



9th International Seminar on Polymer Science and Technology

17-21 October 2009, Iran Polymer and Petrochemical Institute, Tehran, Iran

Seminar Program

Saturday, October 17, 2009

8:30-18:00

**Workshops
&
Registration**

Hall A

Sunday, October 18, 2009

8:30-10:30	Opening Ceremony	
10:00-10:30	Plenary Presentation: Prof. J.M. Anderson (Case Western Reserve University, USA) Perspectives on the Evaluation of Polymer Biocompatibility	
10:30-11:00	Break, Exhibition & Poster Viewing	
Nano-structured Polymers		
11:00-11:30	Keynote Lecture: Associate Prof. M. Mehrabzadeh (Iran Polymer and Petrochemical Institute, Iran) Polymer Clay and Polymer Blend Nanocomposite	
Code	Time	Title
A-10-317-1	11:30-11:50	Viscoelastic Properties of Sulfonated Polyacrylamide Nanocomposite Hydrogels <u>J. Aalaie</u> , <u>E.V. Farahani</u> , A. Rahmatpour, and M.A. Semsarzadeh
A-10-247-1	11:50-12:10	Different Behaviors in Electrospinning of Polystyrene and Polyacrylonitrile Solutions <u>D. Fallahi</u> , M. Rafizadeh, and N. Mohammadi
A-10-271-2	12:10-12:30	Mechanical and X-ray Diffraction Properties of Nanoclay/CNT/Unsaturated Polyester Nanocomposites <u>B. Kaffashi</u> , and F. Honarvar
12:30-14:00	Lunch Break, Exhibition & Poster Viewing	
A-10-130-1	14:00-14:20	A Comparison Between Two Silane Coupling Agents to Increase Crosslink Density and Dispersion State in Silica-filled SBR Nanocomposites <u>S. Kazemi</u> , A.S. Ghaemmaghami, A.A. Katbab, and M. Abdouss
A-10-147-1	14:20-14:40	Correlation of Morphological and Rheological Characteristics of Low Density Polyethylene/Ethylene-vinyl acetate/ Organoclay Ternary Nanocomposites <u>A. Behradfar</u> , A. Shojaei, and N. Sheikh

A-10-209-3	14:40-15:00	A Novel Bionanocomposite Film Prepared from Modified Starch/Carboxymethyl Cellulose/Montmorillonite H. Almasi, B. Ghanbarzadeh, and A.A. Entezami
A-10-238-1	15:00-15:20	The Effect of Surfactant Type on the Characteristics of Polyaniline Nanocomposites A. Daryanoush and H. Eisazadeh
15:30-16:00 Break, Exhibition & Poster Viewing		
A-10-253-3	16:00-16:20	Synthesis of Hydrophilic Chelating Copolymers for Removal of Toxic and Heavy Metal Ions Containing Water and Wastewaters S. Jalali, P. Najafi Moghadam, and K. Akbari Dilmaghani
A-10-285-1	16:20-16:40	Synthesis of Exfoliated Polystyrene Nanocomposite via ATRP H. Roghani-Mamaqani, M. Najafi, V. Haddadi-Asl, and M. Salami-Kalajahi
A-10-650-1	17:20-17:40	Nanomechanical Properties and Corrosion Protection Evaluation of Nanocomposite Hybrid Coatings on AA1050 D. Zare-Hossien Abadi, A. Ershad-Langroudi, and A. Rahimi
A-10-630-6	17:00-17:20	Epoxy/Silane Modified Nanoclay Nanocomposites: Morphology and Thermal Properties M. Khoeini, S. Bazgir, M. Tamizifar, and K. Arzani
A-10-442-3	16:40-17:00	The Effects of Nanostructure on the Conductivity and Morphology of Poly(aniline-co-o-methoxy Aniline-co-o-toluidine) as Prepared by Interfacial Polymerization B. Massoumi, F. Ghashangpour Peivasti, A.A. Entezami and M. Balaei

Hall B

10:30-11:00 Break, Exhibition & Poster Viewing	
Polymer Synthesis and Characterization	
11:00-11:30	Keynote Lecture: Prof. F. Afshar Taroni (Amir Kabir University of Technology, Iran) Star Polymers

