

Seminar Program

**ISPST 2018
19-22 November, 2018**

Oral Presentation

13

th International Seminar
on Polymer Science and Technology



Monday, November 19, 2018

8:30-12:00

&

14:00-16:00

**Registration,
Workshops
and
Posters Placement**

13

th International Seminar
on Polymer Science and Technology



Tuesday, November 20, 2018

Opening Ceremony

8:30-9:30 Main Hall, AUT Central Amphitheater

8:30-08:40 Quran recitation and the national anthem of I.R. Iran

Plenary Presenter:

08:40-09:00 Prof. H. Mirzadeh (Seminar Chairman)
09:00-09:10 Prof. A.A. Katbab (Scientific Committee Head)
09:10-09:20 Prof. M. Nekoomanesh (IPS President)
09:20-09:30 Prof. N. Mohammadi (Polymer Engineering Dep. Head)

Chair persons: C. Dubois, A.A. Katbab, M. Nekoomanesh, B. Nyström

Keynote Speakers:

09:30-10:00 Prof. Bo Nyström (University of Oslo, Norway)
Novel structural changes during temperature-induced self-assembling and gelation of PCLA-PEG-PCLA triblock copolymer in aqueous media
10:00-10:30 Prof. Charles Dubois (École Polytechnique de Montréal, Canada)
Simulation of Heat-Sealing Process in Multilayer Films

10:30-11:00 Break

Chair persons: V. Altstädt, E. Jabbari, N. Mohammadi, M.J. Zohuriaan-Mehr

Keynote Speakers:

11:00-11:30 Prof. Volker Altstädt (Polymer Engineering, Uni Bayreuth, Germany)
Semi-crystalline polymer foams with enhanced morphology and mechanical properties nucleated by trisamide based supramolecular additives
11:30-12:00 Prof. Esmail Jabbari (University of South Carolina, USA)
Novel naturally-derived polymers for medical applications

Polymer Engineering Department

12:00-14:00 Poster Viewing and Lunch



Tuesday, November 20, 2018

Biocompatible and biodegradable polymers

Hall A: Amphitheater, Polymer Engineering Department

Chair persons: M. Atai, S. Bagheri Khoulenjani, B. Nyström

Code	Time	Title
A-10-1270-1	14:00-14:15	In-situ forming hydrogels based on clickable star-peg for biomedical applications <u>M.H. Ghanian</u> , H. Mirzadeh, and H. Baharvand
A-10-1156-1	14:15-14:30	Hydrophilicity, degradability and mechanical properties of poly(L-lactide-co-D, L-lactide)/poly(acrylic acid) blend and investigation of their nanofiber morphology <u>P. Ghaffari-Bohlouli</u> , P. Zahedi, and M. Shahrousvand
A-10-1225-1	14:30-14:45	The effect of vulcanization temperature on curing parameters of IR and IR foams E. Rostami, <u>S. Panahi</u> , E. Esmizadeh, A. Vahidifar, and D. Rodrigue
A-10-498-3	14:45-15:00	Fabrication of antibacterial electrospun chitosan-polyethylene oxide nanocomposite nanofibrous mats <u>Zahra Shariatinia</u> and Iraj Kohsari
A-10-843-1	15:00-15:15	Peptide release behavior from in-situ forming implants: effect of multi-walled CNT on release profile <u>E. Avazverdi</u> , H. Mobedi, and H. Mirzadeh
A-10-219-2	15:15-15:30	Preparation and evaluation of LCST behavior of poly N-vinyl caprolactam-chitosan semi IPN nanogel as a drug carrier <u>H.M. Gholiha</u> , M. Ehsani, A. Saeidi, A. Ghadami, and S. Safari
15:30-16:00		Break

Chair persons: M. Imani, H. Mobedi, F. Shokrollahi, P. Zahedi

A-10-1344-1	16:00-16:15	Drug delivery profile study of gelatin-methacrylate (Gel-Ma)/cellulose nano crystal (CNC) and Gel-Ma/polyamidoamine (PAMAM) scaffolds <u>F. Jonidi Shariatzadeh</u> , K. Goodarzi, A. Solouk, H. Mirzadeh, S. Bagheri Khoulenjani, and S. Akbari
A-10-428-1	16:15-16:30	Poly(lactide) (PLA), nitrile rubber (NBR) and organoclay nanocomposites: the influence of ACN content on nanoclay localization <u>M. Maroufkhani</u> , A.A. Katbab, and J. Zhang
A-10-1355-2	16:30-16:45	Synthesis of Biodegradable Unsaturated Polyester Resin Using Soybean Fatty Acid as an Acidic Monomer <u>N. Parsi</u> , M. Jamshidi, and M. Sarrafi
A-10-1025-2	16:45-17:00	Drug release modeling through a 3 stage model on hydrophobic modified carboxymethyl chitosan nanoparticles <u>N. Olov</u> , H. Mirzadeh, and S. Bagheri-Khoulenjani



