PPS 2017 June 26–29 Europe Africa Conference

WEDNESDAY · JUNE 28 · 2017

Room	Großer Saal	Kleiner Saal	Hörsaal	Marta-Fraenkel-Saal	SR 9	SR 5	SR 3	SR 2
Chair person	*Petra Pötschke*							
08:30 – 09:15	**PLENARY LECTURE** **Daniel Hanoch Wagner** Bio-inspired hierarchical composites using carbon nanotubes (CNTs) and carbon nanotube fibers (CNTFs)							
09:15 – 09:30	Presentation of upcoming PPS meetings							
Chair person	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*
9:40 – 10:10 *Keynote*	**S06-79** **G. Titomanlio** Mechanical characterization of iPP injection molded samples on multiple length scales	**S06-354** **K. Lamnawar** Multi-scale investigation and fundamental studies on interface / interphase in multilayered polymer systems towards better controlling coextrusion process	**S08-394** **Y. Martinez-Rubi** Polyurethane composite sheets incorporating BNNTs and CNTs at high loading: Morphological, mechanical and electrical characterization and advantages of the fabrication method	**S04-364** **Q. Wang** Preparation and thermal processing of functional poly(vinyl alcohol) based micro / nanocomposites	**S05-197** **D. Go** In-situ observation of multiple-necking behavior in continuous cold drawing of PET filaments in ethanol	**S01-154** **B. Vergnes** Preparation by melt compounding of composites reinforced by natural fibers: From breakage mechanisms to process optimization	**S02-207** **V. Gigante** Extruded blends of PLA and PBAT: Correlation between composition and fracture behaviour	**S03-10** **E. Herrera Valencia** On the pulsating flow behavior of a biological fluid: Human blood
10:10 – 10:30	**S06-17** **Q. Yang** Tailored microstructures and properties of microinjection moulded isotactic polypropylene / poly(ethylene terephthalate) blends	**S06-339** **M. Andretzky** A new joint product made of PCM and plastic for application in water-powered heat storage systems manufactured by a coextrusion process	**S08-396** **E. Brandley** Alignment study of CNT veils and the influence on their composites	**S04-113** **T. Watanabe** Antistatic properties of transparent plastics using a donor-accepter molecular compound antistatic agent	**S05-175** **J. Wellekötter** Recycling of composites – A new approach minimizes downgrading	**S01-173** **A. Mostafa** The influence of mixing parameters on the properties of micron-sized blast furnace slag filled PP compounds	**S02-411** **H. Garmabi** Improvement of rheological and mechanical properties of PLA by reactive blending with poly(MMA-g-GMA)	**S03-163** **D. Raps** Rheological behaviour of a high melt strength polypropylene at elevated pressure and gas-loading
10:30 – 10:50	**S06-47** **Y. Spörer** Crystallization behavior of injection molded semi-crystalline thermoplastics	**S06-240** **M. Langlotz** Single screw foam extrusion with low pressurized blowing agents	**S08-324** **J. Castro** Ultrasonic processing of multifunctional epoxy composites reinforced by low-cost MWNT nanopaper	**S04-119** **S. Konagaya** Study on effect of organic compounds with OH group on conductivity enhancement of poly(3,4-ethylene-dioxythiophene) doped with poly(styrene sulfonic acid) (PEDOT:PSS)	**S05-232** **M. Längauer** Study of infrared sheet heating for thermoforming fiber-reinforced thermoplastic composite parts	**S01-170** **A. Venkatesh** Melt processing of cellulose nanofibrils and amphiphilic copolymer based bio-composites	**S02-155** **L. Goebel** Development of a block copolymer for impact modification of poly-hydroxyalkanoate (PHB)	**S03-46** **B. Jakob** Following phase transitions with rheometry and simultaneous Raman-spectroscopy
10:50 – 11:10	**BREAK**							
Chair person	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*	*XXX XXX*
11:10 – 11:40 *Keynote*	**S06-57** **J. Onken** Integrative simulation of weld line strength in unreinforced amorphous thermoplastics	**S11-90** **Ph. Coates** In-situ X-ray structure measurements of polymers during die-drawing	**S08-393** **J. Vilatela** CNT yarns in structural composites	**S04-284** **M. C. Paiva** Nanostructured films of natural polymers and graphene derivatives	**S05-27** **F. Reinders** Modelling the stretching of polypropylene films by a nonlinear spring dashpot model	**S01-219** **J. Rudloff** Analysis of the process behavior of co-kneaders	**S02-131** **P. Cassagnau** Efficient hydrosilylation reaction in polymer blending: An original approach to structure PA12 / PDMS blends at multiscales	**S03-367** **R. Gupta** Effects of morphology and rheology on nylon 6 glass fiber composites