Code	Time	Title
A-10-326-1	11:30-11:50	Kinetic Study of Free-Radical Polymerization of Vinyl Acetate in the Presence of CDCl_3 by $^1\text{H-NMR}$ Spectroscopy M.A. Semsarzadeh and M. Abdollahi
A-10-457-1	11:50-12:10	Preparation and Characterization of Schiff Base Polythioamides Derived from 4,4'-Methylenebis(cinnamaldehyde) by Willgerodt –Kindler Reaction. M.Y. Khuhawar, A. Shah , and A.A. Shah
A-10-340-4	12:10-12:30	Indirect Synthesis of Bis-2PhIndZrCl ₂ Metallocene Catalyst Used for Ethylene Polymerization M.M. Mortazavi, H. Arabi, G.H. Zohuri , M. Nekoomanesh, S. Ahmadjo, and A. Farhadi
12:30-14:00 Lunch Break, Exhibition & Poster Viewing		
A-10-634-2	14:00-14:20	Crystalline Structure Analysis of Cellulose Following Ionic Liquid Dissolution by Means of X-ray Diffraction and FTIR Spectroscopy A. Shakeri and M.P. Staiger
A-10-41-1	14:20-14:40	HS-SPME-GC-MS Analysis of Volatile Organic Compounds Released During Thermo-oxidative Degradation of PMMA M. Kaykhali
A-10-154-1	14:40-15:00	Preparation of Oxidized Polypropylene Wax A. Salimi , M. Atai, M. Mirabedini, and M. Mohseni
A-10-721-1	15:00-15:20	Effect of RAFT Agent Structure on the Rate of Polymerization of Methyl Methacrylate in Presence of Clay Sh. Sadeghi-Ardakani, A.H. Navarchian , and M.B. Teimouri
15:30-16:00 Break, Exhibition & Poster Viewing		
A-10-511-1	16:00-16:20	Ethylene Polymerization Using $\text{MgCl}_2/\text{SiO}_2$ -supported Ziegler-Natta Catalyst A. Rouhifefat , M. Vatankhah, and S. Pourmahdian
A-10-214-1	16:20-16:40	Preparation of Porous Polyethylene Using Spherical SBA-15 Supported Philips Catalysts E. Ahmadi , M. Nekoomanesh Haghghi, A. Ramazani, and Z. Mohamadnia
A-10-278-1	16:40-17:00	Synthesis and Properties of Novel Aromatic and Chiral Polyamides in Eco-Friendly Media S. Mallakpour, and E. Hashemi

A-10-285-2	17:00-17:20	Effect of Nanoclay on Kinetics and Molecular Weight of Polystyrene Nanocomposite Prepared via In-situ ATRP H. Roghani-Mamaqani , M. Najafi, V. Haddadi-Asl, and M. Salami-Kalajahi
A-10-168-1	17:20-17:40	A New Smart Hydrogel Composite Based on Salep-g-Poly(sodium acrylate)/Alumina G.R. Bardajee , A. Pourjavadi, R. Soleyman, and F. Taherkhani

Hall C

10:30-11:00 Break, Exhibition & Poster Viewing

Polymers and Environment & Polymer Wastes and Recycling

11:00-11:30 Keynote Lecture: Prof. F. Tamaddon (Lund University (TVRL), Sweden)
Environmental and Energy Aspects of Polymeric Material and Its Waste

Code	Time	Title
A-10-406-3	11:30-11:50	Biodegradation Studies of Expanded Polystyrene Blends N. Atiq , M. Asif, S. Andleeb, M. Ishtiaq Ali, M. Sajjad Shaukat, and S. Ahmed
A-10-725-1	11:50-12:10	Effect of Different Parameters on Deinking Efficiency of HDPE Films Using Acrylic Based Flocculants and Nonionic Surfactant M. Soltani , A. Khosravi , M. Khorasani, K. Gharanjig, and M. Khatibzadeh
A-10-6-4	12:10-12:30	Synthesis and Characterization of Chlorine Containing Flame-resistance Polyurethanes M. Mohammadi Aslzadeh , G. Mir Mohammad Sadeghi , and M. Abdouss
12:30-14:00 Lunch Break, Exhibition & Poster Viewing		
A-10-242-4	14:00-14:20	Ionic Liquid [Pr ₂ im]Br as a Green Catalyst and Solvent for the Mild and Efficient Synthesis Chiral Polyamides under Microwave Irradiation S. Mallakpour and Z. Rafiee
A-10-48-2	14:20-14:40	Rapid and Economical Method for Synthesis of Heterocyclic Polyureas S. Mallakpour and M. Dinari