Tuesday, November 20, 2018

Polymers for smart and sustainable future

Hall B: Room 001, Polymer Engineering Department

Chair persons: H.A. Khonakdar, M. Kokabi, G. Mirmohammad Sadeghi,
H. Salehi Mobarakeh

Code	Time	Title
A-10-1207-2	14:00-14:15	Smart polymers based on PLA/PCL/GNps nanocomposites with triple-shape memory behavior <u>F.K. Molavi</u> , I. Ghasemi, M. Messori, and M. Esfandeh
A-10-1230-3	14:15-14:30	Designing highly filled particulate polymer composites with improved flow properties: a route toward sustainable and environmentally innocuous structural materials <u>M. Mohammadi</u> , N. Mohammadi, and S. Norouzi
A-10-1074-2	14:30-14:45	New Superabsorbent Hydrogel Hybrids from Bio-based acids monomer and sodium acrylate-acrylic acid <u>A. Dabbaghi</u> , A. Jahandideh, K. Kabirib, A. Ramazania, and M.J. Zohuriaan-Mehr
A-10-1300-1	14:45-15:00	Preparation of thermo-responsive cell culture dishes by surface initiated ATRP of poly(N-isopropylacrylamide) brushes <u>S. Afif</u> , B. Memar Maher, H. Ghaleh, M. Nasiri, F. Abbasi, S.H. Ojaghi haghghi, and A. Mikaeilpour
A-10-1146-1	15:00-15:15	Copolymerization of styrene and 1-hexene via Ziegler- Natta and atom transfer radical polymerization methods <u>M.R. Rostami</u> , N. Bahri-Laleh, M. Nekoomanesh-Haghghi, and S. Rahmatiyani
A-10-1087-1	15:15-15:30	Preparation of folic acid functionalized photo-responsive and gold-decorated polymer nanocomposite particles <u>J. Keyvan Rad</u> and A.R. Mahdavian

15:30-16:00 Break

Chair persons: M.M. Mahdavian, H. Makki, A. Pourjavadi

A-10-1126-1	16:00-16:15	Preparation of PVDF nanowire by infiltration method into alumina nanopores <u>H. Soleymani</u> , M.M. Abolhasani, M. Normohamadi, and M. Ashjari
A-10-383-1	16:15-16:30	Alkanolamine-based adduct as latent accelerator for epoxy/dicyandiamide: Statistical approach to the relationship between adduct ingredients and cure characteristic of one-pot system <u>M.N. Hesabi</u> , A. Salimi, and M.H. Beheshty
A-10-1282-2	16:30-16:45	Modification of super paramagnetic iron oxide nanoparticle with porphyrin-decorated polycaprolactone/poly(N-vinylpyrrolidone-co-maleic anhydride) as photosensitizing nanocarrier <u>S.M. Masoumi</u> and S. Khoee
A-10-1178-1	16:45-17:00	Synthesis of poly(N-isopropylacrylamide) nanocontainers via reversible addition fragmentation transfer polymerization <u>P. Eskandari</u> , H. Roghani-Mamaqani, M. Salami-Kalajahi, S. Hajebi, Z. Abousalman-Rezvani



