Jon Spangenberg - DTU Orbit (07/09/2017)

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Department of Mechanical Engineering - Associate Professor
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Publications:

Cavity prediction in sand mould production applying the DISAMATIC process
Publication: Research - peer-review › Journal article – Annual report year: 2017

A computational model for heterogeneous heating during pulsed laser irradiation of polymers doped with light-absorbing microparticles
Publication: Research - peer-review › Journal article – Annual report year: 2016

An analytical solution describing the shape of a yield stress material subjected to an overpressure
Publication: Research - peer-review › Conference article – Annual report year: 2016

Improvement in Surface Characterisitcs of Polymers for Subsequent Electroless Plating Using Liquid Assisted Laser Processing
Publication: Research - peer-review › Conference article – Annual report year: 2016

Numerical modelling of the flow in the resin infusion process on the REV scale: A feasibility study
Publication: Research - peer-review › Conference article – Annual report year: 2016

Numerical simulations of concrete flow: A benchmark comparison
Publication: Research - peer-review › Journal article – Annual report year: 2016

Particle migration using local variation of the viscosity (LVOV) model in flow of a non-Newtonian fluid for ceramic tape casting
Publication: Research - peer-review › Journal article – Annual report year: 2016

Rheological Characterization of Green Sand Flow
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016

Shape Effect of Crushed Sand Filler on Rheology: A Preliminary Experimental and Numerical Study
Publication: Research - peer-review › Article in proceedings – Annual report year: 2016
Simulating the DISAMATIC process using the discrete element method — a dynamical study of granular flow
Publication: Research - peer-review › Journal article – Annual report year: 2016

Vortex behavior of the Oldroyd-B fluid in the 4-1 planar contraction simulated with the streamfunction–log-conformation formulation
Publication: Research - peer-review › Journal article – Annual report year: 2016

A new numerical framework to simulate viscoelastic free-surface flows with the finite-volume method
Publication: Research - peer-review › Conference article – Annual report year: 2015

Cellwise conservative unsplit advection for the volume of fluid method
Publication: Research - peer-review › Journal article – Annual report year: 2015

Numerical simulation of viscoelastic free-surface flows using a streamfunction/log-conformation formulation and the volume-of-fluid method
Publication: Research › Ph.D. thesis – Annual report year: 2015

Robust simulations of viscoelastic flows at high Weissenberg numbers with the streamfunction/log-conformation formulation
Publication: Research - peer-review › Journal article – Annual report year: 2015

A CFD Approach for Prediction of Unintended Porosities in Aluminum Syntactic Foam: A Preliminary Study
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

A CFD-Model for prediction of unintended porosities in metal matrix composites: A preliminary study
Publication: Research - peer-review › Article in proceedings – Annual report year: 2013

A new numerical framework to simulate viscoelastic free-surface flows with the finite-volume method
Comminal, R., Spangenberg, J. & Hattel, J. H. 2013
Publication: Research - peer-review › Paper – Annual report year: 2013

A Two-Phase Flow Solver for Incompressible Viscous Fluids, Using a Pure Streamfunction Formulation and the Volume of Fluid Technique
Comminal, R., Spangenberg, J. & Hattel, J. H. 2013
Publication: Research - peer-review › Paper – Annual report year: 2013

Interface Behavior in Functionally Graded Ceramics for the Magnetic Refrigeration: Numerical Modeling
Publication: Research - peer-review › Conference article – Annual report year: 2013
Rheology of matrix and concrete with crushed aggregates
Skare, E. L., Spangenberg, J., Jacobsen, S. & Mørtsell, E.
01/03/2017 → 29/02/2020
Project: PhD

Microproportioning with crushed sand: experiment and simulations of fine particles effect on rheology
Ramenskiy, E., Jacobsen, S., Hattel, J. H. & Spangenberg, J.
01/02/2016 → 17/11/2016
Project: PhD

Bonding processes for large wind turbine blades - numerical modelling and experimental verification
01/09/2015 → 31/03/2017
Project: PhD

Modelling Climatic Reliability of Electronic Devices
Shojaee Nasirabadi, P., Hattel, J. H., Mohanty, S. & Spangenberg, J.
01/11/2014 → 31/10/2017
Project: PhD

Autonomous optimization of flow, solidification and thermomechanical conditions in the high pressure die casting process
Li, S., Hattel, J. H., Spangenberg, J. & Tutum, C. C.
15/09/2012 → 15/10/2016
Project: PhD

Numerical modelling of extrusion of functionally graded ceramic materials
01/01/2011 → 24/08/2015
Project: PhD

Numerisk modellering af formfyldning ved støbning i selvkompakterende beton
01/04/2009 → 24/08/2012
Project: PhD