

Monday 18/09/2023

Time	
12:00 – 13:00	Registration
13:00 – 13:30	Opening
13:30 – 14:00 L1	<u>Holm Altenbach</u> , Konstantin Naumenko, Johanna Eisentrager, Katharina Knape Creep Mechanics - Some Historical Remarks and New Trends
14:00– 14:30 L2	Eike Blum, <u>Yevgen Kostenko</u> , Konstantin Naumenko Various state-of-the-art methods for creep evaluation of power plant components in a wide load and temperature range
14:30 – 15:00 L3	<u>Dmytro Breslavsky</u> and Oksana Tatarinova Creep and Irradiation Effects in Reactor Vessel Internals
15:30 –18:30	Come Together

Tuesday 19/09/2023

Time	
9:00 – 9:30 L5	<u>Yuri Kadin</u> and Richard Schake Modeling of Cyclic Creep in PEEK with the Parallel Rheological Framework
9:30 – 10:00 L6	<u>Takeshi Iwamoto</u> , Chong Gao, Bo Cao and Tsutomu Umeda A Consideration of Damage Initiation and Evolution Coupling with Strain-induced Martensitic Transformation During Small Punch Tests of SUS304 at Various Deformation Rate
10:00 – 10:30 L7	<u>Alexander Dyck</u> , Alexander Kauffmann, Martin Heilmaier and Thomas Böhlke Efficient Simulation of Creep in Lamellar Structures
10:30 – 11:00	Coffee-break
11:00 – 11:30 L8	Robert Fleischhauer, <u>Le Zhang</u> and Michael Kaliske A Temperature Dependent Viscoelastic Approach to the Constitutive Behavior of Semi-crystalline Thermoplastics at Finite Deformations
11:30 – 12:00 L9	<u>Jörg Hohe</u> and Sascha Fliegner Anisotropic Creep Analysis of Fiber Reinforced Load Point Support Structures for Thermoplastic Sandwich Panels
12:00 – 12:30 L10	Claudio Findeisen, Zalikha Murni, Abdul Hamid, Benedikt Rohrmüller, Dominik Spancken, Dominik Laveuve and <u>Jörg Hohe</u> A Viscoelastic Continuum Damage Model to Model the Creep and Fatigue Failure Behavior of Fiber Reinforced Polymers
12:30 – 13:00 L11	<u>Oksana Tatarinova</u> , Holm Altenbach and Dmytro Breslavsky Creep-damage Processes in Cyclic Loaded Double Walled Structures
13:00 – 14:30	Lunch
14:30 – 15:00 L12	<u>Fabian Welschinger</u> , Argha Protim Dey, Benjamin Schneider, Matti Schneider, Sebastian Gajek and Thomas Bohlke Deep Material Networks for an Efficient Virtual Characterization of Long-term Creep in Short Fiber-reinforced Polymers
15:00 – 15:30 L13	<u>Sorin Vlase</u> , M. Katouzian, M. Marin, C. Itu, and A. Toderita Finite Element Models in the study of Creep Behavior of Carbon-Fiber-Reinforced Composites
15:30 – 16:00 L14	<u>Bilen Emek Abali</u> Damage Mechanics in Metamaterials by Using Phase-field Modeling
16:30 – 17:30	City Tour

Wednesday 20/09/2023

Time	
9:00 – 9:30 L15	<u>Kerstin Weinberg</u> and Marcel Fischbach Effect of Physical Aging on the Flexural Creep in 3D Printed Thermoplastic
9:30 – 10:00 L16	<u>Yoji Shibutani</u> , Linju Liu, Kazuma Ito, Hideaki Sawada, Masaaki Sugiyama and Naoki Maruyama Effect of Atomistic Diffused Carbons in Fe-C Alloy to Stress-induced Phase Transformation
10:00 – 10:30 L17	<u>Seishiro Matsubara</u> , Akira Takashima, So Nagashima, Shohei Ida, Hiro Tanaka, Makoto Uchida and Dai Okumura Time-swelling Superposition Principle for the Linear Viscoelastic Properties of Polyacrylamide Hydrogels
10:30 – 11:00	Coffee-break
11:00 – 11:30 L18	<u>Patrick Michels</u> , Christian Dresbach, Esther Ramakers-van Dorp, Holm Altenbach and Olaf Bruch Application of Nonlinear Viscoelastic Material Models for the Shrinkage and Warp Analysis of Blow Molded Parts
11:30 – 12:00 L19	<u>Olivier Castelnau</u> , Patrick Cordier, Karine Gouriet, Timmo Weidner, James van Orman, Jennifer M. Jackson and Philippe Carrez Periclase Deforms more Slowly than Bridgmanite under Earth Mantle Conditions
12:30 – 19:30	Excursion

