

8:30-9:30 AM Plenary: <i>A perspective on polymeric nanocomposite materials</i>. Satish Kumar, Georgia Institute of Technology Room: Grand Ballroom A Chair: Ica Manas Zloczower.							
9:30 – 10:10 AM Coffee break and poster (Poster Group I). Chair: Nicole Zacharia Room: Exhibit Hall							
Breakout sessions	S02 Polymer Blends and Alloys Chair: Thein Kyu	S07 Fibers and Films Chair: Gary Wnek	S06 Nanocomposites Chair: Sati Bhattacharya	S04 Modeling and Simulation Session Chair: Rekha Rao	S09 Extrusion and Extrusion Processes Chair: Krzysztof Wilczynski	S15 Additive Manufacturing Chair: Jae-Won Choi	S16 Rheology and Rheometry Chair: Ashish Lele
Room	Severance	George Bush	Grand Ballroom A	Whitehall Room	Ambassador	Gold Room	Grand Ballroom B
10:10-10:40 AM	KN: 02-301 Relationship between rheology and morphology in polymer blends of polypropylene and ethylene-octene copolymer containing nanosilica. Amirhossein Maani, Pierre J. Carreau	KN: 07-364: Fiber structure formation in melt spinning of bio-based aliphatic copolyesters. Qing Qin, Wataru Takarada, Takeshi Kikutani	KN: S06-130 Fabrication of DNA/Hydroxyapatite nanocomposites by simulated body fluid for gene delivery. Takayuki Takeshita, Masami Okamoto	KN: 04-151 Modeling morphology evolution during injection molding of thermoplastic polymers. R. Pantani, F. De Santis, V. Speranza, G. Titomanlio	KN: 09-673: New developments in extrusion and remaining challenges. C. Rauwendael	KN: 15-377: Polymer powders for Selective Laser Sintering (SLS). Manfred Schmid, Antonio Amado, Konrad Wegener	KN:16-19: How entangled polymers undergo nonlinear deformation: An emerging world view. S.-Q. Wang
10:40-11:00 AM	02-215: Rheological and mechanical properties of poly(lactic acid)/poly[(butylene succinate)-co-adipate]/epoxy chain extender nanocomposites. Amin Mirzadeh, Musa R.Kamal, Basil D. Favis	07-356: Spinning of PEN, PEN/PET polymer blends. Ertan Asli, Guven Emine, Yildirim Ibrahim	06-248: Synthesis and characterisation of polylactide/ doxorubicin/magnetic nanoparticles composites for drug delivery. Nikiwe Mhlanga, Suprakas Sinha Ray	04-16: Capillary flow of poly(lactides). Mitsoulis Evan, Othman Norhayani, Zisis Thanasis, Hatzikiriakos Savvas G.	09-304: Immiscible Blend Morphology after Shear and Elongation. Gibson L. Batch, Milana Trifkovic, Aaron Hedegaard, Christopher W. Macosko	15-167: Isotropic mechanical properties and dimensional stability of laser sintered nylon 12 parts within the whole building volume as a result of hardware and software modification of the laser sintering machine - Analytical investigations. Pfister Andreas, Galitz Verena, Paternoster Stefan, Sippel Dominik, Schmahl Wolfgang W.	16-406: Rheological properties of flax and Tencel fiber reinforced polypropylene. A. Abdennadher, T. Budtova, M. Vincent
11:00-11:20 AM	02-265: The Processing influence on the structure and properties of melt-filtered and blended electronic waste thermoplastics. E. Stenval, A. Boldizar	07-324: Effect of polymer viscosities on the fiber structure and membrane properties of polypropylene / polyethylene bicomponent hollow fibers. Satoshi Sugiura, Wataru Takarada, Takeshi Kikutani	06-251: Fabrication of polylactide nanocomposite scaffolds for bone tissue engineering applications, Vuyiswa J. Mkhabela, Suprakas Sinha Ray	04-580: Molecular simulation of solvent diffusion in polymer solution casting processes. Li Xi, Bernhardt L. Trout	09-4: Residence time distributions in a co-kneader: a chemical engineering approach. Benjamin Monchatre, Christian Carrot, Claude Raveyre	15-228: Understanding the decisive thermal processes in laser sintering of polyamide 12. Andreas Wegner, Gerd Witt	16-172: Modeling and analysis of electrorheological suspensions in shear flow. Youngwook P. Seo, Wei Huan Chua, Yongsok Seo
11:20-11:40 AM	02-394: Biobased poly(lactides)/poly(methyl methacrylate) blends: a perfect association for durable and smart applications? Cédric Samuel, Jean-Marie Raquez, Phillippe Dubois	07-19: Electrospun nanofibrous rhodanine/polymethylmethacrylate membranes for the removal of heavy metal ions. Chiang Chang-Lin, Liu Shih-Jung	06-362: Development of silver and zinc oxide decorated nanoclay containing polymeric composites for water disinfection applications, Sarah C. Moteshega, Suprakas Sinha Ray, Maurice S. Onyango, Maggie N.B. Momba	04-392: Flow uniformity study in a film die. Patrick C. Lee, Laura Dietsche, Joseph Dooley	09-341: Experimental study and verification of the residence time distribution using fluorescence spectroscopy and color measurement. Michael Aigner, Alexander Lepschi, Jakob Aigner, Izaro Garmendia and Jürgen Miethlinger	15-247: Fundamental study for a better understanding of the laser sintering process. C. Barrès, S. Dupin, O. Lame, M. Boutaous, J.Y. Charmeau	16-443: The effect of pre-shear history on the rheological behavior of wood plastic composites. Ivica Duretek, Clemens Holzer
11:40 AM-12:00 PM	02-97: Relations between free volume and temperature and pressure coefficients of viscosity for miscible polymer blends. Ruth Cardinaels, Lucas A. Polito, Jürgen Pionteck, Paula Moldenaers	07-263: How different ZN catalysts and polymerization conditions can affect polypropylene structure and biaxial stress strain behavior: a bench scale study using DoE methodology. Gregory David Potter, Dietrich Gloger	06-112: Carbon nanotube/polyurethane nanocomposites by melt mixing. G. Pircheraghi, M.P. Mallamaci, I. Manas-Zloczower	04-503: Finite element analysis to understand coextrusion of filled polymers. Rekha Rao, Lisa Mondy, Randy Mrozek	09-611: Continuous multi-layer co-extrusion of high viscoelasticity ratio polymers. Rongzhi Huang, Patrick J. Harris, Joao M. Maia, Benjamin A. Huntington, Roger Bonnezeze	15-294: Derivation of heating rate dependent exposure strategies for the selective laser melting of thermoplastic polymers. Dietmar Drummer, Maximilian Drexler, Katrin Wudy	16-444: A study of rolling resistance of electrorheological fluids impregnated polymer fabrics as a function of electric field, Vishal Zade, Xiaomin Zhang, Shing Chung Wong
12:00-12:20 PM		S07-668: Effect of solvent composition and processing	06-539: Modification of microfibrillated cellulose and	04-57: Stability analysis of a polymer coating process. A.	09-82: Prototype system for studying the effect of weld	15-233: Thermomechanical simulation of the selective	16-602: The role of aspect ratio of nano fillers on flow

		parameters on the morphology of Poly(styrene- <i>b</i> -(ethylene-co-butylene)- <i>b</i> -styrene) (SEBS) electrospun fibers. Kurusu Rafael, Demarquette Nicole	its effect on mixing properties of MFC/PLA bionanocomposite. Hesam Taheri, Pieter Samyn	Kallel, E. Hachem, Y. Demay, J.F. Agassant	lines on extruded products. O. S. Carneiro, J. M. Nóbrega, A. R. Mota, Y. W. Sitotaw	laser melting process for PA12 including volumetric shrinkage. D. Riedlbauer, P. Steinmann, J. Mergheim	induced orientation and isothermal re-orientation kinetics in PEO based nanocomposites. Behnaz Ranjbar, Hossein Nazockdast, Pierre Carreau
12:20 PM – 1:30 PM	Lunch Break						
1:30 PM-2:30 PM	Plenary: A quest to the designer's way: Innovative design using organic-inorganic polymer composite. Joong-In Kim, Samsung Cheil Industries Inc. Room: Grand Ballroom A Chair: Chul B. Park						
Breakout sessions	S02 Polymer Blends and Alloys Session Chair: Frej Mighri	S07 Fibers and Films Session Chair: Rudolph Hufenus	S06 Nanocomposites Session Chair: Suprakash Sinha Ray	S04 Modeling and Simulation Session Chair: Jie Feng	S09 Extrusion and Extrusion Processes Session Chair: Chris Rauwendaal	M. Xanthos Memorial Session Session Chair: John Vlachopoulos	S16 Rheology and Rheometry Session Chair: Joao Maia
Room	Severance	George Bush	Grand Ballroom A	Whitehall Room	Ambassador	Gold Room	Grand Ballroom B
2:30-3:00 PM	KN:02-30 Orientation correlation in miscible blends and its application to optical functional films. Yamaguchi Masayuki	KN: 07-463: Influence of macromolecular architecture on necking in polymer extrusion film casting process. Harshwardhan Pol, Banik Sourya, Lal Busher Azad, Sumeet Thete, Pankaj Doshi, Ashish Lele	KN: S06-739: Electrically conductive polymer-metal nanowire nanocomposites for electromagnetic shielding and charge storage applications. U. Sundararaj	KN: 04-653 Development of a coarse graining platform to examine flow induced crystallization. Thomas W. Rosch, Frederick R. Phelan Jr.	KN: 09-74: Novel rotation extrusion technology of polymer pipes. Qi Wang, Min Nie, Shibing Bai, Yue Guo, Rui Han	2:30-3:00 PM. 20-447: Pharmaceutical hot melt extrusion (HME) viewed as a "special" polymer compounding process. Costas G. Gogos, Nicolas Ioannidis	KN: 16-675: Some features of neat and filled polymer melts behavior in strong shear flow. Valery Kulichikhin, Alexander Semakov