A-10-633-1	14:40-15:00	Synthesis of Polyester Polyol for Rigid Polyurethane Foams from PET Wastes A.H. Haghighi and F. Afshar Taromi
A-10-565-1	15:00-15:20	Application of Polypyrrole-modified Quartz Crystal Nanobalance and Principal Component Analysis for Determination of Nickel in Solution A. Mirmohseni , and F. Farshi Azhar
15:30-16:00 Break, Exhibition & Poster Viewing		
Polymer Blends and Composites		
A-10-27-1	16:00-16:20	Mechanical Properties of Composite (Glass Fiber Fabric/Epoxy Resin) at Different Times of Hygrothermal Ageing A. Naceri
A-10-98-3	16:20-16:40	Effect of Some Accelerators on Curing of Dicyandiamide/Epoxy Resin System M. Hayaty , M.H. Beheshty , and M. Esfandeh
A-10-718-1	16:40-17:00	Epoxy/Glass Flake Composite: Curing Kinetics, Glass Transition Temperature and Degradation Temperature M. Ghaffari , A. Ghadami , M. Ehsani , and M. Piri Niri
A-10-347-2	17:00-17:20	Effect of Processing Condition on Crystallinity and Mechanical Properties of PE Fiber – PE Nanocomposites A. Babaei , S.R. Ghaffarian , and M.M. Khorasani
A-10-374-4	17:20-17:40	Copolymerization of Aniline and Acrylonitrile Using Various Surfactants in Aqueous Media H. Eisazadeh and B. Ghobadi Bistouni

Hall D

10:30-11:00 Break, Exhibition & Poster Viewing		
Biopolymers and Biocompatible Polymers		
11:00-11:30	Keynote Lecture: Prof. H. Mirzadeh (Iran Polymer and Petrochemical Institute, Iran) Skin, Bone and Cartilage Tissue Engineering at IPPI	

Code	Time	Title
A-10-228-3	11:30-11:50	Drug Eluting Cochlear Implant Coating: An Animal Model Study <u>M. Farhadi</u>, M. Jalessi, P. Salehian, F. Farahmand, H. Emamjomeh, H. Mirzadeh, and M. Imani
A-10-230-1	11:50-12:10	PEG Molecular Weight Effect on Pancreatic Islets Camouflaging Against Lymphocytes <u>E. Vasheghani Farahani</u>, H. Aghajani, L. Barani, and S.H. Najaf Abadi
A-10-316-1	12:10-12:30	Biosynthesis of Various Polyhydroxyalkanoate Polymers as Biodegradable and Biocompatible Material <u>A. Al-Ashraf</u>, R. Ahmad, N. Abd Aziz , V. Sevakumaran, N.Mat Yusuf, and M.I.A. Majid
12:30-14:00		Lunch Break, Exhibition & Poster Viewing
14:00-14:30		Keynote Lecture: Dr. H. Hosseeinkhani Towards the Development of Advanced Medicine by New Biomaterials
A-10-681-1	14:30-14:50	Dextran Hydrogels as Topical Hemostatic Agents: Surface Response Methodology to Optimize Chemical Crosslinking Reaction H. Seyednejad, <u>M. Imani</u>, H. Salimi Kenari, and S. Hojjati Emami
A-10-231-1	14:50-15:10	A Preliminary Study on Composite Preparation from Supramolecular Polycaprolactone and HAp for Tissue Engineering Applications <u>P. Shokrollahi</u>, H. Mirzadeh, F. Shokrolahi, M. Daliri, O.A. Scherman and W.T.S. Huck
A-10-774-2	15:10-15:30	Perforated Polyurethane Scaffold as Cartilage Substitution in Vitro & in Vivo Assessments S. Amanpour, <u>A. Solouk</u>, H. Mirzadeh, M.A. Mohagheghi, S. Rabbani, M. Soleimani, and F. Tirgari
15:30-16:00		Break, Exhibition & Poster Viewing
Polymer Reaction Engineering		
16:00-16:30		Keynote Lecture: Prof. M. Nekoomanesh (Iran Polymer and Petrochemical Institute, Iran) Kinetic Features of Ethylene Polymerization with Heterogeneous Ziegler-Natta Reactions
A-10-326-2	16:30-16:50	A New Approach to Calculate More Reliable Reactivity Ratios in the Atom Transfer Radical Copolymerization of Styrene and Methyl Methacrylate <u>M.A. Semsarzadeh</u>, and M. Abdollahi