Tuesday, November 20, 2018

Natural bio-based polymers and composites

Hall C: Room 002, Polymer Engineering Department

Chair persons: A. Jalali Arani, S. Mazinani, A. Solouk

Code	Time	Title
A-10-615-1	14:00-14:15	Influence of cut-out shape on buckling behavior of composite beams <u>S. Dariushi</u>
A-10-103-1	14:15-14:30	Effect of ENR as a compatibilizer on rubber droplet size in bio-based PLA/NR blend <u>M. Nematollahi</u> , A. Jalali-Arani, and H. Modarress
A-10-140-2	14:30-14:45	Preparation of a new antioxidant for polypropylene based on quercetin <u>A. Rahmati</u> , R. Jahanmardi, and S. Amiri
A-10-1046-1	14:45-15:00	Preparation, characterization, and application of bio-based hydrogel nanocomposite in water treatment S. Mallakpour, A. Abdolmaleki, and <u>F. Tabesh</u>
A-10-1121-2	15:00-15:15	Thermal and dynamic analysis and β -phase crystal induction of PLLA-g-CNC/PLLA bionanocomposites <u>A.A. Seraji</u> , F. Goharpey, J. Khademzadeh Yeganeh, and M. Nourany
A-10-1190-1	15:15-15:30	Synthesis and Characterization of Molecularly Imprinted Hydrogel for Efficient Control Release of Levodopa <u>M. Rezaie</u> , M. Mansour Lakouraj, and V. Hasantabar

15:30-16:00 Break

Chair persons: A. Abbasian, A. Javadi, K. Kabiri

A-10-1052-1	16:00-16:15	Biodegradation and thermal properties of biocomposites based on poly(lactic acid)/thermoplasticized rice straw A. Zandi, A.H. Zanganeh, <u>S. Hosseini</u> , F. Hemmati, and J. Mohammadi-Roshandeh
A-10-257-2	16:15-16:30	Evaluation the Effect of the Solution Concentration and Molecular Weight on the Properties of the Dextran Nanocomposite Hydrogels <u>F. Hasasni</u> , H. Salimi-Kenari, H. Ghaffori Taleghani, and P. Nikpour
A-10-434-1	16:30-16:45	Chemical Modification of Polyfurfuryl Alcohol Resin Using Maleic Anhydride: FTIR Study of a Diels-Alder Reaction <u>R. Marefat Seyedlar</u> , M. Imani, and S.M. Mirabedini
A-10-1509-1	16:45-17:00	The influence of TRITC on the size and structure of amine grafted dextran nanoparticles as a promising carrier for si-RNA <u>D. Zeini</u> , J. Glover, K.D. Knudsen, and B. Nyström



Tuesday, November 20, 2018

Nanoassemblies for sustainable energy & environment applications

Hall D: Room 003, Polymer Engineering Department

Chair persons: M. Abdouss, S. Akbari, E. Ghasemi

Code	Time	Title
A-10-751-1	14:00-14:15	Synthesis of Au@GO core shell structure for solar cell application <u>B. Rezaei</u> , M. Kianpishe, P. Babaei, B. Nasrollahi, and F. Afshar Taromi
A-10-1028-1	14:15-14:30	Preparation and characterization polyurea/GO thin film nanocomposite on polyacrylonitrile supports: solvent resistant nanofiltration membrane H. Mahdavi, <u>S.M. Mousavi Davijani</u> , and L. Ahmadian-Alam
A-10-1105-1	14:30-14:45	Thermal behavior of organic-inorganic hybrid perovskite solar cells based on conjugated polymer hole transporting layer <u>H. Hooshdar</u> , F. Arabpour Roghabadi, S.M. Sadrameli, and V. Ahmadi
A-10-1209-1	14:45-15:00	Promotion of performances of polymer solar cell by introducing carbon nanotubes sensitized by quantum dot/perovskite core shell nanoparticle <u>R. Soltani</u> , A.A. Katbab, and Tayebbeh Ameri
A-10-1239-1	15:00-15:15	Delineating the governing rules of nano-assembly as a step toward sustainable polymeric systems <u>F. Gholamirad</u> , N. Mohammadi, and S. Norouzi
A-10-1235-1	15:15-15:30	Thin film microextraction of phthalate esters in water and milk by poly m-aminophenol/nylon 6/graphene oxide electrospun nanofiber <u>Z. Mehrani</u> , H. Ebrahimzadeh, and E. Moradi

15:30-16:00 Break

Chairman persons: F. Abbasi, B. Pourabas, F. Ziaee

A-10-1096-1	16:00-16:15	Effect of monomer concentration in primary sol on colloid like particle size of novolac aerogel <u>G. Abdeali</u> , A.R. Bahramian, and M. Abdollahi
A-10-152-1	16:15-16:30	Improved conductivity and film forming of transparent PEDOT:PSS electrodes using non-ionic surfactants <u>M. Kianpisheh</u> , B. Rezaie, and F. Afshar-Taromi
A-10-1172-1	16:30-16:45	Graphene Coating on PVDF/ZnO Composite substrate Generating Mechanical to Electrical Energy Converter <u>Z. Moarref</u> , M. Montazer, and R. Bagherzadeh
A-10-1213-1	16:45-17:00	PVA electrospun Hollow Nanofibers via One-Pot Coaxial Electrospinning <u>N. Ghaedi Dehaghi</u> , S. Sharafkhani, and M. Kokabi