3:00-3:20 PM	02-184: Shape-memory actuators on the basis of binary and ternary blends of polyethylenes. Oleksandr Dolynchuk, Igor Kolesov, Hans-Joachim Radsusch	07-408: Effect of affinity of grafted polymer on the viscoelasticity and film processability of PMMA blended with core-shell rubber. Keisuke Hatano, Masataka Sugimoto	06-329: Network formation and melt rheology of HDPE/Nitrogen doped graphene nanoribbon nanocomposites. Soheil Sadeghi, Alireza Zehtab Yazdi, Uttandaraman Sundararaj	04-56: Numerical simulation of viscoelastic layer rearrangement of polymer melts using OpenFOAM. Thomas Koeppelmayr, Elias Mayrhofer	09-486: A new scale-up approach for dispersive mixing in twin-screw compounding. Graeme Fukuda, David I. Bigio, Paul Andersen, and Mark Wetzel	3:00-3:30 PM. 20-674: Engineering analysis of tandem extruder system for foam manufacturing. Kun Sup Hyun, Myung-Ho Kim, Que Noh, Jeff A. Myers	16-423: Wall slip of polydisperse linear polymer melts. S.M. Sabzevari, I. Cohen, P.M. Wood-Adams
3:20-3:40 PM	02-321: Effect of adding Polysilane on Heat Fusion Properties of PP. Katsuhisa Tokumitsu , Asuka Hayashi, Sakiko Fukunishi, Kazuhumi Kohno, and Masami Okamoto	07-384: Study on the stretching methods of biaxially stretched copolyester film with uniaxial heat shrinkage properties. S. Ishimaru, M. Haruta, K. Ito, N. Tabota , T. Yamada	06-452: Effect of addition of Ag nano powder on mechanical properties of epoxy/polyaminoamide adduct coatings filled with conducting polymer. Ubair Abdus Samad, Rawaiz Khan, Mohammad Asif Alamb, Othman Y. Al-Othman, Saeed M. Al-Zahrani	04-346: Injection molding simulation with variothermal mold temperature control of highly filled polyphenylene sulfide. A. Birkholz, M. Tschiersky, J. Wortberg	09-300: The use of in-line colorimetry to follow polymer degradation during extrusion. Sebastião V. Canevarolo, Leticia S. Hamester	3:30-4:00 PM. 20-472: A dual effect of mixing on the morphology development of reactive polymer blends. Guo-Hua Hu, Wei-Yun Ji, Lian-Fang Feng, Sandrine Hoppe, Cai-Liang Zhang	16-568: Thermo-rheological behavior of TPUs under high-strain rate extensional flow and its relation with morphology development and rupture dynamics. Andrade Ricardo, Gadley Jesse, Maia Joao
3:40-4:00 PM	02-509: A new approach for PE100 characterization, an in-reactor HDPE alloy with semi hard and soft segments. Sasan Talebnezhad, Parviz Hamidi	07-43: Understanding the Differential Thermal behaviour of an oriented polymeric film, in response to the modulated differential scanning calorimetry variables, for determination of the degree of crystallinity. Rohan Ambardekar, Hrushikesh Karandikar, Adrian Kelly, Phil Caton-Rose, Phil Coates Phil, Anant Paradkar	06-520: Influence of processing history on the mechanical properties and electrical resistivity of polycarbonate – multi-walled carbon nanotubes nanocomposites. Gabriel Y.H. Choong, Davide S.A. De Focatiis	04-398: Experiments and simulation of the evolution of fiber orientation in a center-gated disk. Peter Wapperom, Syed Makhmoor Mazahir, Gregorio Manuel Velez-Garcia	09-65: Composite modeling for counter-rotating twin screw extrusion. K. Wilczyński, A. Nastaj, A. Lewandowski, K.J. Wilczyński		16-104: Analysis of stability and viscoelastic properties of melts of polystyrene- <i>block</i> -polyisoprene diblock copolymers in oscillatory shear and creep-recovery experiments. Ulrich A. Handge, Taida Gil Haenelt, Prokopios Georgopoulos, Clarissa Abetz, Sofia Rangou, Doreen Alisch, Ulla Vainio, Andreas Meyer, Volker Abetz
4:00 PM – 4:40 PM	Coffee break and poster (Poster Group II): Chair: Nicole Zacharia Room: Exhibit Hall						
4:40-5:00 PM	02-290: Isothermal crystallization kinetics of PVDF/PET conductive blends. Mighri Frej, Athmouni Nafaa,	07-259: Heat seal processing by using various seal bar shape. Yamada Kazushi, Miyata Ken, Konishi Reiichi,	06-526: Titanium complex catalyst for in situ preparation of poly(butylene adipate)/Moroccan Clay	04-572: Mechanical performance of short flax fiber reinforced PP injection molded parts: numerical	09-338: Illustration of cross flow of polystyrene melts through a coathanger die. Prof. Dr.-Ing. V. Schöppner,	4:30-5:00 PM. 20-633: Reactive extrusion: An overview. A. Machado	16-569: High strain extensional rheometry of polymer melts. Ricardo Andrade, Patrick Harris, Joao

	Elkoun Saïd	Tsujii Tetsuya, Hashimoto Yasuo	bionanocomposites. Mustapha Raihane, Mohamed Ilouk, Mohammed Lahcini, Valter Castelvetro, Simona Bronco, Sabrina Bianchi, Hamid Kaddami	simulations versus experiments. Frederik Desplentere, Karen Soete, Lieselot Vandenweghe, Hilde Bonte	Dipl.-Wirt.-Ing. B. Henke		Maia
5:00-5:20 PM	02-456: Fabrication of chitosan/polyacrylonitrile blend and semi-IPN hydrogel with epichlorohydrin., Muhammad Omer Aijaz, Sajjad Haider, Fahad S. Al Mubaddel, Waheed A. Al Masry	07—15: Production of Graded Structures in Films. Andrea Wibbeke, Volker Schoeppner	06-93: Manufacture of catalytically active gold nanoparticle surfaces during injection molding. Felix Kroschwald, Jürgen Nagel, Cordelia Zimmerer, Brigitte Voit, Gert Heinrich	04-330: Mold deflection effects on the prediction of packing pressure decay and shrinkage of semi-crystalline polymers. Franco S. Costa, Zhongshuang Yuan	09-365: Optimized biopolymer blends for profile extrusion processes. K. Moser, A. Holzer, B. Bergmann, J. Diemert, P. Elsner	5:00-5:30 PM. 20-489: Devolatilization trends and developments viatwin screw extrusion. C. Martin	16-591: Rheological study of a novel hydrophobically associating polyacrylamide-surfactant system for enhanced oil recovery. M. Shahzad Kamal, Ibelwaleed A. Hussein, Abdullah S. Sultan, Usamah A. Al-Mubaiyehd
5:20-5:40 PM	02-386: Assessment of interfacial adhesion in HDPE based ternary blends. Mohammad Reza Saeb, Roshanak Haghighat, Foujan Dinarvand, Alireza Eslahi, Sima Aghajari	07-385: Numerical analysis of melt-spinning process using multiscale simulation method. Taniguchi Takashi, Takase Kazuhiro	06-68: Permeability analysis of carbon nanofiber nanopapers. Ziwei Zhao, Wei-Ching Liao, James Lee Ly, Jose M. Castro	04-62: Simulation of nanopaper permeability and injection molding using smoothed particle hydrodynamics. Wei-Ching Liao, Eusebio Duarte Cabrera, Ziwei Zhao, Ying-Chieh Yen, Jiangfeng Yu, Jose Castro, and L. James Lee	09—5: Measurement and calculation of the material degradation of polystyrene and modeling of the degradation by using REX. Stefan Littek, Volker Schöppner	5:30-6:00 PM. 20-289: Reactive extrusion based in-situ polymerization of nanonylons...It's not so easy. Christopher S. Tucker, Joseph C. Golba, Jr.	16-632: Strain hardening of molten thermoplastic polymers reinforced with poly(tetrafluoroethylene) nanofibers. Jurczuk Kinga, Galeski Andrzej, Piorkowska Ewa
5:40-6:00 PM	02-119: Towards conductive polymer composites with strain sensing capability: the effect of conductive network morphology and interfacial interaction. Hua Deng, Rongni Du, Mizhi Ji, Linyan Duan, Qiang Fu	07-70: Mass production of polyphenylene sulfite (PPS) ultra-fine fiber by melt differential electrospinning. Li Haoyi, Yang Weimin	06-383: Effect of extrusion configuration on the properties of MWCNT/POM composites. A. Bongiorno, C. Pagano, F. Baldi, I. Fassi	04-560: Thermo-viscoelastic modeling of the aircraft tire cornering. L. Elias-Birembaux, I. Rosu, F. Lebon	09-581: Experimental study of long glass fibers breakage in starve-fed single screw extrusion of reinforced polypropylene. Lucchetta Giovanni	6:00-6:30 PM 20-10 Modification of polypropylene melt strength: effect of depth and duration of radiation. Yasaman Amintowlieh, Costas Tzoganakis, Alexander Penlidis	16-156: Rheologically determined phase behavior in dynamically asymmetric LSCT blends. Khademzadeh Yeganeh Jafar, Goharpey Fatemeh, Foudazi Reza
6:00-6:20 PM		07-663: The effect of the additives of different nature on homo-PAN oxidative stabilization process. Anna Berkovich, Galina Chebotaeva, Ivan Skvortsov, Vladimir Sergeyev	06-143: Effect of cooling rate on the properties of high density polyethylene/multi-walled carbon nanotube composites. Dong Xiang, Eileen Harkin-Jones, David Linton		KN: 09-494 (6:00 – 6:30 PM): Fundamental studies of interfacial rheology at multilayered model polymers for coextrusion process. Huagui Zhang, Khalid Lamnawar, Abderrahim Maazouz		16-606: The Investigation of properties of nanosilica modified asphalt. Rahi Mohamad, Farhad Zafari, Hossein Nazockdast, Nazanin Moshtagh

