

CFDEM®project LIGGGHTS® and CFDEM®coupling user group meeting and workshop, 14-15 March 2016, Wissensturm, Linz, Austria

Monday 14.03.2016						Tuesday 15.03.2016					
room E_09, ground floor		room 01_02, 1st floor		room 08_05, 8th floor		room E_09, ground floor		room 01_02, 1st floor		room 08_05, 8th floor	
COFFEE & REGISTRATION 08:30-09:00 (registration open until noon)						COFFEE 08:30-09:00					
09:00 Welcome						09:00 Welcome					
Keynote (chair: Goniva C.) Rouven Weiler (BASF) Application of the Discrete Element Method in Chemical Industry 09:05-09:40						Keynote (chair: Kloss C.) Hugh Stitt (Johnson Matthey) Application of CFD with DEM to Transport and Reaction Modelling in Catalytic Reactors 09:05-09:40					
Keynote (chair: Goniva C.) Bill Ketterhagen (Pfizer) Modeling the impact of powder segregation on pharmaceutical tablet manufacturing process 09:40-10:15						Keynote (chair: Kloss C.) Tuomo Keskkitalo (Neste Jacobs) Simulation of industrial scale three-phase fluidization hydrodynamics using CFD-DEM 09:40-10:15					
Break 10:15-10:30						Break 10:15-10:30					
Keynote (chair: Radl S.) Arno Kwade (TU Braunschweig) Calibration and validation of DEM process and material simulations 10:30-11:05						Keynote (Chair: Ooi J.) Stefan Luding (Twente University) Mesoscale models for particles and particles in fluids 10:30-11:05					
Keynote (chair: Radl S.) Jin Ooi (Univ. Edinburgh) Determining granular phenomena of interest from DEM simulations 11:05-11:40						Keynote (chair: Ooi J.) Stefan Pirker (JKU Linz) Time Extrapolation of Multiphase CFD - Recurrence CFD 11:05-11:40					
Plenary Short Communication C.Stoltz (PG): DEM in HPC Environment J. Kerbl (DCS): Parallel Scalability 11:40-12:00						Plenary Discussion (Goniva C., Kloss C.) N. Deen, B. Ketterhagen, J. Ooi, A. Plankensteiner, E. Rossiter, H. Stitt 11:40-12:00					
Lunch Break 12:00-13:00						Lunch Break 12:00-13:00					
										OpenFOAM® User Meeting Austria "PFAU XII" Come together and coffee 12:30-13:00	
MD* Queteschner D. , 13:00-13:20 Coupling different levels of resolution in DEM simulations		GA* Fleischmann J. , 13:00-13:20 Determination of Continuum Properties for Geomaterials Using the Discrete Element Method		MM* Gibaud R. , 13:00-13:20 Modelling Dense Viscoplastic Bimaterial with the DEM		IA* Aigner A. , 13:00-13:20 Application of particle bond models in order to simulate from visco-elastic to rigid materials		T-MAPPP Session Chair: Jin Ooi Kianoosh Taghizadek 13:00-13:15		Welcome & Overview 13:00-13:10	
MD* Seil P. , 13:20-13:40 LBDEMcoupling: An efficient open-source approach to resolved simulation of fluid particle systems		GA* Dorostkar O. , 13:20-13:40 CFD-DEM simulation of stick-slip in saturated granular media; a fault gouge model		MM* Egger M./Haber A. , 13:20-13:40 Flow properties of bulk solids- comparison of calculation, simulation and measurement		IA* Katterfeld A. , 13:20-13:40 Coupled Discrete Element and Multi-Body Systems Simulation for Determination of the Performance of Primary Crushers		Somik Chakravarty 13:15-13:30		Keynote Presentation (tbd) 13:10-13:40	