Tuesday, November 20, 2018

Other novel aspects of polymer science and technology

Hall E: Room 004, Polymer Engineering Department

Chair persons: Ro. Bagheri, M. Esfandeh, V. Haddadi-Asl, Y. Jahani

Code	Time	Title
A-10-1296-1	14:00-14:15	Controlled radical copolymerization of styrene and acrylonitrile by reverse iodine transfer polymerization <u>S.M. Razavi</u> and M. Abdollahi
A-10-1307-2	14:15-14:30	Controlling of poly(1-hexene) microstructure through polymerization condition <u>A. Dechal</u> , M. Khoshsefat, S.M.M. Mortazavi, S. Ahmadjo, G.H. Zohuri, R. Rashedi, and A. Sepahi
A-10-1336-1	14:30-14:45	Removal of nitrate from water using new synthesized polymeric nanocomposite based on graphene oxide <u>S. Noori</u> , S.M. Amininasab, and Z. Shami
A-10-1060-1	14:45-15:00	Acidic dye removal by chitosan treated membrane containing spacer fabric /nylon6 nanofibers/TiO ₂ nanoparticles <u>E. Yousefi</u> , M. Ranjbar Mohammadi, and M. Nouri Taba
A-10-619-2	15:00-15:15	Investigation of thermal stability of polyethylene/silica aerogel compounds M.A. Abbas-zadeh, <u>A.H. Arab Sorkhi</u> , and M. Mohammadi
A-10-622-1	15:15-15:30	Synergistic Effect of shear rate and Nanosilica in a Cellular polymer <u>M. Ako</u> , M.R. Kalae, and Pouya Haghani

15:30-16:00 Break

Chair persons: K. Razavi Aghjeh, M. Razavi Nouri, A.A. Sarabi

A-10-232-1	16:00-16:15	A novel thymol-doped enamel bonding system: Biological activity and adhesive strength Z. Rezaeian, <u>S. Beiqi-Boroujeni</u> , and M. Atai
A-10-1257-1	16:15-16:30	Functionalization and characterization of ethylene/ vinyl alcohol copolymers with imidazole and benzimidazole side-groups <u>M. Farrokhi</u> and M. Abdollahi
A-10-1269-2	16:30-16:45	Conducting polymer electrochemical actuator made of polyurethane/ polypyrrole nanofibers <u>S.V. Ebadi</u> , D. Semnani, H. Fashandi, and A. fakhrali
A-10-1299-2	16:45-17:00	Modeling of both temperature and pressure dependency of permeability through membranes <u>S. Maghami</u> , A. Mehrabani-Zeinabad, J. Sanchez-Lainez, B. Zornoza, C. Tellez, J. Coronas, and M. Sadeghi



Wednesday, November 21, 2018

Hall A: Amphitheater, Polymer Engineering Department

Keynote Speakers:

08:30-09:00 Prof. M.J. Zohuriaan-Mehr (Iran Polymer and Petrochemical Institute, Iran)

From Biomass to the Bio-based Monomers and Polymers

09:00-09:30 Prof. Clemens Holzer (Montan universitaet, Austria)

Upcycling of technical polymers from post-consumer sources

Chair persons: C. Holzer, J. Morshedian, H. Nazokdast, E. Vasheghani-Farahani

Biocompatible and biodegradable polymers

Code	Time	Title
A-10-1263-1	09:30-9:45	Injectable porous natural based hydrogels for tissue engineering applications <u>S. Bagheri-Khoulenjani</u> , N. Olov, and H. Mirzadeh
A-10-1169-1	09:45-10:00	Toughening of polylactide via chemical grafting of poly(hydroxybutyrate) functional oligomers in a reactive blending <u>H. Seyed Khabbaz</u> and H. Garmabi

10:00-10:30 Break

Keynote Speakers:

10:30-11:00 Prof. Tayebah Ameri (University of Munich, Germany)
Study, design, and development of printed organic and hybrid optoelectronic devices for energy application

11:00-11:30 Prof. Naser Mohammadi (Amirkabir University of Technology, Iran)
The membrane science universality and the rationalizing of apparent stagnation regarding the novel polymer's application despite a flood of successful reports