6:30 PM: Evening Activities

8:30-9:30 AM James L. White Innovation Award Lecture: Research for polymer processing: A challenge in an environment full of obstacles. Dr. Heinz Gross, Gross Kunststoff-Verfahrenstechnik Room: Grand Ballroom A Chair: Avraam Isayev							
9:30 – 10:10 AM Coffee break and poster (Poster Group III): Chair: Nicole Zacharia Room: Exhibit Hall							
Breakout sessions	S16 Rheology and Rheometry Session Chair: Valery Kulichikhin	S06 Nanocomposites Session Chair: Anna Machado	S05 Composites Session Chair: Thanasis Papathanasiou	S04 Modeling and Simulation Session Chair: Gerrit Peters	S09 Extrusion and Extrusion Processes Session Chair: Gibson Batch	S14 Material Technologies for Sustainability Session Chair: Manju Mishra	S02: Polymer Blends and Alloys Session Chair: Rathanawan Magaraphan
Room	Grand Ballroom B	Grand Ballroom A	George Bush	Whitehall	Ambassador	Gold Room	Severance
10:10-10:40 AM	KN: 16-623 Non-equilibrium polymer melt and its response in the linear and non-linear viscoelastic regions. S. Rastogi	KN: S06-505 Selective dispersion of gold nanoparticle in baroplastic polystyrene-b-poly(n-pentyl methacrylate) copolymer thin films. Jo Ara, Kim Jin Kon	KN: S05-214: Structure and properties of polymer-based composite nanofibers. M. Kotaki	KN: 04-515 Reduced-order modeling techniques for understanding printing and coating processes. P. Randall Schunk, Scott A. Roberts, Kristiano Tjptowidjojo	KN: 09-571: A critical review of technological developments and mathematical modeling in single-screw extruders. John Vlachopoulos	KN: 14-204: The influence of injection molding parameters and annealing conditions on structure formation and mechanical properties of polylactide grades. Hans-Joachim Radusch, Andre Wutzler, Werner Anton, Hendrik Walther, Caspar Paetz, Rainer Hagen	KN: S02—17: Conductive polymer blends based on novel interfacial CNT localization. Samuel Kenig, Eyal Cohen, Lior Zonder, Amos Ophir, Joey Mead, Carol Barry
10:40-11:00 AM	16-108: Modification of rheological properties of branched polyethylenes by a thermomechanical treatment. C. Peiti, J.-M. Haudin and B. Vergnes	06-166: Polymer blend nanocomposites containing carbon nanotubes and block copolymer compatibilizer for EMI shielding applications. Uttandaraman Sundararaj, Ivonne Otero, Mohammad Arjmand	05-283: Thermal decomposition kinetic, crystallization behavior, mechanical performance and flame retardancy of poly(lactic acid) filled with glass bead and hybrid composites. Supaphorn Thumsorn, Kazushi Yamada, Yew Wei Leong, Masaki Mizukami, Hiroyuki Hamada	04-92: Numerical optimization of a multi-jet cooling system for the blown film extrusion. M. Janas, J. Wortberg	09-497: Numerical simulation of single screw co-rotating with helical grooved barrel in polymer extrusion. Jian Wang, Juan Liu	14-203: Improving the melt strength and crystallization rate of PLA by reactive extrusion using a multi-functional coagent. Manoj Nerkar, Juliana Ramsay, Bruce Ramsay, Marianna Kontopoulou	02-96: Effect Of Janus particles compatibilization on the mechanical properties of immiscible polymer blends of PPE/SAN. Ronak Bahrami, Tina Loebing, Holger Schmalz, A.H.E. Müller, Volker Altstaedt
11:00-11:20 AM	16-22: Characterization and Process-ability Prediction of Multi-Modal Ziegler-based HDPE for Blow-Molding Applications. Iakovos Vittorias, Diana Doetsch, Rainer Sattel, Helmut Gersema	06-161: Study of Curing Behavior of FKM/Nitrogen Doped Graphene Nanoribbon (N-GNR) Nanocomposites. Alireza Zehtab Yazdi, Maryam Khajehpour, Soheil Sadeghi, Uttandaraman Sundararaj	05-288: Evolution of crystalline orientation during solid phase die-drawing of PP-Talc composites. R.H. Rane, K. Jayaraman, T.R. Bieler, K.L. Nichols, M.H. Mazor	04-659: Modeling the dimensional stability of chemically blown foam. Kevin N. Long, Rekha R. Rao, Lisa L. Mondy	09-55: Extrusion of PP-based WPC: experimental and theoretical analysis. V. Mazzanti, N. El Kissi, F. Mollica	14-232: Properties enhancement of poly (lactic acid). Maria Josefina Carbone, Bart Goderis, Peter Van Puyvelde	02-525: Compatibilizing effect of organically modified clays in poly (lactic acid) and natural rubber blends. Kyung Hyun Ahn, Hyun Geun Ock
11:20-11:40 AM	16-23: Curved Mooney plots and non-locality in the wall slip boundary condition. F. Mollica, V. Mazzanti	06-23: Superhydrophobic Durable Coating based on UV-Photoreactive Silica Nanoparticles. T. Nahum, H. Dodiuk, A. Dotan, S. Kenig, J.P. Lellouche	05-351: Influence of supercritical carbon dioxide on TPE based composites. U. Gallau, S. Laske, M. Wehrl, C. Holzer	04-566: Prediction of droplet dynamics under confined flows by coarse-grain tunable dissipative particle dynamics. Arman Boromand, Joao Maia	09-246: Computer simulation of extrusion and die design for the extrusion of rubber. Tae Gyun Choi, Min-Young Lyu	14-303: Effect of maleated polypropylene emulsion on the mechanical and thermal properties of polypropylene-lignin blends. Mohamed Abdelwahab, Manjusri Misra, Amar Mohanty	02-522: Role of organoclay on the morphology of phase inversion of PP/PS blend. Creusa Ferreira, Joao Maia
11:40 AM-12:00 PM	16-285: Shear and extensional viscosity measurement for rubber compounds by means of high pressure capillary rheometry. Walter Friesenbichler, Michael Fasching, Leonhard Perko	06-292: Epoxy Composites with Hybrid Carbon Fillers – Dispersion and synergy effects Liang Yue and Ica Manas-Zloczower	05-652: Experimental analysis of micro-scale structure and thermal conductivity of polymer sheet containing boron-nitride. T. Saito, T. Komiyama, K. Ishikawa, T. Kawaguchi, I. Satoh	04-618: Finite element analysis of gas transport in nanoclay filled polymers. P.E. Spencer, J. Sweeney, T. Gough, P.D. Coates	09-389: Development of a high speed extrusion concept using a floating screw sleeve for solid-melt-separation. Gregor Karrenberg, Johannes Wortberg	14-280: biocomposites from co-polypropylene and distillers' grains. Nima Zarrinbakhsh, Amar K. Mohanty, Manjusri Misra	02-500: How to control and optimize the morphology of polypropylene/polyamide 6 blends using ionic liquids and nanofillers: influence of the polarity and viscosity. Mohamed Yousfi, Maxime Lebeau, Marie-France Lacrampe, Patricia Krawczak, Jeremie Soulestin

12:00-12:20 PM	16-221: Morphology and rheology of nanoparticle-filled polymer blends under simple shear and elongational flows. Miqiu Kong, Yajiang Huang, Guangxian Li	06-126: Construction of conductive networks through segregated structure in conductive polymer composites. Shuangmei Zhang, Hua Deng, Qin Zhang, Qiang Fu	05-269: Cure Monitoring of Composites by DEA. Tais Doll, Bob Fidler, Robert Pieper		09-174: Wear resistance of thick diamond like carbon coatings against polymeric materials used in single screw plasticizing technology. G. Zitznabacher, K. Liu, C. Forsich, D. Heim	14-308: Effect of thermal history on nucleation and kinetics of crystallization of poly (lactic acid). Amirjalal Jalali, Michel Huneault, Saïd Elkoun	02-474: Structural relaxations and dielectric properties induced by surface functionalized MWNTs in poly (vinylidene fluoride)/poly (methyl methacrylate) blends. Sharma Maya, Madras Girdhar, Bose Suryasarathi
12:20 PM – 1:30 PM	Lunch Break						
1:30 PM-2:30 PM	Plenary: Novel photonics polymers for high-bandwidth and high-quality communication technologies. Yasuhiro Koike, Keio University, Japan Room: Grand Ballroom A Chair: Phil Coates						
Breakout sessions	S16 Rheology and Rheometry Chair: Pierre Carreau	S06 Nanocomposites Chair: Pramoda Pallathadka	S05 Composites Chair: Shing-Chung Wong	S04 Modeling and Simulation Chair: Jean-Francois Agassant	S10 Injection Molding Chair: Avraam Isayev	H.E.H. Meijer Honorary Session Chair: Patrick Anderson	S02 Polymer Blends and Alloys Chair: Anup Ghosh
Room	Grand Ballroom B	Grand Ballroom A	George Bush	Whitehall Room	Gold Room	Ambassador	Severance