MD* Mayrhofer A. , 13:40-14:00 Large eddy simulation with SPH: Mission impossible?		GA* Plenker D. , 13:40-14:00 Simulation of transport processes of coarse sand with coupled CFD-DEM		MM* Lemrich L. , 13:40-14:00 Investigation of the resonant frequencies of granular media and of its nonlinear response to acoustic waves		IA* Nagy J. , 13:40-14:00 Modeling of Melting of Polymer Pellets for the Plastification Process		Hao Shi 13:30-13:45		Presentation Session I	
MD* Municchi F. , 14:00-14:20 A Hybrid Fictitious Domain-Immersed Boundary Method for the Direct Simulation of Heat and Mass Transport in Fluid-Particle Systems		GA* Falkingham P. , 14:00-14:20 Using LIGGGHTS to investigate dinosaur footprint formation		MM* Hager A. , 14:00-14:20 CFD-DEM on Multiple Scales		IA* Kobylka R. , 14:00-14:20 Numerical simulation of the dynamic response due to discharge initiation of the grain silo		Ramon Cabisco 13:45-14:00		13:40-14:20	
								Rahul Mohanty 14:00-14:15			
Break 14:20-14:35						Break 14:20-14:35					
Keynote (chair: Kloss C.) Stefan Radl (TU Graz) Probing Heterogeneities in Fluid-Particle Systems with the Computer 14:35-15:10						IA* Suryawanshi T. , 14:35-14:55 An Efficient Hybrid CFD-DEM Modeling Framework for Industrial Drum Coating Operations		T-MAPPP Session (Chair: Jin Ooi) Giuseppe Raso 14:35-14:50		Networking Wrap Up (Radl S) 14:35-15:55 (BoF sessions & partnership formation/consolidation)	
Keynote Goniva C. & Kloss C. (DCS Computing, CFDEMresearch) LIGGGHTS and CFDEMcoupling, recent advances, remaining challenges and road map 15:10-15:40						IA* Jagtap J. , 14:55-15:15 Sand Fines Erosion in Gas Pipelines - Experiments, CFD and CFD-DEM Modeling		Ahmed Jarray 14:50-15:05			
Plenary Short Communication A. Aigner (DCS): CFDEMworkbench: A GUI for LIGGGHTS+CFDEMcoupling A. Jungwirth (DCS): Funding								Nikoletta Patsaki 15:05-15:20			
								Yousef El-Hasadi 15:20-15:35			
Break 15:55-16:10						Break 15:55-16:10					
MC* Kerbl J. , 16:10-16:30 Automated material calibration using optimization algorithms		GA* Choi C. , 16:10-16:30 Discrete element modelling of dry granular interaction with deflectors		MM* Blais B. , 16:10-16:30 Understanding solid-liquid mixing by means of CFD-DEM: Model formulation and validation study		T-MAPPP (Chair: Jin Ooi) Tim Najuch 16:10-16:25					
MC* Benvenuti L. , 16:30-16:50 DEM and Artificial Neural Networks parameters investigation for industrial applications				MM* Askarishahi M. , 16:30-16:50 The Effect of Model Details on Predictions of Spray-Particle Interaction in Fluidized Beds		Alexander Podlozhnyuk 16:25-16:40					
Group photo 17:00						Ilaria Iaconeta 16:40-16:55					
Informal Get-Together and Group Discussion with drinks Foyer, ground floor 17:00-17:30						Behzad Soltanbeigi 16:55-17:10					
						Workshop Closing & Farewell 17:10-17:30					
18:00 1st train ride to dinner 18:30 2nd train ride to dinner										Contact person for uploading presentation Kloss C. Kerbl J. Goniva C. Hager A. Hager A. Aigner A. Podlozhnyuk A.	
CFDEM®project workshop dinner											
19:00 - 23:00											
Information on Technical Sessions: *MD Model Development & Fundamental Numerics *MC Material Calibration *GA Geotechnical Applications *MM Material Modelling *MF Multiphase Flow *IA Industrial Application *T-MAPPP											

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