Chair persons: T. Ameri, M.H. Beheshty, A.A. Katbab

Code	Time	Title
A-10-1224-1	11:30-11:45	Bio-based graphene aerogel/PHB nanocomposite <u>A. Moghaddam</u> , M.T. Khorasani, H. Mahdavi, and A. Joorabloo
A-10-1345-1	11:45-12:00	Mechanical behavior assay of cellulose nanocrystal (CNC) and polyamidoamine (PAMAM) nano particles reinforced gelatin-methacrylate (Gel-Ma) scaffolds <u>K. Goodarzi</u> , F. Jonidi Shariatzadeh, H. Mirzadeh, A. Solouk, S. Akbari, and S. Bagheri Khoulenjani



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12:00-14:00 Poster Viewing and Lunch

Biocompatible and biodegradable polymers

Hall A: Amphitheater, Polymer Engineering Department

Chair persons: M. Forouchi, B. Kaffashi, H. Mahdavi, P. Shokrollahi

Code	Time	Title
A-10-1392-1	14:00-14:15	Surface modification of polyurethane films with chitosan and collagen biomolecules, using layer by layer self-assembly method to improve biocompatibility properties <u>N. Bahrami</u> , S. Nouri Khorasani, and H. Mahdavi
A-10-1436-1	14:15-14:30	One-step synthesis bowl like hollow carbon nanosphere and its effect on growing mesochime cell <u>P. Kiany</u> , F. Goharpey, and M. Karimi
A-10-183-1	14:30-14:45	Porous scaffolds of polyvinyl pyrrolidone/polyethylene glycol/nano-diamond using gamma irradiation <u>A. Jabbar</u> , S. Dadbin, and M. Frounchi
A-10-1261-1	14:45-15:00	Biodegradable 3D printed scaffolds based on PLA for bone tissue engineering <u>S. Kaviani-Samani</u> , S. Bagheri-Khoulenjani, H. Mirzadeh, and S. Dariushi
A-10-549-1	15:00-15:15	Development of novel biodegradable chitosan electrospun scaffolds for bone tissue engineering <u>A. Shaabani</u> , R. Sedghi, and N. Sayyari
A-10-1230-2	15:15-15:30	The associative dispersion copolymerization of polyacrylonitrile with itaconic acid in the presence of cationic and non-ionic surfactants A. Salehi, N. Mohammadi, and <u>S. Norouzi</u>
A-10-1267-1	15:30-15:45	Synthesis and characterization of biodegradable and nontoxic water borne copoly(ether-urethane-urea)s based on amino acid derivatives <u>S. Tafazoli</u> and F. Rafiemanzelat
A-10-1309-1	15:45-16:00	Influence of polyolefin elastomer content on morphology, rheology and thermal behavior of toughened polylactic acid/polyolefin elastomer blends <u>N. Jalalifar</u> and B. Kaffashi
16:00-16:30		Break

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Wednesday, November 21, 2018

Biocompatible and biodegradable polymers

Hall B: Room 001, Polymer Engineering Department

Chair persons: H. Bahrami, M. Pezeshki Modares, M. Saeid

Code	Time	Title
A-10-1167-2	09:30-9:45	Physical properties and antibacterial activity of chitosan/carboxymethyl cellulose/starch biofilms as natural bio-based polymers <u>A. Joorabloo</u> , M.T. Khorasani, Z. Mansoori-Moghadam, and A. Moghaddam
A-10-1133-1	09:45-10:00	Synthesis and characterization of Ciprofloxacin/Cyclodextrin containers S. Amiri, <u>S. Masoumi</u> , and S.H. Bahrami
10:00-10:30 Break		

Polymers for smart and sustainable future

Hall B: Room 001, Polymer Engineering Department

Chair persons: S.R. Ghaffarian, S. Gorji Kandi, S. Mehdipour-Ataei, A. Rahimi

Code	Time	Title
A-10-1211-1	11:30-11:45	A new aspect of using GNPs in thermosensitive polymer(CS-NIPAM) for improving drug delivery under light stimuli <u>M. Bagherifard</u> , M. Doroudian, and A. Pourjavadi
A-10-650-1	11:45-12:00	Polarity dependence of thermo-optical properties in spirooxazine-based photochromic materials and their polymeric latex <u>Z. Alinejad</u> , S. Sanjabi, A. Muraki, and A.R. Mahdavian