2:30-3:00 PM	KN: 16-553 Rheological behavior and foam morphology of linear and modified ETFEs. Masataka Sugimoto, Eiichi Nishi, Tahashi Kato, Takashi Satou, Sathish K. Sukumaran, Kiyohito Koyama	KN: S06-237 How is the cold-crystallization behavior of a semi-crystalline polymer/clay nanocomposite affected by degree of intercalation? Bandyopadhyay Jayita, Sinha Ray Suprakas	KN: S05-99 New role of modeling and simulation in advancement of composite manufacturing with liquid molding. Advani Suresh G, Simacek Pavel	KN: S04-277 Multi-phase crystallization kinetics in isotactic polypropylene. Peter Roozmond, Gerrit Peters	KN: 10-69 Rapid micro-embossing and injection molding using molds with carbide-bonded graphene coating. Pengcheng Xie, Eusebio Duarte Cabrera, Panpan Zhang, Ying-Chieh Yen, Peng He, Daniel Gallego-Perez, Lingqian Chang, Allen Yi, Jose Castro, L. James Lee	2:30-2:40 PM: General Introduction 2:40-3:00 PM: 19-536: Towards a multiscale modeling approach to predict the large-scale morphology of polymer nanocomposites. Sacha Trevelyan Mould, João Miguel Nóbrega, José António Covas	KN: 02-102: Improvement of PET surface hydrophilicity and roughness through blending. Ahmad Rezaei-Kolachi, Abdellah Ajji, Pierre Carreau
3:00-3:20 PM	16-240: An enhanced rotational rheometer system with two motors. Joerg Laeuger	06-476: Aromatic polyamide/graphite nanocomposites: Effects of the expanded graphite surface treatment on the materials properties. Alexis Bobenrieth, Jean-Marie Raquez, Franck Meyer, Caroline Frédérix, Anne-Lise Goffin, Hans Miltner, Philippe Degée, Philippe Dubois	05-276: Flow-Induced Resin Infiltration of Porous Substrates. Nickolas D. Polychronopoulos, Ioannis E. Sarris, Thanasis D. Papathanasiou	04-570: Impact behavior of semi-crystalline polymers: experimental characterization and FEM simulations. Juan Pablo Torres, Martín Machado, Patricia María Frontini	10-594: Thermal optimization of porous mold inserts for rapid heat cycle molding. Luca Crema, Giovanni Lucchetta	19-448: The role of assumptions in Jeffery's model on fiber orientation prediction for short fiber composites processing. Douglas E. Smith, Dongdong Zhang	02-678: Polyelectrolyte complex solution phase behavior. Nicole Zacharia
3:20-3:40 PM	16-33: Variance Analysis in Polymer Melt Viscosity Characterized by a Capillary Rheometer. D.O. Kazmer, Amir Moshe, S. P. Johnston, R. M. Malloy, S. Kenig	06-492: A comparison of LLDPE-based nanocomposites containing multi-walled carbon nanotubes and grapheme. Alexandros Vasileiou, Aristides Docoslis, Marianna Kontopoulou	05-590: Rapid infusion of epoxy matrix composites. Fang Xudong, Bi Chao, Yao Donggang	04-411: The prediction of mechanical performance of isotactic polypropylene on the basis of processing conditions. Harm Caelers, Leon Govaert, Gerrit Peters	10-231: Investigation of the influence of different coatings on the filling behavior and replication quality of microstructures in injection molding. Martin Burgsteiner, Florian Müller, Thomas Lucyshyn, Christian Kukla, Clemens Holzer, Dieter Gruber, Johannes Macher, Gernot Pacher	19-359: Stress-optical behavior of amorphous films during stretching and relaxation processes near glass transition. Yuki Takada, Wataru Takarada, Takeshi Kikutani	02-48: Blends of polyethylene glycol and olefinic copolymers: Interfacial tension data and measurements. Kevin Verilhac, Melinda Desse, Françoise Fenouillot, Christian Carrot
3:40-4:00 PM	16-427: Controlling rheological behavior of entangled polymers by chain architecture. Gengxin Liu, Konstantinos Ntetsikas, Kostas Misichronis, Namgoo Kang, Jimmy Mays, Apostolos Avgeropoulos, Shi-Qing Wang	06-235: Development of multi-functional nanobiocomposites using in situ reactive compatibilization. Vincent Ojijo, Sinha Ray Suprakas	05-586: Effect of laminate edge conditions on the formation of microvoids in composite laminates. J.P. Anderson, M.C. Altan	04-296: Computational simulations and constitutive modeling external pressure induced buckling collapse of high density polyethylene (HDPE) liners. Federico Rueda, Juan Pablo Torres, Patricia Maria Frontini	10-146: Injection molding of optical functional micro structures using laser structured, PVD-coated mold inserts. Ch. Hopmann, M. Weber, M. Schöngart, C. Schäfer, K. Bobzin, N. Bagcivan, T. Brögelmann, S. Theiß, T. Münstermann, M. Steger	19-257: The search for laser sinterable polymers: Identification of key material parameters. Leander Verbelen, Bart Goderis, Paula Moldenaers, Peter Van Puyvelde	02-311: Orientation birefringence of cross-linked rubber containing low-mass compound. Ayumi Ykiyama, Shogo Nobukawa, Masayuki Yamaguchi

4:00 PM – 4:40 PM Coffee break and poster (Poster Group IV): Chair: Nicole Zacharia Room: Exhibit Hall							
4:40-5:00 PM	16-519: Rheological techniques for determining degradation of polylactic acid in bioresorbable medical polymer systems. Gabriel Y.H. Choong Andrew J. Parsons David M. Grant, Davide S.A. De Focatiis	06-672: Morphology and properties of polypropylene/clay nanocomposites prepared by solvent assisted double screw extrusion. Lanfranconi Matias, Alberca Joaquin, Ludueña Leandro, Alvarez Vera	05-103: The mechanical properties of density graded hemp/polyethylene composites. Raphaël Dauvegis, Denis Rodrigue	04-202: Simulation of extrudate swell of high-density polyethylene: Effect of K-BKZ model parameters. Konaganti Vinod Kumar, Ebrahimi Marzieh, Ansari Mahmoud, Hatzikiriakos Savvas George	10-234: Analysis of cavity pressure and warpage of polyoxymethylene thin walled injection molded parts: experiments and simulations. P. Guerrier, G. Tosello, J.H. Hattel	19-109: Radical-mediated modification of polyolefins: Strategies for introducing long-chain branching, rheological and mechanical properties. Khalil El Mabrouk, Mostapha Bousmina	02-188: A High-throughput technology for the efficient development of thermoplastic formulations. Michael Hunt, Gerhard Maier, Ralf Bode
5:00-5:20 PM	16-537: An insight into the crystallization behavior of mLLDPEs in shear and elongation. Maria Troisi Enrico, Gerrit Peters, Martin van Drongelen	06-89: The glass transition temperatures and thermal stability of PMMA-grafted natural rubber toughened epoxy/clay nanocomposites. Nor Yuliana Yuhana	05-12: Study of transverse matrix cracking in acrylic block-copolymer toughened epoxy/basalt-fiber composite pipe. Mohammad T. Bashar, Pierre Mertiny, Uttandaraman Sundararaj	04-18: Thermo-mechanical simulation of liquid-supported stretch blow molding. J. Zimmer, M. Stommel	10-252: Estimation of thermal contact conductance at polymer melt and mold surface interface in microinjection molding. M. Babenko, B.R. Whiteside, J. Sweeney, G. González Castro, K. Norris, S. Bigot	19-111: Rheological assessment of CNT dispersion in polyol systems. G. Pircheraghi, I. Manas-Zloczower	02-460: Preparation and characterization of reactive blends of poly(lactic acid), poly(ethylene-co-vinyl alcohol), and poly(ethylene-co-glycidyl methacrylate). Warangkhan Phromma, Sadhan C. Jana, Rathanawan Magaraphan
5:20-5:40 PM	16-592: Kinetic studies of chemical shrinkage and residual stress formation in thermoset epoxy adhesives under confined curing conditions. P. L. Geiss, M. Schumann	06-9: Novel sheet materials for conservation and control of water have high morphological, thermal and mechanical properties like nano-structured materials. Agrawal Bhawana, Deopura Basanti Lal	05-306: The effect of in-service aerospace contaminants on X-band dielectric properties of a bismaleimide/quartz composite. Luis A. Rodriguez, Carla García, Landon R. Grace	04-0: Validation of discrete element simulations in the field of solids conveying in single-screw extruders. Johann-Sebastian Lessmann, Volker Schoeppner	10-345: Evaluation of the demoldability of coated micro structures in the injection molding process. Tobias Struklec, Martin Burgsteiner, Thomas Lucyshyn, Werner Balika, Stefan Moderegger, Clemens Holzer	19-314: Two Dimensional Long-Flexible Fiber Simulation In Squeeze Flow. Gleb Meirson, Andrew N. Hrymak	02-222: In-situ thermal-degradation of polymethyl pethacrylate in polyphenylene sulfide matrix: a new perspective to polymer thermal-degradation. Xiaojun Wang, Yuanxin Zheng, Shengru Long, Gang Zhang, Jie Yang
5:40-6:00 PM	16-567: Shear-induced crystallization of polylactides differing in D-lactide content. Joanna Bojda, Ewa Piorkowska	06-94: Characterization of Organoclay- and/or CNT-added PVDF Nanocomposites. Fang-Chyou Chiu	05-325: High-performance and multi-functional polymeric materials with alternating multilayered structure. Guo Shaoyun, Shen Jiabin	04-194: Moffatt eddies in the single screw extruder: numerical and analytical study. Petru S. Fodor, Miron Kaufman	10-390: Determination of a robust process setting for an injection molded mirror drive component using D-Optimal DoE. Gerald R. Berger, Walter Friesenbichler, Hans-Juergen Luger, Michael Gierth, Irmgard Beytollahi, Paul Filz	19-302: Solid phase polymer processing – unlocking the potential of molecular orientation. F. Caton-Rose, P. Coates, I. Ward	02-549: Compatibilizing efficiency of graft copolymers for immiscible polymer blends. Cai-Liang Zhang, Jia-Jun Wang, Lian-Fang Feng, Sandrine Hoppe, Guo-Hua Hu