11:40 – 12:00	**S06-125** **M. B. Baradi** Mechanical characterization of frontal and flowing weld lines in injection-molded short fiber-reinforced thermoplastics	**S11-61** **M. Rahammer** Local defect resonance excitation thermography for damage detection in plastic composites	**S08-214** **N. Kchit** Strategies for carbon nanotubes incorporation in structural composites	**S04-182** **R. Hartmann** Tailored wood strand plastic composites for high performance applications	**S05-92** **K. Egoshi** The evaluation of biaxial stretchability of polypropylene films by a newly developed test machine	**S01-225** **O. Celik** A novel experimental setup for characterization of dispersive mixing in single-screw extruders	**S02-178** **J. Heyn** Structure properties relationships of PA6 / EOR blends	**S03-43** **N. Laufer** Effects of interparticle interactions on the flow behaviour of low density polyethylene filled with various fillers
12:00 – 12:20	**S06-290** **A. Geyer** Enhancing the weld line strength of injection molded components by means of a new molding tool technology	**S11-42** **M. Schilling** Environmental stress cracking of PE-HD induced by liquid media – FNCT testing	**S08-374** **M. T. Müller** Nanostructured glass fiber sensor yarns for structural health monitoring	**S04-105** **H.-J. Radusch** Deformation behavior of polylactide relating to plastic forming processes	**S05-144** **T. Kanai** Dynamics and structure development for biaxial stretching PA6 films	**S01-147** **H.-J. Luger** Influence of the screw configuration in a co-rotating twin screw extruder on the rheological and mechanical properties of a talc-reinforced polypropylene	**S02-25** **M. Malekmohammad** Compatibilization effect of silica nano particles on rheology, morphology and mechanical properties of immiscible PA6 / LDPE blends	**S03-12** **O. Abakar Adam** Design, structuration and rheological properties of laponite based polymeric nanocomposites
12:20 – 12:40	**S06-459** **M. Kreutzbruck** Comparison of different ultra-sonic methods for weld line characterization	**S11-8** **W. Essig** Non-contact inline monitoring of thermoplastic CFRP tape quality using air-coupled ultrasound	**S08-402** **H. de Luca** Continuous production of carbon nanotube-grafted quartz fibers: Effect of carbon nanotube length on fiber / matrix adhesion	**S04-159** **A. Scholten** Use of recycled waste paper as fiber reinforcement for PP – Relationship of fiber extraction process and mechanical properties of the composites	**S05-132** **M. Mehranpour** Preparation of intelligence barrier films based on low density polyethylene and evaluation of its properties	**S01-41** **V. Hristov** Melt homogenization in co-rotating twin-screw extruders: Design of a novel kneading disk	**S02-271** **L. Delva** Compatibilization of PET-PE blends for the recycling of multilayer packaging foils	**S03-186** **J.-M. Haudin** Shear-induced crystallization of polymers: Discussion on the coupled mechanical and structural effects
12:40 – 13:00	**S06-417** **A. Porsch** Knowledge-based material selection for injection-molded, thermoplastic parts	**S11-165** **T. Pflock** Dielectric analysis for online cure monitoring: Correlation with thermal and rheological properties of epoxy resins	**S08-301** **M. Mehranpour** Hybrid nanocomposite as strain sensor on the base of SBS / CNT / RGO	**S04-76** **S. Caba** Application of desert sands as reinforcing material for polymer concrete	**S05-400** **D. B. Anthony** Crack arrest in finger jointed thermoplastic polyethersulfone film interleaved carbon fiber reinforced composites	**S01-19** **K. Scharr** Investigation of the temperature development within the solid conveying zone of twin-screw extruder based on the discrete element method (DEM)	**S02-143** **C. Burgstaller** The influence composition on the properties of polyethylene based blends	**S03-373** **M. Salami Hosseini** Prediction of final crystal morphology of semi-crystalline polymers using phase field modeling (PFM)

S01 Mixing and compounding
S02 Polymer Blends and Alloys
S03 Rheology and Process Simulation
S04 Functional, Nano and Bio Composites
S05 Fibers, Films and Foams
S06 Injection Molding and Extrusion
S07 Elastomer Materials and Processing
S08 Nanocarbon Based Composites, CNPComp2017
S09 Polymer Modification with Ionizing Radiation
S10 Nano- and Microstructured Surfaces and Films
S11 In-line Analytics and Process Monitoring
S12 Welding and Joining Technology