12:00-14:00 Poster Viewing and Lunch

Chair persons: M. Mohseni Bozorgi, M. Razzaghi Kashani, A. Shojaei Segherloo

A-10-1042-1	14:00-14:15	Effect of chain inter-hydrogen bond on rheological behavior of aqueous poly(vinyl alcohol) (PVOH) solution <u>S. Akhlaghpasand</u> and N. Mohammadi
A-10-209-1	14:15-14:30	Preparation of SiO ₂ nanocomposite via surface initiated RAFT polymerization <u>M. Kohestanian</u> , M.A. Abek Azerbaijani, and A. Pourjavadi
A-10-1357-1	14:30-14:45	Effect of chain extender on the properties of polysulfone-based membrane as a candidate for fuel cell proton exchange membrane M. Mohammadi, M. Orouzadeh, and <u>S. Mehdipour-Ataei</u>



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Hall B: Room 001, Polymer Engineering Department

Code	Time	Title
A-10-1247-1	14:45-15:00	Solvatochromism effect of a new synthesized conjugated organic compounds in different environment and types of polymers <u>F. Miri</u> , S. Gorji Kandi, and F. Panahi
A-10-1160-1	15:00-15:15	Synthesis of pH-sensitive hybrid and hollow poly(N,N-dimethylaminoethyl methacrylate) nanogels H. Roghani-Mamqani, M. Salami-Kalajahi, <u>Z. Abusalman-Rezvani</u> , P. Eskandari, and S. Hajebi
A-10-1163-1	15:15-15:30	Synthesis of temperature-responsive hollow poly(N-isopropylacrylamide) nanogels by distillation precipitation polymerization method <u>S. Hajebi</u> , H. Roghani-Mamaqani, and M. Salami-Kalajahi
A-10-1186-1	15:30-15:45	Fabrication of photonic crystal heterostructures free of interface imperfection based on plasma assisted versatile deposition <u>Z. Azizi</u> , M.M. Tehranchi, and S. Pourmahdian
A-10-1198-1	15:45-16:00	Dynamics of entangled supramolecular polymer networks, determined by high-order associations of strong hydrogen bonding groups A. Jangizehi, <u>S.R. Ghaffarian</u> , and M. Ahmadi

16:00-16:30 Break

Natural bio-based polymers and composites

Hall C: Room 002, Polymer Engineering Department

Chair persons: S. Bazgir, M.R. Mohammadzadeh-Attar, A. Shakeri

Code	Time	Title
A-10-1111-2	09:30-9:45	In situ synthesis of ZnO nanosheets on chitosan by aqueous solution and evaluation of antibacterial activity against Escherichia coli <u>E. Zabihi</u> , K. Mirshahidi, D. Shahrampour, A. Babaei, and H. Joz Majidi
A-10-1244-1	09:45-10:00	Alginate/calix[4]arenes-graphene oxide nanocomposite beads: preparation, characterization, and dye adsorption studies A. Mohammadi and <u>A.H. Doctorsafaei</u>

10:00-10:30 Break



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Hall C: Room 002, Polymer Engineering Department

A-10-1352-3	11:30-11:45	Preparation and study of optical properties of nanocomposites based on poly-lactic acid containing ZnO nanorods and TiO ₂ nanoparticles <u>A. Tajdari</u> , A. Babaei, A. Goudarzi, and R. Partovi
A-10-1405-1	11:45-12:00	Non-isocyanate polyurethane (NIPU) from Tannin extracted of Sumac leaves <u>M. Gholami</u> and A. Shakeri