6:00-6:20 PM	S16-424: Investigating viscous dissipation in startup uniaxial extension of entangled melts. Lin Panpan, Wang Shi-Qing	06-479: Electromagnetic Interference Shielding Nanocomposites based on EPDM rubber and Nanographite/ Nano NiFe2O4 hybrid: The Role of Crosslink Density and Rubber Elasticity. Maryam Hatami, Ali Asghar Katbab	05-350: Thermal and mechanical properties of polylactic acid (PLA) and bagasse carboxymethyl cellulose (CMCB) composite by adding isosorbide diesters. S. Kamthai, R. Magaraphan	04-31: Molecular dynamics simulation of elastomer nanocomposites: current achievements and future opportunities. Liu Jun, Shen Jianxiang, Gao Yangyang, Feng Yanchong, Chen Yulong, Tian Ming, Liu Li, Zhang Liqun	10-471: Crystalline behavior of a micro-injection molded gear of reactive extrusion modified PP. Shi-Wei Wang, Bo Sun, Qian Li, Chang-Yu Shen, Guo-Hua Hu	07-361: Monitoring structure development in LDPE blown film using real-time wide-angle X-ray diffraction. Martin van Drongelen, Dario Cavallo, Iakovas Vittorias, Giancarlo Alfonso, Gerrit Peters	02-662: Shape memory polymers through blending of elastomers and crystalline small molecules. Nicole Brostowitz, Kevin A. Cavicchi, R.A. Weiss
6:30 PM: Evening Activities							

8:30-9:30 AM							
Plenary: <i>Stretchy electronics that dissolve in your body</i> . John Rogers, University of Illinois Room: Grand Ballroom A Chair: Mukerrem Cakmak							
9:30 – 10:10 AM							
Coffee break and poster (Poster Group V): Chair: Nicole Zacharia Room: Exhibit Hall							
Breakout sessions	S14 Material Technologies for Sustainability Chair: Richard Gross	S13 Material Technologies for Energy Chair: Yu Zhu	S05 Composites Chair: M. Cengiz Altan	S06 Nanocomposites Chair: Masami Okamoto	S03 Foams Chair: Denis Rodrigue	S15 Additive Manufacturing Chair: Manfred Schmid	S10 Injection Molding Chair: Shih-Jung Liu
Room	Ambassador	Grand Ballroom B	George Bush	Grand Ballroom A	Severance	Whitehall	Gold Room
10:10-10:40 AM	KN: 14-26: Constant-temperature embossing of supercooled polymer films. Kuduva-Raman-Thanumoorthy Ramasubramani, Yao Donggang	KN:13-696: Energy efficient Reflex™ displays and applications. E. Montbach	KN: S05—7: Biopolymer composites: Mechanical, thermal, rheological and biodegradation properties. V. Mittal	KN: S06-242: Tunable phase change properties of stimuli-responsive polyurethane films and their nanocomposites. Oguz Oguzhan, Malay Ozge, Kosak Cagla, Yilgor Emel, Yilgor Iskender, Menciloglu Yusuf Ziya	KN: 03-37: Effect of crystals and fibrous network polymer additives on cellular morphology of microcellular foams. Ryoma Miyamoto, Tatsumi Utano, Shunya Yasuhara, Shota Ishihara, Masahiro Ohshima	KN:15-676: History, state of the art and future of powder based additive manufacturing of thermoplastics. Peter Keller	KN:10—20: Injection molding of biodegradable balloon-expandable self-locking polycaprolactone stents as buckling explants for the treatment of retinal detachment. Yi-Jie Peng, Yu-Ting Lu, Shih-Jung Liu
10:40-11:00 AM	14-270: Characterization of electrospun lignin based carbon fibers. Vida Poursorkhabi, Amar Mohanty, Manjusri Misra	13-688 (Invited): Strain dependent dual relaxation in main chain smectic-c liquid crystals elastomers. Sonal Dey, Dena M. Agra-Kooijman, Ren Wanting, Philip J. McMullan, Anselm C. Griffin, Satyendra Kumar	05-628: Bio-composites based on cellulose acetate and kenaf fibers. C. Pang, R.A. Shanks, F. Daver	06-196: Influence of filler on the crystallization behavior of polymers at high supercooling measured by fast scanning DSC. Juergen Schawe	03-660: Solid-state foam processability and morphological studies of poly(lactic acid) blends & composites. Sabapathy Sankar, Raghuram, Anup K. Ghosh	15-422: A novel process route for the production of spherical SLS polymer powders. Jochen Schmidt, Marius Sachs, Christina Blümel, Bettina Winzer, Franziska Toni, Karl-Ernst Wirth, Wolfgang Peukert	10-273: The evaluation of vacuum venting and variotherm process for improving the replication by injection molding of high aspect ratio micro features for biomedical application. Marco Sorgato, Giovanni Lucchetta
11:00-11:20 AM	14-523: The improvement in functional characteristics of eco-friendly composites made of natural rubber and cellulose. Kunihiko Araki, Shonosuke Kaneko, Koki Matsumoto, Asahiro Nagatani, Tatsuya Tanaka, Yoshihiko Arai	13-697 (Invited): Morphology and interface control with fully conjugated block copolymers for organic photovoltaics. Enrique Gomez	05-555: Poly(L-lactic acid)/poly(glycolic acid) microfibrillar polymer-polymer composites: Preparation and viscoelastic properties. L.D. Kimble, S. Fakirov, D. Bhattacharyya	06-370: Tribological investigations of polyamide nanocomposites. Andreas Witschnigg, Stephan Laske, Ivica Duretek, Clemens Holzer, Livia Chitu, Sabine Bodner	03—6: Polypropylene structural foams: Measurements of the core, skin and overall mechanical properties, evaluation of predictive models. T. Sadik, C. Pillon, C. Carrot	15-337: Fiber reinforced 3D-printing. Andreas Gebhardt, Mirjam Knothe, Laura Thurn	10-51: Electrical and dielectric properties of foam injection-molded polypropylene/multi-walled carbon nanotube composites. A. Ameli, M. Nofar, M. Saniei, N. Hossieny, C.B. Park, P. Pötschke
11:20-11:40 AM	14-495: The formation and analysis of biobased carbon nanoparticles as a substitute to carbon black. Michael R. Snowdon, Amar K. Mohanty, Manjusri Misra	13-459 (Invited): Highly conductive solid polymer electrolyte membranes. He Ruixuan, Kyu Thein	05-699: Characterization of non-Fickian moisture absorption in thermosetting polymers. Gorkem E. Guloglu, M. Cengiz Altan	06-403: Preparation of friendly conductive nanocomposites: Mixer vs. extruder. Ana Machado	03-562: Production of conductive micro-foam from polyamide-epoxy adduct. L. Anusha, M.N. Nurul Ain, Z. Zakaria, Du Ngoc Uy Lan	15-511: Three parameter analysis of fiber orientation in fused deposition modeling geometries. Jason Nixon, Benjamin Dryer, Inna Lempert, David I. Bigio	10-507: Influence of processing and structure-properties relations for Polyamide 6. Emanuele Parodi
11:40 AM-12:00 PM	14-475: The relation between number of recycling cycles and DSC behavior for PLA. Viana Hamilton Magalhaes, Bandeira Cirlene Fourquet	13-692 (Invited): Highly conductive PEDOT:PSS films prepared by acid treatment for transparent electrode of optoelectronic devices. Jianyong Ouyang	05-642: Thermal conductive composites of PPS/boron nitride with varying microfillers for electronic packaging applications. Mosanezadeh Shahriar Ghaffari, Lai Song-Liang, Naguib Hani E.	06-639: Influence of carbon nanotubes on polyethylene terephthalate deformation behavior. Carla I. Martins, Alberta Coelho, Paulo E.C. Lopes, Miko Cakmak, Conceição Paiva	03-547: The effect of polymer rheology on the morphology of multi-layered PP foam/film and on its mechanical and dielectric properties. Lee Sangjin, Du Jiang, Baer Eric, Maia João	15-256: Numerical simulation of UV additive printing system. Kentaro Taki, Yoshihito Watanabe, Hiroshi Ito, Masahiro Ohshima	10-32: Validation of an in-mold multivariate sensor for measurement of melt temperature, pressure, velocity, and viscosity. Guthrie Gordon, David O. Kazmer, Xinyao Tang, Zhoayan Fan, Robert X. Gao
12:00-12:20 PM		13-123 (Invited): Non-conjugated radical polymers as an emerging class of transparent conductors in organic photovoltaic and thermoelectric applications. Bryan W. Boudouris, Lizbeth Rostro, Aditya G. Baradwaj	05-348: Influence of the compounding process on bio-based polyamides with cellulosic fibers. Jan-Christoph Zarges, Maik Feldmann, Hans-Peter Heim	06-661: Performance of polycarbonate/ABS nanocomposites under torsional load: Polymeric orthotic hinge joint. Priyanka Singh, Mayank Dwivedi, Naresh Bhatnagar, Anup K. Ghosh	03-698: Analysis of the anisotropic compression response and shear of PET foams using digital image correlation (DIC). Amir Fathi, Volker Altstadt	15-168: Multi-material deposition of polymer powders with vibration-controlled capillary steel nozzles for additive manufacturing. Thomas Stichel, Tobias Laumer, Tobias Baumüller, Philipp	10-136: Influence of thermal conductivity of PP-based compounds on surface roughness of rapid heat cycle injection molded parts. Gernot A. Pacher, Bernd Geissler, Johannes Macher, Gerald R. Berger, Dieter P.