S13 Polymer Materials for Medical Applications
S14 Additive Manufactoring

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13:00 – 14:00	**LUNCH**							
Chair person	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*
14:00 – 14:30 *Keynote*	**S06-347** **L. Woo Il** Simulation of the mold structure for reducing cavity filling deviation in micro injection molding	**S11-198** **B. Praher** Inline melt homogeneity measurement in injection molding	**S08-399** **N. Rubio-Carrero** Engineering graphene with polymers for the preparation of nanocomposites	**S04-142** **B. Thomson** Orthopaedic compression screws formed from body-temperature reverting, shape-memory polymers	**S05-329** **A. S. Walallavita** Biopolymer foam blends of poly(lactic acid) and Novatein® thermoplastic protein	**S01-82** **K. Matsumoto** New screw design induced extensional flow for enhancement of CNT dispersion in PP matrix through twin-screw extruder	**S13-2** **S.-J. Liu** Biodegradable 3D printed bone anchoring bolts to enhance tendon-bone healing	**S03-270** **C. Holzer** Strain-dependent upscaling method in dissipative particle dynamics simulations of nanoparticles orientation under shear
14:30 – 14:50	**S06-64** **S. Zhou (A. Hrymak)** Microinjection molding of carbon filled polypropylene nanocomposites: The effect of filler type on electrical and morphological properties of micro-moldings	**S11-89** **A. Geyer** Material characterization in the injection molding process	**S08-140** **S. Colonna** In-situ polymerization of poly(butylene terephthalate) in presence of graphene-related materials: Effects of nanoparticles structure and defectiveness	**S04-222** **C. Kahl** Advanced short fiber composites with hybrid reinforcement based on glass and cellulose fibers – Effect of coupling agent on mechanical properties	**S05-13** **X. Liao** Crystals in-situ induced by supercritical carbon dioxide as bubble nucleation agents on foam structure controlling of poly(L-lactic acid)	**S01-209** **J. Heyn** Interaction between coolant polyamide 6.6, glass fibers and additives	**S13-134** **M. El Fray** Electrospinning of spring-like fibers from elastomeric copolyesters	**S03-49** **D. V. Perumal** Correlation of steady shear rheology and morphology of nylon 6 glass fiber composites
14:50 – 15:10	**S06-328** **Y. Chen** Preparation and microinjection molding of polyoxymethylene / molybdenum disulfide nanocomposite	**S11-325** **T. Scheffler** Determination of the flow and curing behavior of highly filled phenolic injection molding compounds by means of spiral mold	**S08-419** **B. Schumm** Carbon nanoparticle surface modification for thermoplastic polymers	**S04-210** **J. Büttler** Investigation of the interface of polyamide-polypropylene laminates	**S05-174** **M. Fafara** Radiation-based pre-foaming of expandable polystyrene beads (EPS)	**S01-298** **V. Ojijo** Water assisted extrusion of PA / South African bentonite nanocomposites: A process cost saving perspective	**S13-231** **F. Küng** Influence of the molar mass on the suture retention properties of polycaprolactone	**S03-101** **J. Domurath** Viscosity amplification in dilute suspensions of rods in a Carreau matrix fluid
15:10 – 15:30	**S06-6** **S. Zhou** Microinjection molding of polypropylene / multi-walled carbon nanotubes nanocomposites	**S11-26** **S. Joas** CFRP pipe inspection by using air coupled ultrasound	**S08-384** **K. Kröning** Functionalization of carbon nanotubes (CNTs) by using different oxidative agents and characterization with regard to functionalization efficiency	**S04-29** **J. R. Robledo-Ortiz** Fiber surface treatment to increase the fiber content and machanical properties of rotomolded coit-LMDPE and agave-LMDP composites	**S05-340** **R. Pantani** Foam injection molding of magneto sensitive polymer composites	**S01-343** **L. Chen** Exfoliation of layered zirconium phosphate nanoplatelets by melt compounding	**S13-262** **B. Shriky** Injectable hydrogels for controlled release drug delivery	**S03-215** **J.-F. Agassant** Rheology of industrial plastisol formulations
