

Poster Contributions – Session I – Monday March 25, 2024

- I.01 *Adhesion mechanisms of silane-terminated polymers*
Santos, G., Criton, T., Savonnet, M., Creton, C., Ciccotti, M., Tran, Y.
- I.02 *Mechanistic insights into elastomer frictional wear using damage-reporting mechanophores*
Taisne, O., Cartier, A., Thillaye-du-Boullay, C., Couty, M., Caillard, J., Creton, C., Comtet, J.
- I.03 *Exploring nanoparticle and thin film bonding characteristics onto carbon fibers using atomic force microscopy*
Haiden, L., Kratzer, M., Feuchter, M., Barbezat, M., Pansare, A.V., Brunner, A.J., Pinter, G.
- I.04 *Stress-induced local order parameter control of ultrathin liquid crystalline polymer on soft substrates*
Kim, M., Bradley, L.C., Crosby, A.J.
- I.05 *Contact mechanics of indentation of pre-oriented polycarbonate*
Pecora, M., Solar, M., Egele, A., Favier, D., Gauthier, C.
- I.06 *Better understanding of mechanically induced crystallization in filled natural rubber*
Le Bihan, A., Marco, Y., Le Saux, V., Chazeau, L., Chenal, J.-M., Warneboldt, I.
- I.07 *Mechanics in shear of nanostructured, heat-deactivable and tunable PSAs using dynamic covalent chemistry*
Aguilar, V., Creton, C., Ciccotti, M.
- I.08 *Strong and tough ionically conductive elastomers*
Yiming, B., Hubert, S., Ringuede, A., Creton, C.
- I.09 *Controlling phase separation to make porous hydrogels*
Feng, Y., Cousin, L., Tibbitt, M., Dufresne, E., Style, R.
- I.10 *Model short-chain silica-based rubbers*
Häring, M.S., Caseri, W.R., Tervoort, T.A.
- I.11 *Impact of confinement on the ageing of a PDMS seal*
Feyne, F., Le Bourhis, E., Lacroix, F., Autissier, L., Smerdova, O.
- I.12 *Non-uniform strain driven crystallization in natural rubber*
Nozaki, D., Mai, T.-T., Tsunoda, K., Urayama, K.
- I.13 *Percolation in a model covalent adaptable network (CAN)*
Hafner, B.R., Pal, S., Lewis, B., Keten, S., Shull, K.R.

- I.14 *Non-isothermal creep relaxation of thermoplastic elastomers for sealing applications*
Kern, M., Schönebeck, J., Löschke, O., Rohnstock, F., Wittenberg, R., Bahrs, K., Auhl, D.
- I.15 *Unravelling the impact of thermo-mechanical history on the formation of a rigid network within a silica-free silicone elastomer*
Rajinthan, L., Ganachaud, F., Sotta, P., Morelle, X.
- I.16 *Slowing-down of the relaxation time during subcritical rupture in paper and filled elastomers*
Braux, C., Bérut, A., Vanel, L.
- I.17 *Property enhancement through interfacial crystallization in immiscible polymer blends*
Ahmadi, H., Anderson, P.D., Cardinaels, R.
- I.18 *Micromechanical modeling of semi-crystalline PEEK*
Geveling, R.A.M., Govaert, L.E., Dommelen, J.A.W. van
- I.19 *Mechanics of semi-crystalline polymers: Understanding and modelling the creep response*
Roman-Faure, M., Lequeux, F., Montes, H., Chateauminois, A.
- I.20 *Mechanical monitoring of abiotic degradation of polyolefins with free-metal pro-oxidants*
Ianniello, V., Tervoort, T.A.
- I.21 *Fast magnetic hyperthermia sintering of UHMWPE nascent powders: rheological follow-up of the chain re-entanglement*
Salse, M., Baeza, G.P., Morthomas, J., Lame, O.
- I.22 *Double yielding in PA11 under tensile deformation: a probe of microstructural evolution*
Gros, B., Gérard, J.-F., Morelle, X.P., Sotta, P.
- I.23 *Impact of the number of layers in the mechanical properties of multilayer films*
Grandi, A.A., Peixinho, J., Sollogoub, C., Guinaul, A., Antkowiak, A., Neukirch, S., Miquelard-Garnier, G.
- I.24 *Quantitative measurement of stress-transmitters in the semicrystalline, crystal-fixed polymer polycaprolactone*
Liu, T., Petzold, A., Thurn-Albrecht, T.
- I.25 *Influence of intracrystalline chain diffusion on the mechanical behavior of semicrystalline polymers*
Michell, R.M., Petzold, A., Thurn-Albrecht, T.
- I.26 *Cavitation and plastic flow in the tensile elongation of poly(*ε*-caprolactone)*
Jiang, Z., Men, Y.
- I.27 *Structure determination of ethylene copolymers during isothermal crystallization at high temperature: co-units content effect*
Li, S., Yu, Q., Petzold, A., Litvinov, V., Thurn-Albrecht, T., Men, Y.
- I.28 *Structural heterogeneity dependence of the fracture feature distribution in the tensile elongation of microinjection molded polyethylene*
Liao, T., Zhao, X., Coates, P., Whiteside, B., Jiang, Z., Men, Y.

- I.29 *Mechanical behaviour of ac-mobile/fixed form crystals of isotactic Polybutene-1 (iPB-1) under compression*
Zhao, X., Michel, R.M., Thurn-Albrecht, T., Men, Y.
- I.30 *Association of rigidity of metal and UHMWPE impact resistance by flash sintering*
Zemo Foteu, M., Deplancke, T., Gaucher, V., Balloy, D.
- I.31 *Fiber orientation-induced strain hardening in uniaxial extensional flow of fiber-filled polymer composites*
Egelmeers, T.R.N., Cardinaels, R., Anderson, P.D., Jaensson, N.O.
- I.32 *Puff rheometer-fast and contactless measurements of viscosity and surface tension*
Gracht, C.R.C. van der, Jaensson, N.O., Cardinaels, R.
- I.33 *Bayesian uncertainty quantification for the squeeze flow of soft matter*
Rinkens, A., Verhoosel, C.V., Jaensson, N.O.
- I.34 *Injection molding simulation of polyoxymethylene considering crystallization kinetics and comparison with the experimental process*
Schrank, T., Berer, M., Haar, B., Ramoa, B., Lucyshyn, T., Feuchter, M., Pinter, G., Speranza, V., Pantani, R.
- I.35 *Constitutive modelling of glassy polymers considering shear plasticity and crazing*
Pan, Z., Chen, H., Brassart, L.
- I.36 *Characterisation and modelling of stress-induced degradation in Polylactic acid (PLA) at large deformation*
Chen, H., Pan, Z., Brassart, L.
- I.37 *Strain rate, temperature, and their coupled effects on the deformation process of four polycarbonates and a short glass fibre reinforced polycarbonate composite*
Song, P., Trivedi, A., Chapman, D., Graham, A., Siviour, C.
- I.38 *Theory of Bauschinger effect in glassy polymers*
Long, D., Merlette, T.C., Clément, F., Sotta, P.
- I.39 *Influence of network structure determined by Time-domain 1H DQ NMR on the creep properties of non-stoichiometric epoxy-amine resins aimed for chemical anchoring applications*
Demleitner, M., Hübner, F., Mainz, A., Michely, L., Alstädt, V., Ruckdäschel, H., Rios de Anda, A.