						Amend, Stephan Roth	Gruber, Walter Friesenbichler
12:20 PM – 1:30 PM	Lunch and business meeting Room: Grand Ballroom A						
1:30 PM- 2:30 PM	Morand Lambla Award Lecture: <i>Graphene/elastomers nanocomposites and hybrids with excellent performances prepared by facile approaches aiming at application and industrialization</i> . Liqun Zhang, BUCT Room: Grand Ballroom A Chair: Sati Bhattacharya						
Breakout sessions	S08 Reactive Processing Chair: Joseph Golba	S13 Material Technologies for Energy Chair: Hunaid Nulwala	S05 Composites Chair: Stephan Laske	S06 Nanocomposites Chair: Nages Potluri	S03 Foams Chair: Zhen Yao	D.R. Paul Honorary Session Chair: Luz Pessan; Eric Baer	S10 Injection Molding Chair: Carla Martins
Room	Whitehall	Ambassador	George Bush	Grand Ballroom A	Severance	Grand Ballroom B	Gold Room
2:30-3:00 PM	KN:08-11: Modification of high density polyethylene in a UV-initiated reactive extrusion process. Pouyan Sardashti, Costas Tzoganakis, Alexander Penlidis	KN: 13-691: Development of low band-gap conjugated polymers with high hole mobility for polymer solar cells. J. Chen	KN: S05-622: A computationally efficient model for fiber length attrition in molded composites. Gregorio M. Velez-Garcia, Charles L. Tucker	KN: S06-343 Rheology on the dispersion of acetylated cellulose nanocrystals in polylactic acid (PLA). Tapasi Mukherjee, Nhol Kao, Rahul Gupta, Sati Bhattacharya	KN:03-637: Development of multifunctional shape memory polymer foams. Janice Song, Ilya Srivastava, Hani Naguib	2:30-3:00 PM: 18-75: Molecular nanoparticles are unique elements for macromolecular science. S.Z.D. Cheng	KN: 10-229: Experimental confirmation of diffusion processes in multi-component injection molding. Thomas Kisslinger, Katharina Bruckmoser, Thomas Lucyshyn, Guenter R. Langecker, Clemens Holzer, Katharina Resch
3:00-3:20 PM	08-60: Chemorheology of In-Mold Coating for Compression Molded SMC Applications. Seunghyun Ko, Elliott J. Straus, Jose M. Castro	13-487 (Invited): Energy filtered, low-electron-dose TEM of organic and hybrid nanomaterials for energy research. Jihua Chen	05-64: Variation of fiber orientation in single and two component injection molding process for glass fiber reinforced polymer. C.L. Tuinea-Bobe, P.E. Spencer, E. Honza, B.R. Whiteside, P.D. Coates	06-298: Effect of cellulose nanocrystals (CNCs) on crystallinity, mechanical and rheological properties of polypropylene/CNCs nanocomposites. D. Bagheriasl, P. J. Carreau, C. Dubois, B. Riedl	03-504: Low-density nanoporous acrylic medium. Saniei Mehdi, Ameli Amir, Hossieny Nemat, Park Chul	3:00-3:30 PM: 18-441: Continuous polymer nanolayer processing by forced assembly. Michael Ponting, Deepak Langhe, Eric Baer	10-88: Polymer/metal direct Joining by precise injection molding process. Nakamura Shuhei, Takayama Tetsuo, Taki Kentaro, Ito Hiroshi
3:20-3:40 PM	08-76: Effect of elasticity on resident time distribution in reactive extruder. Suresh Ahuja	13-558 (Invited): Plasmo-electrical organic solar cells. Wallace Choy	05-399: Analysis of the resin transfer molding (RTM) process for FRP and its process simulation fundamentals. S. Caba, M. Koch	06-593: Stereocomplexed PLA nanocomposites: From in situ polymerization to materials properties. Giada Lo Re, Samira Benali, Youssef Habibi, Jean-Marie Raquez, Philippe Dubois	03-363: Effect of chemical blowing agent on cure kinetic morphology and thermal property of natural rubber foam. Anongnat Somwangthanaroj, Pollawat Jaroenthonkajonchai	3:30-4:00 PM: 18-101: Characterization of cellulose nano-fibers & applications to fibrous membranes. B. Chu, B.Hsiao, Y. Su	10-327: Nucleation and shelf life enhancing additives for a novel foam injection molding process using gas-laden pellets. Tung Lih-Sheng, Sun Xiaofei
3:40-4:00 PM	08-14: Functionalization and hemocompatibility of styrenic thermoplastic elastomer. Jinghua Yin	13-614 (Invited): Improving the cyclability of lithium-air battery with small molecule solvent. Yu Ming Chen, Yu Zhu	05-462: Phosphate glass/PP-g-MA blends and the gas barrier property. Hua Sun, Matthew Herbert, David Schiraldi	06-391: Evaluation of molecular structure – conductivity relation of injection molded polycarbonate hybrid nanocomposites filled with carbon black/carbon nanotube. Parastoo Lotfi, Hossein Nazokdast	03-521: Development of polylactic acid foams via nonsolvent-induced phase separation. Ehsan Rezabeigi, Paula M. Wood-Adams, Robin A.L. Drew		10-340: Non-invasive ultrasound based temperature measurements at reciprocating screw plastication units: Methodology and applications. Klaus Straka, Bernhard Praher, Georg Steinbichler
4:00 PM – 4:40 PM	Coffee break and poster (Poster Group VI): Chair: Nicole Zacharia Room: Exhibit Hall						
4:40-5:00 PM	08-200: High melt strength, tear resistant blown film based on poly(lactic acid). Neil R. Edmonds, Peter N. Plimmer, Chris Tanner	13-690 (Invited): Morphology and charge separation in all-conjugated block copolymers. Rafael Verduzco, Kendall A. Smith, Yen-Hao Lin, Jorge Mok	05-480: Fiber orientation in direct sheet molding compound. Atieh Motaghi, Andrew Hrymak	06-53: Morphology and thermal properties of poly(butylene succinate)/graphene nanosheets nanocomposites. Pramoda K.P., Koh Xue Qi, Akhila Khatta, Vikas Mittal	03-458: Polypropylene composite foams made of carbon particulate-coated pellets and foam beads. Ying-Chieh Yen, Dajiong Fu, Dachao Li, Ly James Lee	4:40-5:10 PM: 18-45: Use of the binary interaction model to design ionomer/polymer blends. R.A. Weiss	10-546: Numerical simulation of single stage injection blow molding process. J. Biglione, Y. Béreaux, J.-Y. Charneau, R. Rinaldi, J. Balcaen, S. Chhay

5:00-5:20 PM	08-39: Effect of branching agents and coagent on poly lactic acid: reactive modification and investigation of properties. E. Deenadayalan, Salunkhe Pradip, Lele Ashish	13-710 (Invited): Electric field assisted alignment of barium titanate nanoparticles for ultra-capacitor application: Morphology perspective. Mukerrem Cakmak, Saurabh Batra	05-667 Influence of ultrasonic treatment in PP/CNT composites using masterbatch dilution method. Jing Zhong, Avraam Isayev	06-208: High thermal conductivity and electrical insulation of epoxy composites by incorporating silica coated Ag nanowires. Chao Chen, Yang Xue, Zhigang Xue, Xiaolin Xie, Yiu-Wing Mai	03-312: Preparation of well-defined HMSPPs with multi-structure and study on its rheological and foaming behaviors. Zhen Yao, Bo-en Dai, Yun-fei Zhang, Shao-long Qiu, Yan Li, Kun Cao	5:10-5:40 PM: 18-498: Dispersion of nano-clay at higher levels into polypropylene with carbon dioxide. D. Baird	10-344: Numerical prediction of fiber orientation in injection-molded short-fiber/thermoplastic composite parts with experimental validation. Thanh Binh Nguyen Thi, Mizuki Morioka, Atsushi Yokoyama, Senji Hamanaka, Katsuhisa Yamashita, Chisato Nonomura
5:20-5:40 PM	08-20: Graft copolymers of poly(methyl-methacrylate) and poly(lactic acid) or poly(3-hydroxybutyrate): Synthesis by reactive extrusion and characterization. Frédéric Becquart, Samira Touhtouh, Mohamed Taha	13-693 (Invited): Facile and large-scale fabrication of graphene-like carbon nanosheets with high surface area for supercapacitor applications. Hui Peng, Jingjing Mu, Guofu Ma, Ziqiang Lei,	05-376: Study of injection molded long glass fiber-reinforced polypropylene and the measurement of fiber length distribution. B. Parveen, P. Caton-Rose, J. Sweeney, P. Hine, F. Costa	06-616: Carbon filler based polymer compounds: Applications and challenges from industrial perspective. Gaurav R. Kasaliwal, Hye-Jin Park, Roland Hingmann, Arnold Schneller	03—1: Fabrication of nano-cellular foams using a gaseous CO ₂ process. Charlène Forest, Philippe Cassagnau, Philippe Chaumont		10-331: Optimum design method for injection molding die using mixed approximation method. Atsushi Yokoyama, Yuichi Kubota