A-10-319-2	16:50-17:10	Copolymerization of Ethylene with α -olefins Using Synthesized BisIndZrCl ₂ Metallocene Catalyst M.M. Mortazavi, H. Arabi , G.H. Zohuri, M. Nekoomanesh, S. Ahmadjo, and A. Farhadi
A-10-157-1	17:10-17:30	Effect of Operating Variables on Conversion in Semi-batch Emulsion Copolymerization of Butyl Acrylate and Glycidyl Methacrylate H. Bakhshi , M.J. Zohuriaan-Mehr, H. Bouhendi, and K. Kabiri
A-10-166-1	17:30-17:50	Application of DOE Method to Experimental Study the Process Parameter Effects on Porosity of S-PVC Grains N. Etesami , M. Nasr Esfahany, and R. Bagheri

Hall E

10:30-11:00 Break, Exhibition & Poster Viewing		
Modeling and Simulation		
11:00-11:30 Keynote Lecture: Prof. M.H.R. Ghoreishy (Iran Polymer and Petrochemical Institute, Iran) Finite Element Modeling of Tires		
Code	Time	Title
A-10-605-1	11:30-11:50	Simulation of Conversion and Particle Size Distribution in a Continuous Emulsion Polymerization Reactor M. Barazandegan , and M. Shahrokhi
A-10-66-2,3	11:50-12:10	Quasi Steady-State Simulation of Polymeric Fluids Flow in an Intermeshing Co-rotating Twin Screw Extruder (TSE) H. Sobhani , M.H.R. Ghoreishy, and M. Razavi-Nouri Transient Simulation of Polymeric Fluids Flow in an Intermeshing Co-rotating Twin Screw Extruder Using Fictitious Domain Method H. Sobhani , M.H.R. Ghoreishy, M. Razavi-Nouri, and P. Anderson
A-10-178-1	12:10-12:30	Micromechanical Modeling of PLSNs Containing Exfoliated/intercalated Structures A. Zehtab Yazdi , R. Bagheri, and M. Kazeminezhad
12:30-14:00 Lunch Break, Exhibition & Poster Viewing		

A-10-399-5	14:00-14:20	Copolymerization of Styrene and Methyl Methacrylate: Experimental Kinetics and Mathematical Modeling K. Jalili , F. Abbasi , and M. Nasiri
A-10-35-2	14:20-14:40	CFD Modeling of Transport Phenomena in MMA-St Copolymer Lost Foam Casting Process A. Charchi , M. Rezaei , S. Hossainpour , J. Shayeg , and S. Falak
A-10-108-1	14:40-15:00	Study of Chain-length-dependent and Diffusion-controlled Styrene Polymerization in FRP and ATRP Systems by Monte Carlo Simulation M. Najafi , H. Roghani-Mamaqani , M. Salami-Kalajahi , and V. Haddadi-Asl
A-10-509-1	15:00-15:20	Solution of Population Balance Equations in Emulsion Polymerization Using Method of Moments E. Vafa and M. Shahrokhi
15:30-16:00 Break, Exhibition & Poster Viewing		
Resin and Adhesives		
A-10-700-1	16:00-16:20	Preparation and in Vitro Evaluation of a Fentanyl Drug in Adhesive Patch Based on Functional and Non Functional Acrylic Adhesives S.M. Taghizadeh , A. Soroushnia , and F. Mohamadnia
A-10-221-2	16:20-16:40	Interface Fracture Toughness of Bonded Joints Subjected to Mixed Mode I/II R. Bakhtiari , N. Choupani , and K. Kermani
A-10-183-1	16:40-17:00	A Novel Dentin Adhesive Containing MMP Inhibitors and Evaluating the Mechanical Properties M. Ghavam , M. Atai , M. Reshad , and M. Imani
A-10-600-1	17:00-17:20	Study the Effect of Mixing Temperature on the Cure Characteristics of Epoxy/Diaminodiphenylmethane System F. Ferdowsian , M. Ebrahimi , and A. Jannesari
A-10-604-1	17:20-17:40	Non-isothermal Cure Kinetics of DGEBA/Nanosilica Composites M. Ghaemy and S.M. Amini Nasab