Thursday 21/09/2023

Time	
9:00 – 9:30 L20	<u>Ehab Hamed</u> , Sen Zhang, Ali Amin, and Ian R. Gilbert Effect of Fibres Content on the Creep of Fibre Reinforced Concrete – A Meso-Scale Approach
9:30 – 10:00 L21	<u>Lukas Richter</u> , Holger Sparr, and Matthias Ziegenhorn Self-heating Analysis with Respect to Holding Times of an Additive Manufactured Aluminium Alloy
10:00 – 10:30 L22	<u>Elisabetta Gariboldi</u> , Matteo Molteni, Diego Vargas, and Konstantin Naumenko Development of a microstructure-based finite element model of thermomechanical response of a fully metallic composite Phase Change Material
10:30 – 11:00	Coffee-break
11:00 – 11:30 L23	<u>Michael Brünig</u> , Sanjeev Koirala and Steffen Gerke Analysis of Damage and Fracture in Anisotropic Sheet Metals Based on Biaxial Experiments
11:30 – 12:00 L24	<u>Romana Schwing</u> , Stefan Linn, Christian Kontermann and Matthias Oechsner Creep Behavior Under High Temperature Thermal Cycling and Low Mechanical Loadings
12:00 – 12:30 L25	<u>Guozheng Kang</u> , Yujie Liu, and Qi Li Experimental Observation and Modelling of Creep-Ratchetting Interaction for the Notched-specimen of Copper
12:30 – 13:00 L26	<u>Mikhail Guzev</u> , A.M. Golosov, E.P. Riabokon, M.S. Turbakov, E.V. Kozhevnikov, and V.V. Poplygin The Effect of Dynamic Loads on the Creep of Geomaterials
13:00 – 14:30	Lunch
15:00 – 15:30 L27	<u>Timm Schultz</u> , Ralf Müller and Angelika Humbert Simulation of Firn Densification Using a Cell Model Approach
15:30 – 16:00	Coffee-break
16:00 – 16:30 L28	Hsiao-Wei Lee, Noushad Bin Jamal M, Stanisław Mroziński, Adam Lipski, Michał Piotrowski, and <u>Halina Egner</u> Modeling Degradation Phenomena in Metals with Unified Mechanics Theory
16:30 – 17:00 L29	<u>Hideo Hiraguchi</u>

	A Novel Simulation Method for Phase Transition of Single Crystal Ni based Superalloys in Elevated Temperature Creep Regions via Discrete Cosine Transform and Maximum Entropy Method
17:00 – 17:30 L30	Bilal Rafiq, Xuming Zheng, <u>Qiang Xu</u> The Development and Application of Optimisation Technique for the Calibrating of Creep Cavitation Model Based on Cavity Histogram
18:00	Banquet

Friday 22/09/2023

Time	
9:00 – 9:30 L31	<u>Dai Okumura</u> , Atsuya Ogino, Seishiro Matsubara, and So Nagashima Effects of Surface Tension on Crease Nucleation and Evolution in an Elastomer Subjected to Uniaxial, Plane Strain, and Equibiaxial Compressions
9:30 – 10:00 L32	<u>Jingyu Zhang</u> and Huiling Duan Modeling of Creep in Nickel-based Superalloys Based on Microtwinning Mechanism
10:00 – 10:30 L33	Przemysław Nosal and <u>Artur Ganczarski</u> The Strain Rate Dependent Model Based on Micropolar Theory Implemented in Discrete Element Method
10:30 – 11:00	Coffee-break
11:00 – 11:30 L34	Mbombo Amejima Okpa, <u>Qiang Xu</u> , Zhongyu Lu The Development of a Cavitation-Based Model for Creep Lifetime Prediction Using Cu-40Zn-2Pb Material
11:00 – 11:30	Closing