5:40-6:00 PM	08-149: InnoREX – Online analytic results from European project concerning the polymerization of PLA using reactive extrusion. Bjoern Bergmann, Wolfgang Becker, Jan Diemert, Peter Elsner	13-669 (Invited): Over 10% efficiency from single junction polymer solar cells by novel two-dimensional donor-acceptor conjugated copolymer. Chang Liu	05-198: Progress in modeling long glass and carbon fiber breakage during injection molding. Hongyu Chen, Mark Cieslinski, Donald G. Baird	06-142: Short-term and long-term behavior of PP-polymer nanocomposites produced by injection molding compounding. M.G. Battisti, P. Guttman, L. Chitu, W. Friesenbichler	03-135: Fabrication of PLLA/HA composite scaffolds modified by DNA for tissue engineering applications. Yuki Nishida, Masami Okamoto	5:40-6:10 PM: 18-454: Polymer nanocomposites for hydrogen storage. Fabio R. Passador, Bruna R. Moreira, Luiz A. Pessan	10—12: Artificial neural networks to model formulation-property correlations in the process of inline-compounding on an injection molding machine. Elmar Moritzer, Ellen Müller, Yannick Martin, Rainer Kleeschulte
6:00-6:20 PM	KN: 08-466: Reactive compatibilizer-tracer: A powerful tool for designing, scaling up and optimizing reactive blending processes. Cai-Liang Zhang, Wei-Yun Ji, Lian-Fang Feng, Sandrine Hoppe, Guo-Hua Hu	13-656: Effect of dipolar orientational polarization on electronic conductivity in ferroelectric polymer electrets. Yang Lianyun, Zhu Lei	05-419: Manufacturing dielectric electroactive polymers (DEAP) by using thermoplastic elastomers (TPE) and conductive polymers. Ralf Giesen	06-366: Rheological and morphological behavior of PA6/ABS/nanoclay with shear flow. Mojarrad Azim, Ramazani S. A. Ahmad, Ghasemi Ismaeel	KN (6:00-6:30 PM): 03-113: Expanded polylactide bead foaming- A new technology. M. Nofar, A. Ameli, C.B. Park		10-1: Long fiber breakage simulations for injection molded fiber-reinforced thermoplastics: Processing from screw to part. Huan-Chang Tseng, Yuan-Jung Chang, Chia-Hsiang Hsu, Rong-Yeu Chang
6:20-6:40 PM		13-473 (Invited): Polymer nanocomposite membrane for high-pressure gas separation applications. Zhao Yanan, Ouyang Xilian, Jung Benson, Ho W.S. Winston, Lee Ly James					10-369: Investigations on injection molded, glass-fiber reinforced polyamide 6 integral foams using breathing mold technology. A. Roch, L. Kehret, T. Huber, T. Potyra, F. Henning, P. Elsner
7:00 PM: Cocktail Reception and Conference Dinner							

8:00-9:00 AM Plenary: <i>Building a bigger, better toolkit for polymer characterization</i> , Nancy Jestel, SABIC Innovative Plastics Room: Grand Ballroom A Chair: Volker Altstadt							
9:00 – 9:20 AM Coffee break Room: Exhibit Hall							
Breakout sessions	S12 Aerogels Chair: Stephanie Vivod	S01 Mixing and Compounding Chair: Pierre Elemans	S14 Materials Technologies for Sustainability Chair: Younjin Min	S07 Fibers and Films Chair: Abdella Ajji	S11 Elastomer Materials and Processing Chair: Chris Robertson	S21 Xi Xu Memorial Session Chair: Petr Saha; Qi Wang	S17: Fire Science and Engineering Chair: Alex Morgan
Room	Whitehall	Severance	Ambassador	George Bush	Gold Room	Grand Ballroom A	Grand Ballroom B
9:20-9:50 AM	KN: 12-134: Monolithic aerogels with nanoporous crystalline phases. Christophe Daniel, Gaetano Guerra	KN:01—22: The essence of compounding: Composition control. Jos-MH Janssen	KN: 14-709 Biopolymer compounds containing polyhydroxyalkanoates and polylactic acid with enhanced processability and properties. Manoj Nerkar, Juliana Ramsay, Bruce Ramsay, Marianna Kontopoulou	KN:07-516: Time scales in film fabrication processes and their effect on interlayer adhesion. Barry A. Morris	KN:11-317: Highly stretchable and conductive electrodes system based on wrinkles and electrospun copper nanofibers. Nah Changwoon, Lee Gi-Bbeum, Lee Ji Hyeon	9:20-9:50 AM: 21-695: Sensing conductive composites. P. Saha, R. Benlikaya, P. Slobodian	KN: 17-655: Challenges with material compatibility and performance of composite intermediate bulk containers. Christopher John Wieczorek, Yogish Gopala, Geary Yee
9:50-10:10 AM	12-201: A rapid method of production and surface modification of silica aerogel monoliths. Sung Jun Kim, Sadhan C. Jana	01-138: Experimental analysis of PET on a co-rotating twin-screw extruder for varying vacuum pressures. T. Herken, N. Fecke, V. Schöppner	14-105: Thermoplastic elastomers derived from bio-based monomers. Hossein Ghassemi	07-47: Fabrication of robust coatable polarizing patterned thin film. Kwang-Un Jeong	11-493: Comparative study of rheology, vulcanization and mechanical properties of rubbers containing soybean and naphthenic oils. Avraam Isayev, Mark Soucek, Xiaofeng Ren and Jiayi Li	9:50-10:20 AM: 21-644: Polymer mechanochemistry and its application in developing novel polymer materials. Qi Wang, Canhui Lu, Hesheng Xia	17-686: Nanoplatelets used as effective flame retardant synergists. Udo Wagenknecht, DeYi Wang, Uwe Gohs, Andreas Leuteritz, Gert Heinrich
10:10 AM-10:30 AM	12-159: Chitosan-based aerogel polymers as a flexible building-block to design novel porous materials. Abdelkrim El Kadib, Mosto Bousmina	01-179: Thermal properties of poly(3-hydroxybutyrate)/vegetable fiber composite. Maria B. C. Vitorino, Lizzia T. A. Reul, Laura H. Carvalho, Eduardo L. Canedo	14-305: An in-depth analysis of the physico-mechanical properties imparted by agricultural fibers and food processing residues in polypropylene biocomposites. Rachel Campbell Murdy, Michelle Mak, Manjusri Misra, Amar K. Mohanty	07-583: The role of crystal phase transitions on the drawability of polyamides films. Julie Pepin, Valerie Miri, Jean-Marc Lefebvre	11-393: Effect of carbon black and/or elastomer on thermoplastic elastomer-based blends and composites. M. Yasar G. Bayram, H. Celebi	10:20-10:50 AM: 21-44: Micromolding of Polymers & Polymer Nanocomposites. P. Coates, B. Whiteside, K. Norris, C. Tuinea-Bobe, and Q. Wang, Y. Chen, N. Chen, D. Li, G. Li, G. Fei, Q. Yang, H. Xia	17-666: Micro-Scale evaluation of flammability for polymeric materials. Gandhi Pravinray, Chapin J Thomas
10:30-10:50 AM	12-309: Facile biobased chitosan/polybenzoxazine/clay carbon aerogels with superior CO ₂ adsorption capacity. Almahdi A. Alhwaige, Hatsuo Ishida, Syed Qutubuddin	01-139: Flow field features of twin-screw extruder process for different screw elements: Analysis of morphology development. Arash Sarhangi Fard, Frederico Custodio, Vaidyanath Ramakrishnan	14-38: Environmentally-benign electroless nickel plating technique for acrylonitrile-butadiene-styrene substrate. Siwach Tengsuwan, Shota Ishihara, Masahiro Ohshima	07-6: Repreve® - The Recycled PET of choice. Edmir Silva, Corey Tate	11-381: Influence of different crosslinking systems on the mechanical and morphological properties of thermoplastic vulcanizates. Simone Patermann, Volker Altstadt	10:50-11:20 AM: 21-125: Some issues and experiences in recycling of polyethylene. John Vlachopoulos	17-575: Effect of wool fiber hybridization on flame retardancy in intumescent APP Based PP/Kenaf Composites. Aruna Subasinghe, Raj Das, Debes Bhattacharyya
10:50-11:10 AM	12-281: Crosslinked polyurea aerogels with controlled porosities. Andrew Shinko, Sadhan C. Jana, Mary Ann Meador	01-230: Increase of the thermal stability of polymers based on renewable resources. Stephan Laske, Wolfgang Ziegler, Clemens Holzer	14-588: The elucidation of the degradation mechanism of the polyethylene pipe for warm water by the catalytic effect of copper ion. Daisuke Tanemura, Kazushi Yamada, Hiroyuki Nishimura, Kazuhisa Igawa, Yuji Higuchi	S07-625: Solid state processing of disentangled ultra-high molecular weight polyethylene(s) for demanding applications. Sanjay Rastogi	11-90: Design and preparation of high performance dielectric elastomers by using some new methods. Ming Tian, Nanying Ning, Qin Ma, Dan Yang, Yonglai Lu, Xiuying Zhao, Hua Zou, Yiqing Wang, Liqun Zhang	11:20-11:50 AM: 21-107: Challenges in using ultrasonication for dispersion of nanofillers in polymeric media. G. Pircheraghi, Qingkai Meng, I. Manas-Zloczower	17-407: The effect of layered double hydroxide (LDH) synthesis methods, morphology and composition on the flame retardancy of polymers. Frederick Johannes Labuschagne, Walter Wilhelm Focke
