows and Diagnostics, TU Darmstadt, Germany
15:00-15:30	Closing Discussion & End of Program