15:30 – 15:50	**S06-351** **M. Babenko** Study of the factors affecting heating mechanism in ultrasound microinjection moulding		**S08-148** **K. Enomoto** Effect of UV-enhanced oxidation on tensile strength of carbon nanofiber reinforced polyamide 11	**S04-128** **A. Bajpai** Tailored epoxy system modified with block co-polymer, core shell rubber and hybrid: Mechanical properties and fracture mechanisms	**S05-246** **A. Javadi** The effect of nano calcium carbonate on mechanical properties, crystallinity and foam ability of PLA / starch / epoxidized soybean oil (ESO) blends	**S01-263** **K. Khodabakhshi** Mechanical properties of plasticized poly(lactic acid) with epoxydized soybean oil	**S13-436** **A. Kelly** Investigation of immiscible polymer blends to control drug release rate of polymeric pharmaceutical compounds	**S03-309** **W. Friesenbichler** Viscosity measurements for rubber compounds usings slit-die rheometry
15:50 – 16:20	**BREAK**							
Chair person	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*	*xxx xxx*
16:20 – 16:40 (*no keynote*)	**S06-383** **E. Abdelkhalik** Investigation on the influences of injection moulding process parameters on the short-shot filling of polymeric micro features	**S11-185** **H. Bayazian** Degradation of bimodal distribution polypropylene and polyethylene during the extrusion process	**S08-7** **J. Schawe** Characterization of the nucleation efficiency of carbon nanotubes for polymer crystallization	**S04-426** **J. Labuschagne** Layered double hydroxide applications – Industry vs. research	**S05-275** **D. Rath** Fine-tuning the properties of expandable polystyrene (EPS)	**S01-299** **A. Greco** Cardanol derivatives as effective plasticizers for polylactic acid	**S13-218** **D. Schubert** Failure of silicone breast implants – Novel insights on the mechanical properties of implant shells	**S03-123** **M. S. Kamal** Rheological properties of polyacrylamide and amido amine-based cationic gemini surfactant solutions
16:40 – 17:00	**S06-93** **H. Ito** Evaluation of physical properties and surface microstructures replication of liquid silicone rubbers obtained by reactive injection molding	**S11-454** **E. M. Troisi** Structure evolution during film blowing: An experimental study using in-situ small angle X-ray scattering	**S08-397** **J. P. Fernandez-Blazquez** Polar polymorphs characterization by synchrotron X-ray diffraction of annealed CNT fiber / PVDF composites	**S04-415** **M. Trampe** Polyamide GnP nanocomposites for permeation control	**S05-118** **H. Naguib** Shock damping properties of out-of-plane reinforced composites with functionality graded syntactic foams	**S01-67** **B. N. Can** PBAT / thermoplastic starch blend: "Concentration of OTPS and comparison with TPS"	**S13-86** **S. Noorzai** Optimization of collagen extraction from various cattle species hide by comparative methods	**S03-260** **G. Peters** Full characterization of multi-phase, multi-morphological kinetics in flow-induced crystallization of iPP at elevated pressure
17:00 – 17:20	**S06-229** **M. Sorgato** Effects of different mold surface coatings on the ejection force in micro injection molding	**S11-470** (End 17:30) *keynote* **D. Fischer** In-line analytics of the content, the dispersion and the nanostructuration process of polymer nanocomposites during extrusion	**S08-302** **J. Bai** The influence of thermal treatments on dielectric behaviors of carbon nanotubes-BaTiO3 hybrids reinforced polyvinylidene fluoride composites	**S04-387** **M. Esfandeh** Preparation, mechanical properties and moisture absorption of urethane acrylate resin / clay nanocomposites	**S05-313** **I. Barbara** Synthesis of porous polymers by emulsion templated step-polymerization	**S01-48** **S. Rabonpoor** Synergistic effect of fire retardant additives on fire behavior of cross-linkable polyolefin compounds toward intumescent compounds	**S13-233** **B. Stafiej** Transparency and suture ability of alginate hydrogel reinforced nano-fiber scaffolds	**S03-268** **W. Takarada** Effect of thermal history on crystallization behavior of polyethylenes in high-speed DSC measurements
17:20 – 17:40			**S08-416** **M. Reza Saeb** An investigation on cure kinetics of epoxy / MWCNTs nanocomposites through isothermal calorimetric and rheological analyses	**S04-35** **M. Mörl** Influence of 1,3,5-benezenetrisamide based additives on the morphology and mechanical properties of isotactic polypropylene	**S05-124** **G. Pircheraghi** Assessment of particles interface welding quality in microporous structures fabricated by sintering process		**S13-88** **Ph. Coates** Property distribution and property gradient polymer products for enhanced functionality	**S02-380** **S. Abdollahi** Structural and electrochemical properties of PEO / PAN / graphene nano-fibrous blends
19:00 – 22:00	**GALA DINNER & BOAT TOUR** (19:00 Boarding · 19:30 Departure)							

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