



**18<sup>th</sup> International Conference on Deformation, Yield and Fracture of Polymers**

April 10-14, 2022 Rolduc Abbey, Kerkrade, NL

**Poster Contributions – Session II – Tuesday April 12, 2022**

- II.01 *Control of the Final Morphology of Epoxy-Thermoplastic Blends and Mechanical Properties*  
A. Coloigner, M.-L. Michon, C. Billaud, D. Long
- II.02 *In-situ time-resolved study of the effects of thermal history on stereocomplexation of a PLLA/PDLA racemic blend*  
H. Ahmadi, R. Cardinaels and P.D. Anderson
- II.03 *Predicting the rate- and temperature dependent behaviour of polyvinylidene-fluoride (PVDF)*  
T. Lenders, T. Pini, J.J.C. Remmers, M.G.D. Geers and L.E. Govaert
- II.04 *Design of polymeric nanocomposite multilayers for efficient EMI shielding*  
F. Van Loock, P. D. Anderson, R. Cardinaels
- II.05 *Composite performance from fiber-matrix interactions: the effect of MAH-g-PP compatibilizer on interphase structure and properties*  
S.F.S.P. Looijmans, D. Cavallo, P.D. Anderson and L.C.A. van Breemen
- II.06 *Crystallization and structure-function relationship of melt-processed (dis)entangled ultrahigh molecular weight polyolefins*  
R.H.M. Bröker, D. Romano, C.S.J. van Hooy-Corstjens, S. Rastogi and J.A.W. Harings
- II.07 *Effect of water inclusion in polyamide crystals on structural refinement and mechanical properties of polyamide 6*  
M. Gardeniers, M.-R. Mani, R. Graf, S. Rastogi and J.A.W Harings
- II.08 *Rheological investigation of partially crystallized polymer melts*  
M. Andreev, A. Kotula, J. Moore, J. den Doelder and G.C. Rutledge
- II.09 *Morphological analysis of Polyoxymethylene specimens produced under standard and industrial-near injection molding conditions by X-ray scattering and diffraction*  
T. Schrank, M. Berer, E. Helfer, M. Feuchter and G. Pinter
- II.10 *Distribution of the Composition in Semicrystalline/Amorphous Miscible Blends of PEKK/PEI and effect on the mechanical properties*  
R. Martin-Faure, A. Belguise, S. Cantournet, F. Lequeux and H. Montes
- II.11 *Prediction of rate and temperature dependent deformation of isotactic polypropylene*  
S. Aktas Celik, I. Baran, L.E. Govaert, R. Akkerman
- II.12 *Deformation in Semi Crystalline Polymers from a Heterogeneous Spherulitic Microstructure*  
M. Cornu, M. El Bachir Seck, J. Boisse and S. André
- II.13 *Thermomechanical characterisation of viscoelastic ETFE membranes*  
A. Comitti, L. Seixas and F. Bosi

- II.14 *Visco-elastic properties of silica filled and silver filled silicone elastomers and impact of confined aging*  
M. Avila Torrado and A. Constantinescu
- II.15 *Strain induced crystallization in natural rubber: is there time strain superposition?*  
P. Sotta, P.-A. Albouy
- II.16 *Investigating the influence of network architecture and mechanical properties on the resistance to cavitation in soft elastomeric layers*  
F.-M. Le Menn, G. Hensen, E. Barthel, C. Creton
- II.17 *Puncture mechanics of ultra-soft hydrogels at the elastocapillary length Scale*  
Y. Wei, C. Creton, and T. Narita
- II.18 *Hydroelastomers: soft, tough, highly swelling composites*  
S. Moser, Y. Feng, O. Yasa, S. Heyden, M. Kessler, E. Amstad, E.R. Dufresne, R. Katzschmann and R.W. Style
- II.19 *Highly stretchable hydrogels and their retraction behavior*  
S. Kundu, A. Varadarajan, R.M. Badani Prado and S. Mishra
- II.20 *A study on the mechanical behaviour of carbon black filled HNBRs*  
I. Denora and C. Marano
- II.21 *Improving the thermomechanical resistance of a fluoroelastomer by adding POSS nanoparticles*  
A. Simon, J. Pepin, M.-P. Deffarges and S. Méo
- II.22 *Numerical modelling of fibrillation and cavitation in PSA*  
K. Patel, M. Ciccotti and E. Barthel
- II.23 *Adhesion mechanisms of silane terminated polymers on glass*  
G. Santos, J. Lacombe, P. Fourton, M. Savonnet, C. Creton, M. Ciccotti and Y. Tran
- II.24 *Using mechanophores to characterize damage in the sub-surface during wear of elastomers*  
O. Taisne, C. Thillaye du Boullay, J. Comtet and C. Creton
- II.25 *Micromechanical characterisation of interphase and local matrix properties in a glass fibre-reinforced thermoplastic composite*  
S. F. Gayot, N. Klavzer, C. Bailly, T. Pardoën, P. Gérard and B. Nysten
- II.26 *Multiscale characterisation of the spherulitic microstructure of iPP polymer by nanoindentation*  
O. Smerdova, J. Grondin, S. Castagnet and C. Tomas
- II.27 *Experimental investigation on the effect of beta transition temperature on the recovery of indentation prints on amorphous polymers*  
M. Pecora, C. Mitia Ramarosaona and C. Gauthier
- II.28 *Experiments and Numerics on the scratch behaviour of pre-oriented polycarbonate depicting a weak anisotropy in its plasticity behavior*  
M. Solar, M. Pecora, L. Stalter, A. Egele, D. Favier and C. Gauthier
- II.29 *Replicating the material inhomogeneity effect of biological materials to increase the fracture toughness in polymers*  
J. Wiener, F. Arbeiter, O. Kolednik and G. Pinter

- II.30 *Osmosis-driven deformation of non-vascular-plant-inspired soft composites*  
A. Kataruka, A. Spitzer and S. Hutchens
- II.31 *Polymeric materials and processes for the fabrication of Soft Dielectric Actuators*  
I. Raguž, M. Fleisch, G. Meier, S. Schlögl, C. Holzer, M. Berer
- II.32 *Experimental fracture analysis of oriented polyethylene films using digital image correlation and full-field mechanics post-processing*  
J. Furmanski and J. Bergstrom
- II.33 *Glass reinforced plastic pipelines: are they durable or not?*  
S. Khajepour-Tadavani, F. Nikpour, A.L.T. Brandão
- II.34 *Fibre induced crystallisation in elongational flows*  
P.M.H. van Heugten, S.F.S.P. Looijmans, L.C.A. van Breemen and P.D. Anderson
- II.35 *Material model fitness evaluation using full-field digital image correlation measurements based on equilibrium gap indicator and reconstructed axial force*  
A. Peshave, F. Pierron, P. Lava, D. Moens, D. Vandepitte
- II.36 *Hunting for Liquid Crystallinity in Aqueous Amylose Solutions*  
N. Streit, T.A. Tervoort.