Hall A

Monday, October 19, 2009

8:15-8:45

Plenary Presentation: Prof. J.M. Abadie (**École Polytechnique Universitaire, France**)
Development of Biodegradable Thermoplastic Elastomers for Medical Applications

Nano-structured Polymers

9:00-9:30

Keynote Lecture: Prof. A. Rahimi (**Iran Polymer and Petrochemical Institute, Iran**)
Nanocomposite Coatings

Code	Time	Title
A-10-624-1	9:30-9:50	Effect of Blending Sequence on Microstructure of PET/EPDM, EPDM-g-MA/Organoclay Ternary Hybrid Nanocomposites <u>M.A. Khatibi</u> , A. Arefazar, M. Esfandeh, and O. Moini Jazani
A-10-232-1	9:50-10:10	Preparation, Characterization and Polymerization of $[\text{Cr}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O}]$ Complexes Grafted SBA-11 and MCM-41 Materials E. Ahmadi, M. Nekoomanesh Haghighi, A. Ramazani, and <u>Z. Mohamadnia</u>
A-10-677-1	10:10-10:30	Preparation of Porous Silica Structures via Sacrificial Template Method Using Nano-Spherical Polystyrene Particles Synthesized by Miniemulsion Polymerization <u>A. Afshar Taromi</u> , S. Pourmahdian, and F. Afshar Taromi
10:30-11:00 Break, Exhibition & Poster Viewing		
A-10-685-1	11:00-11:20	Influence of Cosurfactant Concentration and Reaction Temperature on Particle Size for Methyl Methacrylate Miniemulsion Polymerization <u>H. Hallajzadeh Nayeri</u> , A. Afshar Taromi, F. Afshar Taromi, and H. Eslami
A-10-692-1	11:20-11:40	Effect of O-MMTs on Flame Retardancy and Thermal Stability of Poly(E-co-VAc)/LDPE /Magnesium Hydroxide Composites <u>L. Ahmad Khanbeigi</u> , M. Masoomi, and R. Bagheri
A-10-692-2	11:40-12:00	Optimization of Nanosilver-Polypropylene Synthesis and Its Antibacterial Activity <u>J. Shabantaheri</u> , M. Masoomi, and K. Karimi
A-10-85-2	12:00-12:20	Investigation of TiO_2 Nanoparticles Effects on the Structure and Thermal Properties of Polypyrrole <u>M. Babazadeh</u> , A. Olad, and F. Rezazad Gohari

12:30-14:00 Lunch Break, Exhibition & Poster Viewing

Novel Polymer Applications

A-10-299-1	14:00-14:20	Plasma Etching of Soft Polydimethylsiloxane Elastomers <u>G. Bjørnsen</u>, J. Roots, L. Henriksen, and J.H. Ulvensøen
A-10-640-2	14:20-14:40	Bitumen Modification with Polymeric Coated Precipitated Calcium Carbonate: Interaction between Polymeric Layer and Bitumen <u>A. Kebritchi</u>, A. Jalali Arani, A.A. Roghanizad, and T. Bahram
A-10-281-1	14:40-15:00	FT-IR Study of β-Sialon Synthesis from Kaolinite-Polyacrylamide Precursor <u>A.R. Bahramian</u> and M. Kokabi
A-10-288-1	15:00-15:20	Host-Guest Properties of Acrylonitrile – Acrylic Acid Copolymer Film by Dendrigraft Formation <u>S. Akbari</u>, M. Haghighat Kish, and A.A. Entezami

15:30-16:00 Break, Exhibition & Poster Viewing

A-10-4-1	16:00-16:20	Release of Agrochemical from CMC-g-PAAm/Kaoline Hydrogel Composite <u>G.R. Mahdavinia</u>
A-10-222-1	16:20-16:40	Palladium Nanoparticles Supported on Poly(vinyl pyrrolidone) Grafted onto Silica: A New Recyclable Catalyst for Heck Reaction B. Tamami and <u>H. Allahyari</u>
A-10-827-1	16:40-17:00	Carbon Nanotube-dendritic Polymer-quantum Dot Hybrid Nanomaterials for Nanomedicine M. Bavadi, M. Kalantari, M. Sagvand, M. Ashiri, F. Zabihi, Z. Sobhani, F. Atyabi, and <u>M. Adeli</u>
A-10-216-1	16:40-17:00	Preparation of ^{66}Ga-Chitosan Radio-complex for Internal Radiotherapy of Cancer A. Pourjavadi and <u>M. Aklaghi</u>