12:00-14:00 Poster Viewing and Lunch

Green coatings and engineering in polymer science

Chair persons: M. Ebrahimi, M. Ehsani, S.M. Mirabedini, Z. Ranjbar

Code	Time	Title
A-10-1115-1	14:00-14:15	Fabrication of Ag-TiO ₂ coated textile fabric via a new photoreduction method as an eco-friendly technique <u>Z. Moridi Mahdieh</u> , S. Shekarriz, and F. Afshar Taromi
A-10-934-1	14:15-14:30	Sustainable hydrophobic antifouling marine coatings based on fluoroacrylate polymers <u>M. Sheikhi</u> , S. Akbari, and F. Rafiemanzalat
A-10-1350-1	14:30-14:45	Study of the effect of low-functionalized graphene oxide on the rheological and electrical properties of water-based epoxy coatings <u>A. Rezvani Moghaddam</u> , M. Kamkar, Z. Ranjbar, U. Sundararaj, and A. Jannesari
A-10-584-1	14:45-15:00	Antibacterial performance of biomimetic modification of polymeric surfaces: rice-like and Lotus pattern <u>M. Ayazi</u> and N. Golshan Ebrahimi
A-10-1220-1	15:00-15:15	Enhancement of barrier and weathering resistance of polyurethane coatings by introducing a green-reduced graphene oxide <u>M. Mahmudzadeh</u> , H. Yari, B. Ramezanzadeh, and M. Mahdavian
A-10-1311-3	15:15-15:30	Novel multi-cationic conversion coating applied on steel substrate <u>B. Panahi</u> , A.A. Sarabi, and H. Eivaz Mohammadloo
A-10-1319-1	15:30-15:45	Graphene-nanocomposite self-stratifying coatings: physical and mechanical properties <u>J. Taheran</u> and A. Abbasian
A-10-1404-1	15:45-16:00	Protection of structural buildings against dirt adsorption: photoactive cements vs. photoactive coating <u>F. Mohammadi</u> , S.M. Mirabedini, K. Khodabakhshi, and S. Pazokifard

16:00-16:30 Break



Wednesday, November 21, 2018

Polymer recycling to protect environment

Hall D: Room 003, Polymer Engineering Department

Chair persons: M. Morshed, S. Pourmahdian, M. Rafizadeh,
A. Ramazani Saadat-Abadi

Code	Time	Title
A-10-1278-1	09:30-9:45	Feasibility study on producing of side-by-side bicomponent filament yarns produced from recycled and fiber grade PET <u>M. Abbasi</u> and R. Kotek
A-10-263-1	09:45-10:00	Kinetics of the pyrolysis of polypropylene using zeolite as catalyst <u>J. Nisar</u> and M. Anas Khan
10:00-10:30 Break		
A-10-183-2	11:30-11:45	Mechanical properties of poly(lactic acid)/ethylene-vinyl acetate copolymer/nanoclay composites as biodegradable packaging films <u>M. Zaji</u> and Masoud Frounchi
A-10-1068-2	11:45-12:00	Modification of Polyethylene Branching Structure by Recycling Method <u>A. Dordinejad-Kor</u> , F. Sharif, M. Ebrahimi, R. Rashedi, and A. Sepahi
12:00-14:00 Poster Viewing and Lunch		

Other novel aspects of polymer science and technology

Hall D: Room 003, Polymer Engineering Department

Chair persons: Z. Ahmadi, Re. Bagheri, F. Hejazi

Code	Time	Title
A-10-1248-1	14:00-14:15	Synthesis and characterization of core/shell titanium dioxide nanoparticle/polyacrylamide nanocomposite <u>E. Rezvani Ghomi</u> , S. Nouri Khorasani, M. Dinari, S. Ataei, and R. Esmaeely Neisiany
A-10-104-2	14:15-14:30	Preparation of nanostructured polybutylene succinate (PBS)/nano hydroxy-apatite particles by electrospraying <u>N. Saffar Saharkhiz</u> and M. Rafizadeh



Wednesday, November 21, 2018

Hall D: Room 003, Polymer Engineering Department

A-10-250-3	14:30-14:45	Effect of hydroxyl value of acrylic resin on the anti-graffiti properties of a acrylic-PU nano-coating <u>S. Nemati Mahand</u> , S. Pazokifard, and S.M. Mirabedini
A-10-1337-1	14:45-15:00	Synthesis and characterization of Fe ₃ O ₄ magnetite nanoparticles coated by polyvinylpyrrolidone <u>A. Heiran</u> , S. Hassanajili, and M. Escrochi
A-10-852-1	15:00-15:15	Theoretical evaluation of chain shuttling polymerization using bis(phenoxyimine) zirconium and pyridyl amid hafnium catalysts M. Ahmadi, <u>Y. Maddah</u> , and D. Hassanian-Moghaddam
A-10-1094-1	15:15-15:30	UV-induced graft polymerization of N-isopropylacrylamide on oxidized PET <u>P. Golshaei</u> and O. Güven
A-10-1103-1	15:30-15:45	Novel tailor-made ethylene-phenolic antioxidant copolymerization using Ni (II) α -diimine catalyst: II. thermal stability <u>Z. Balzadeh</u> and H. Arabi
A-10-1106-1	15:45-16:00	Durable Perovskite Solar Cell encapsulated by polymer nanocomposite M. Gharechomaghi, <u>F. Arabpour Roghabadi</u> , S.M. Sadrameli, V. Ahmadi, and F. Najafi
16:00-16:30 Break		