11:10-11:30 AM	12-310: Laponite/multigraphene poly(vinyl alcohol) aerogel. Almahdi A. Alhwaige, Matthew Herbert, Saeed Alhassan, Hatsuo Ishida, Syed Qutubuddin, David Schiraldi	01-266: Determining the residence time distribution of various screw elements in a co-rotating twin screw extruder by means of fluorescence spectroscopy. Alexander Lepschi, Jürgen Miethlinger	14-100: CNW/CNT filler network systems - properties and synergistic behavior. Qingkai Meng, Ica Manas-Zloczower	07-409: Effect of molecular weight on the structure and properties of poly(ethylene terephthalate) fibers prepared by high-speed melt spinning. Wan-Gyu Hahn	11-373: Identification and characterization of natural latex from tapioca tree: New alternative to natural rubber. Hakimah Osman, Du Ngoc Uy Lan, Syarifah Nuraqmar S.M., Norazura A.R., Baharin Azhari, NoorMarlyna Ismail	11:50 AM- 12:20 PM: 21-470: Tuning the electric and thermal properties of immiscible polymer blends by generating co-continuous morphologies and selectively localizing nano-fillers. Guo-Hua Hu, Jun Zhao, Jian-Ping Cao, Xiaodong Zhao, Zhi-Min Dang	17-255: The effect of mineral fillers on the rheological, mechanical and thermal properties of halogen-free flame-retardant polypropylene/expandable graphite compounds. Hannelore Mattausch, Stephan Laske, Dieter Hohenwarter, Clemens Holzer

11:30-11:50 AM	12-152: Fabrication and characterization of silica aerogel as synthetic tissues for medical imaging phantoms. Eunji In, Hani Naguib	01-339: The influence of compounding processing parameters on the barrier properties of PVC-layered silicates and PVC-aluminum composites. Bernd E. Haar, Stephan Laske, Ivica Duretek, Meinhard Schwaiger, Clemens Holzer	14-287: Polylactic acid (PLA) based biocomposites with improved performance: effect of processing parameters and nucleating agents. Vidhya Nagarajan, Kunyu Zhang, Manjusri Misra, Amar Mohanty	07-432: S07-432: Moisture barrier studies of Na ⁺ and Zn ²⁺ neutralized ionomeric films of poly(vinyl butyral) for organic device encapsulation. Saravanan Subbiahraj, Praveen C. Ramamurthy, Giridhar Madras	11-160: Nanomatrix structure and viscoelastic properties of natural rubber. Seichi Kawahara, Yoshimasa Yamamoto		17-563: Flammability behavior of polymer/clay aerogels. David Schiraldi
11:50-12:10 PM	12-131: A Novel method for silica aerogel production via ambient pressure drying. H. Omranpour, S. Motahari	KN (11:50 AM-12:20 PM) S01-491: Surface modified precipitated silica for improved rubber compound processing. B. Hahn	14-46: Evaluation of mechanical properties and durability performance of HDPE-Wood composites. M. Tazi, F. Erchiqui, H. Kaddami, M. Bouazara, B. Poaty	S07-145: Effect of solvent volatility on diameter selection of nanofibers produced by Gas Jet Fiber Process. Jana Sadhan, Rajgarhia Stuti Sudhir	11-244: Investigations on the processing of solid silicon rubber in blow molding. Ch. Hopmann, A. Funk, C. Windeck,		17-158: Influence of structure of the metal salts of phosphinates on the performance of the fire-retardant polymers. Xueqing Liu, Jiyan Liu, Yuanhao Guo, Miko Cakmak
12:20 PM – 1:30 PM	Lunch Break						
Breakout sessions	S12 Aerogels Chair: David Schiraldi	S01 Mixing and Compounding Chair: Clemens Holzer	S14 Material Technologies for Sustainability Chair: Hans-Joachim Radusch	S07 Fibers and films Chair: Barry Morris	S11 Elastomer Materials and Processing Chair: Changwoon Nah	S06 Nanocomposites Chair: Marianna Kontopoulou	Session 7: S17: Fire Science and Engineering Chair: Udo Wagenknecht
Room	Whitehall	Severance	Ambassador	George Bush	Gold Room	Grand Ballroom A	Grand Ballroom B
1:30-2:00 PM	KN: 12-490: Polymer aerogels for aerospace applications. M.A.B. Meador	KN: S01-81: Challenges in nanocomposites: Mixing and interfacial interactions. I. Manas Zloczower	KN:14-578: Biobased materials: Integrating biocatalysis and polymer processing. R. Gross	KN:07—21: Biodegradable fibers from renewable resources - melt-spinning of poly(3-hydroxybutyrate). Rudolf Hufenus, Felix A. Reifler, Urs J. Haenggi	KN: 11-87: Graphene/elastomer nanocomposites and hybrids with excellent performances prepared by facile approaches aiming at application and industrialization. L. Zhang	KN: S06-106 Factors influencing dispersion of nanoparticle agglomerates in polymer melts. MUSA R. Kamal, Vahid Khoshkava	KN: 17-585: Assessment and mitigation of combustible dust hazards in the plastics industry. Michael C. Stern, Alfonso Ibarreta, Timothy J. Myers
2:00-2:20 PM	KN: (2:00-2:30 PM): 12-124: Polymer/clay aerogels produced via freeze drying: Quo vadis? D.A. Schiraldi	01-382: The Optimization of blister disk geometry for mixing performance in co-rotating twin screw extruder. Koki Matsumoto, Natsuki Kayamori, Tatsuya Tanaka, Yoshihiko Arao	14-626: Shielding and de-shielding of hydrogen bonding motifs; from synthetic to biopolymers. Sanjay Rastogi	07-95: Morphology development of poly (lactic acid) and poly (vinyl alcohol) blend filaments along the spinline in melt spinning process. Nguyen Hoai An Tran, Harald Brünig, Regine Boldt, Gert Heinrich	11-565: The Effects of deproteinization on maleic-anhydride grafting of skim natural rubber. Pattamaprom Cattaleeya, Somboonchai Sudarat, Opaprakasit Pakorn	06-358: Tribological performance of polyamide11 nanocomposites. Sunao Horii, Takaaki Minagawa, Tatsuya Tanaka, Yoshihiko Arao	17-485: Flame retardants for plastics: Current chemistries. Alexander B. Morgan
2:20-2:40 PM	2:30PM: Panel Discussions	01-412: Fundamentals of twin-screw extrusion polymer melting: Common pitfalls and how to avoid them. Paul Andersen	14-636: Milk protein based biodegradable active films obtained by blown film extrusion: Effect of thermomechanical processing parameters and formulation on active agent stability. Basak Yilin Colak, Frédéric Prochazka, Pascal Degraeve	07-597: Mechanical behavior and essential work of fracture of starch-based blown films. M. Nottez, S. Chaki, J. Soulestin, M.F. Lacrampe, P. Krawczak	11-58: A new approach to the interaction between rubber and white filler obtained from rice husk ash. Pablo Raimondo, Soledad Caputi, Daniel Mosca, Carlos Mantero	06-40: Free standing graphene-graphene oxide-graphene hybrid nanopaper with superior mechanical, gas barrier and electrical properties. Xilian Ouyang, Wenyi Huang, Eusebio Cabrera, Jose Castro, Ly James Lee	17-181: Improving fire behavior of polyurethane rigid foams based on polyols from renewable resources and halogen free flame retardant. M. Modesti, A. Lorenzetti, S. Besco, D. Hrelja, M. Roso
2:40-3:00 PM		01-557: Numerical study on mixing performance of glass fiber dispersion in a twin-screw extruder with backward-mixing elements. Kunihiro Hirata, Hiroshi Ishida, Motohito Hiragohri, Yasuya Nakayama, Toshihisa Kajiwara	14-468: Binary blends of poly (butylene succinate) and poly (butylene adipate-co-terephthalate): A new matrix for biocomposites applications. Rajendran Muthuraj, Manjusri Misra, Amar Kumar Mohanty	07-499: Study on structure and properties of porous PLA nanofibers electrospun by channel-based electrospinning system. Yi Li, Masaya Kotaki	11-349: Validation of rubber injection molding simulation by correlation of simulated curing degree to measureable part properties. Michael Fasching, Walter Friesenbichler, Gerald R. Berger	06-439: Effect of nanoclay reinforcement on the X-band dielectric properties of epoxy resins for use in radome applications. Carla García, Mauro Fittipaldi, Landon R. Grace	2:40 PM: Panel Discussions

3:00-3:20 PM		01-199: Effect of ultrasonication on carbon nanotube dispersion in polyol. T. Powell, G. Pircheraghi, I. Manas-Zloczower	14-380: Recycling and processing of several typical crosslinked polymer scraps with enhanced mechanical properties through solid-state mechanochemical milling. Canhui Lu, Xinxing Zhang, Wei Zhang	07-413: Seal and hottack of modified blends of poly(lactic acid) with superior mechanical properties. Ramin Yousefzadeh Tabasi, Abdellah Aji	11-587: Electro-activated surface micropattern tuning for microinjection molded electrically conductive shape memory polyurethane composites. Hesheng Xia, Guoxia Fei, Ben Whiteside, Phil Coates	06-657: Control of liquid crystal epoxy morphology containing well-dispersed multi-walled carbon nanotubes. Spencer Allistor Hawkins, Haiqing Yao, Hung-Jue Sue	
3:30-4:30 PM	Plenary: <i>Oilfield polymers – opportunity and innovation</i>. Jim Goodson, Baker Hughes Room: Grand Ballroom A Chair: John Vlachopoulos						
4:30-5:00 PM	Closing ceremony Room: Grand Ballroom A						