Hall B

Polymer Synthesis and Characterization

9:00-9:30

Keynote Lecture: Prof. S. Mallakpour (Isfahan University of Technology, Iran)
Step-Growth Polymerization in Green Media

Code	Time	Title
A-10-507-2	9:30-9:50	Thermally Curable Polyurethanes Containing Naphthoxazine Groups in the Main Chain H. Yeganeh and A. Jangi
A-10-788-1	9:50-10:10	Polymerization and Thermal Degradation of Benzoxazine Based on Methylamine Via Direct Pyrolysis Mass Spectrometry S. Bagheri Fam , T. Uyar , H. Ishida , and J. Hacaloglu
A-10-428-2	10:10-10:30	Study on Synthesis of Novel Soluble Aromatic Polyamides with Pendant Cyano Groups Y. Yu , M. Cai , and Y. Zhang
10:30-11:00 Break, Exhibition & Poster Viewing		
A-10-719-1	11:00-11:20	Block Length Effect on the Properties of the Synthesized Copolyetheramides Based on Nylon 6 and Poly(Ethylene Oxide) M.A. Ardestani , A.A. Babaluo , M. Peyravi , M.k.R. Aghjeh , and S.R. Pishghadam
A-10-569-2	11:20-11:40	Novel Thermally Stable Poly(amide-imide)s Containing Dibenzalacetone Moiety as a Photosensitive Group in the Main Chain: Synthesis and Characterization K. Faghihi , M. Hajibeygi and M. Shabani
A-10-629-1	11:40-12:00	Synthesis of Dendrimers Based on Citric Acid With Peripheral Imidazole Group H. Namazi and S. Motamedi
A-10-599-1	12:00-12:20	One-pack Two-component Benzoxazine Modified Polyurethanes as a Novel Electrical Insulating Coating S. Jamshidi , H. Yeganeh , and S. Mehdipour-Ataei
12:30-14:00 Lunch Break, Exhibition & Poster Viewing		
A-10-112-1	14:00-14:20	Preparation and Swelling Behaviors of Porous Carrageenan-g-Polyacrylamide/Bentonite Superabsorbent Composites A. Pourjavadi , Z. Bassampour , and H. Ghasemzadeh

A-10-114-1	14:20-14:40	Synthesis of Low Density Polymeric Microballoons via Suspension Polymerization <u>S.B. Boroujeni</u> , A. Nodehi, and M. Atai
A-10-309-1	14:40-15:00	Evaluation of Molecularly Imprinted Polymers in Controlled Release of Tramadol <u>S.A. Deilami</u> , M. Abdouss, S. Khoei, M. Javanbakht, and A. Hasani
A-10-151-1	15:00-15:20	Synthesis of Amide Grafted High Density Polyethylene M.A. Semsarzadeh and <u>V. Poursorkhabi</u>
15:30-16:00 Break, Exhibition & Poster Viewing		
A-10-73-7	16:00-16:20	Super-entrant Behavior of Poly(AMPS) in DMSO/water Mixtures M.J. Zohuriaan-Mehr, <u>M. Kheirabadi</u> , and K. Kabiri
A-10-369-1	16:20-16:40	Use of Integral Methods for the Determination of the Kinetic Parameters and Mechanism Study of Novel Optically Active Polyamides S. Mallakpour and <u>M. Taghavi</u>
A-10-119-1	16:40-17:00	Novel Superporous Hydrogel Based on Polysaccharide/Protein Hybrid Backbone A. Pourjavadi, <u>R. Soleyman</u> , Ghasem R. Bardajee, and N. Mousivand

Hall C

Polymer Blends and Composites

9:00-9:30 Keynote Lecture: Prof. R.P. Burford (University of New South Wales, Australia)
New Polymer Blends Using Grubb's Catalyst Formed Polybutadiene

Code	Time	Title
A-10-250-1	9:30-9:50	High Velocity Impact on Composite Materials, Some Model Assessments <u>A.R. Sabet</u> , H. Rahimi, and M.H. Beheshty
A-10-328-1	9:50-10:10	Study on Synergic Effects of Antioxidants for Improvement of Ageing and Fatigue Resistance of NR/BR/SBR Cured Compounds <u>M. Daneshvar</u>

