

GAMM2025

Thursday 10 April 2025

S06.2: Material modelling with non-metals: S06.2.01 - Room 6 (08:30 - 10:30)

-Conveners: Vu Ngoc Khiem

time	[id] title	presenter
08:30	[155] Exploring the effects of thermal aging on filled and unfilled natural rubber compounds with a perspective of SIC modelling	FARKAS, Ondrej
08:50	[156] Data-driven modeling of strain-induced crystallization based on physics-augmented neural networks	FRIEDRICHS, Konrad
09:10	[157] Efficiency enhancement strategies on the concept of representative directions applied to the dynamic flocculation model for filled elastomers	NIEMEYER, Mascha
09:30	[159] Comparative Analysis of Homogenization Techniques for Interphase Modeling in Elastomer Blends	ULRICH, Marc
09:50	[158] The Self-Heating of Rubber Elements in Vibration Absorber Systems	NIKSIRAT, Esmat

S06.2: Material modelling with non-metals: S06.2.02 - Room 6 (14:00 - 16:00)

-Conveners: Daniel Juhre; Vu Ngoc Khiem

time	[id] title	presenter
14:00	[160] Modeling rate-dependent damage effects in soft biological tissue	WOLLNER, Maximilian P.
14:20	[161] Relaxation Effects in Thermo-Visco-Elastic Materials	HILLE, Frederik
14:40	[162] Viscoplastic modeling of shotcrete 3D printing	TUAN LA, Quoc
15:00	[163] Modeling of the Visco-Plastic Compaction Behavior of Crushed Salt Based on Micromechanical Deformation Mechanisms	GARTZKE, Ann-Kathrin
15:20	[164] Modelling Material Behavior and Quantifying Recovery Strain in 4D Printed Shape Memory Polymers	HEMBROCK, Henrik
15:40	[165] Aspects of a multiplicative viscoelastic material model for ice	KOSSLER, Marvin

S06.2: Material modelling with non-metals: S06.2.03 - Room 6 (16:30 - 18:30)

-Conveners: Daniel Juhre; Dominik K. Klein

time	[id] title	presenter
16:30	[166] Neural networks meet hyperelasticity: On benefits and limits of polyconvexity	KLEIN, Dominik K.
16:50	[167] Data-driven statistical learning of polymeric data	CHAU, Vu M.
17:10	[168] Data-driven statistical learning of textile reinforcements	NGOC KHIÊM, Vu
17:30	[169] A Data-Driven Constitutive Model for Compressible Polymers	DAL, Hüsni
17:50	[170] Parameter identification of a cold-box sand with a micromorphic continuum	BÖRGER, Alexander
18:10	[171] Numerical Analysis of the Forming Process for the Design of Tailored Fibre-Reinforced Thermoplastic Laminates	KABALA, Philipp

Friday 11 April 2025

S06.2: Material modelling with non-metals: S06.2.04 - Room 6 (08:30 - 10:30)

-Conveners: Daniel Juhre; Vu Ngoc Khiem

time	[id] title	presenter
08:30	[172] Improved modelling of the microstructure around through-thickness reinforcements in composite laminates	RADTKE, Albrecht
08:50	[173] Investigation of Solution Accuracy in PFEM Simulations Using (Semi-)Analytical Benchmark Problems	BETTMANN, Antaeus
09:10	[174] Numerical modeling of soft interpenetrating composites with tunable anisotropy	MROZEK-CZAJKOWSKA, Agata
09:30	[175] A material model accounting for elasto-plasticity at finite deformations for paper and paperboard	ONTIVEROS, Lilian Aurora Ochoa
09:50	[177] Phase field simulation of precipitation hardened ferroelectric material	BOHNEN, Matthias