Processing and reactive processing of environmental polymer

Hall E: Room 004, Polymer Engineering Department

Chair persons: F. Goharpey, M. Karrabi, M. Mehranpour

Code	Time	Title
A-10-1155-2	09:30-9:45	Preparation of novel liquid, solvent free, polyalphaolefin-based adhesives <u>A. Hanifpour</u> , N. Bahri-Laleh, and M. Nekoomanesh-Haghighi
A-10-41-2	09:45-10:00	Highly-toughened polylactide (PLA) based ternary blends with significantly enhanced glass transition and melt strength <u>M. Mehrabi Mazidi</u> , A. Edalat, and M. Azizi
10:00-10:30 Break		
A-10-1166-2	11:30-11:45	Evaluation of the mechanical properties of poly(lactic acid)/ABS bio-blend foams M. Sánchez-Soto, <u>M.R. Kamrani</u> , M.L. Maspoch, and O. Santana
A-10-1088-1	11:45-12:00	Effect of polyolefin addition on heat seal strength of HDPE blown films <u>A. Mehdipour</u> , H. Abedini, M. Habibelahi, and M. Ehsani
12:00-14:00 Poster Viewing and Lunch		



Wednesday, November 21, 2018

Other novel aspects of polymer science and technology

Hall E: Room 004, Polymer Engineering Department

Chair persons: H. Arabi, H. Jaffari, M.T. Khorasani, H. Yeganeh

Code	Time	Title
A-10-1250-1	14:00-14:15	Preparation of PDMS microparticles via a facile microfluidic device <u>A. Amjadi</u> , F. Ghashghaie, M. Salami Hosseini, and K. Jalili
A-10-1258-1	14:15-14:30	Synthesis of polycarboxylate superplasticizer: influence of temperature of polymerization <u>M. Mohammadi</u> , A.R. Redaei, M.A. Karimizarchi, and M.A. Mohammad Mirzaei
A-10-1274-2	14:30-14:45	Effect of electron donor structure on Ziegler-Natta catalyst performance in propylene polymerization <u>F. Poorsank</u> , H. Arabi, and N. Ghasemi
A-10-1286-1	14:45-15:00	Effect of ethylene monomer pressure on BCE Ziegler-Nata catalyst fragmentation in the early stage of polymerization <u>M. Mansouri</u> , G.H. Zohuri, and N. Ramezani
A-10-1057-1	15:00-15:15	On morphology, rheology and impact resistance of PS/EOC/SEBS ternary blends <u>H. Pourmadadkar</u> , M. Entezam, H.A. Khonakdar, and S.H. Jafari
A-10-1363-1	15:15-15:30	Manage resilience force in polyurethane memory foam by using MWCNT <u>B. Afrasan</u> , M. Barmar, and M. Barikani
A-10-1377-1	15:30-15:45	Effect of ionomer copolymer composition and molecular weight on mechanical properties of glass-ionomers <u>R. Abbasi</u> , M. Atai, and A. Nodehi
A-10-88-3	15:45-16:00	The effect of carbon black on crystallinity and tensile properties on poly(vinylidene fluoride)/fluoroelastomer composites <u>M. Deilamy Moezzi</u> , M. Karrabi, and Y. Jahani
16:00-16:30		Break

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th International Seminar
on Polymer Science and Technology



Thursday, November 22, 2018

Main Hall, AUT Central Amphitheater

Chair persons: F. Afshar Taromi, M. Barikani, M.H.R. Ghoreishy

Keynote Speakers:

08:30-09:00 Prof. Vahid Haddadi-Asl (Amirkabir University of Technology, Iran)

Halloysite nanotube as promising carrier for the controlled release of drugs

09:00-09:30 Prof. Fatemeh Goharpey (Amirkabir University of Technology, Iran)

Effect of depletion attraction on rheology in bimodal silica suspension

09:30-10:00 Prof. M. Mehdi Razzaghi Kashani (Tarbiat Modares University, Tehran, Iran)

Green tire rubber compounds: from vulcanization to viscoelastic energy dissipation

Closing Ceremony

10:00-11:30

**Awards for the best oral and poster presenters
and pioneers of
polymer science and technology**

11:30-12:00 Break

12:15- 13:15 Certificate of Presenters Submission

Polymer Engineering Department

19-22 November 2018, AUT, Tehran, Iran

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th International Seminar
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