A-10-276-2	10:10-10:30	Design and Construction of a Tribometer for Polymers in Research and Practical Applications <u>M.R. Kashani</u>
10:30-11:00 Break, Exhibition & Poster Viewing		
A-10-234-1	11:00-11:20	Electron Beam Crosslinked Hydrogel Based on Poly(acrylic acid)/Poly(vinyl alcohol) Blend N. Sheikh, <u>L. Jalili</u>, and F. Anvari
A-10-52-1	11:20-11:40	Effect of Shell Phase Viscosity on Morphological Properties of Core-Shell Blends A. Jalali, <u>M.M. Abolhasani</u>, A. Arefazar, and M. Mozdianfard
A-10-440-1	11:40-12:00	Phase Behavior, Melt Flow and Fracture Energy of Poly(styrene-co-acrylonitrile) (SAN) Containing Core-Shell Rubber Particles with Polybutadiene Core and SAN Shell <u>M. Pourrahimi</u>, N. Mohammadi and P. Payamya
A-10-723-1	12:00-12:20	The Effect of Curing System on Scratch Resistance of Rubber-Toughened Polypropylene R. Bagheri, <u>N. Zarrinbakhsh</u>, and S. Molladavoodi
12:30-14:00 Lunch Break, Exhibition & Poster Viewing		
Foams and Surface Coatings		
14:00-14:30 Keynote Lecture: Associate Prof. H. Yeganeh (Iran Polymer and Petrochemical Institute, Iran) Polyurethane Based Electrical Insulation Coatings For the Modern Electrical Industry		
A-10-93-3	14:30-14:50	A Study of Staining Behavior of a Polyurethane Coating Containing an Anti-Graffiti Additive Using Optical Parameters A.M. Rabea, <u>M. Mohseni</u> and S.M. Mirabedini
A-10-691-1	14:50-15:10	Smart Corrosion Protection Using Conducting Polymers in UV-curing Coating System: Synthesis, Characterization, and Application <u>S. Jafarzadeh</u>, A. Adhikari, and J. Pan
A-10-72-2	15:10-15:30	Emulsion-Derived Highly Porous Solid Foams: Effect of Electrolyte and Porogenic Solvents on Foam Microstructure <u>Z. Abasian</u> and M.R. Moghbeli
15:30-16:00 Break, Exhibition & Poster Viewing		

A-10-152-1	16:00-16:20	Design and Manufacturing of a Foam Compressibility Tester (FCT) <u>N.A. Taheri</u> , R.M. Nasiri, B.E. Vaziri, and S.A. Ramazani
A-10-35-3	16:20-16:40	Long-term Performance of Rigid Polyurethane Foam Prepared with Different Blowing Agents <u>A.R.E. Kalejahi</u> and M. Rezaei
A-10-439-1	16:40-17:00	Investigation of a Strategy for Well Controlled Inducement of Micro and Nano Cellular Morphologies in the Polymers M.H. Navid Famili and <u>H. Janani</u>
A-10-325-1	17:00-17:20	Corrosion Performance Improvement of Nanocomposite Epoxy Coatings <u>M. Behzad Nasab</u> , S.M. Mirabedini, and K. Kabiri

Hall D

Biopolymers and Biocompatible Polymers

9:00-9:30 **Keynote Lecture: Prof. E. Vasheghani Farahani (Tarbiat Modares University, Iran)**
Polymers in Drug Delivery

Code	Time	Title
A-10-122-1	9:30-9:50	Fabrication of Polyhydroxybutyrate (PHB) Scaffolds by Solid-Liquid Phase Separation Method, Applied in Neural Tissue Engineering S.A. Mirmohammadi and <u>M.T. Khorasani</u>
A-10-545-1	9:50-10:10	Crystallization Behavior of Poly(L-lactide) Films Containing Mg(OH)₂ and L-lactide A. Mashak, M. Nekoomanesh, <u>H. Mobedi</u> , and R. Dinarvand
A-10-660-1	10:10-10:30	Surface Characteristics of UV-irradiated Chitin/Dimethylol Propionic Acid-based Shape Memory Polyurethane Elastomers <u>M. Zuber</u>
10:30-11:00 Break, Exhibition & Poster Viewing		
A-10-228-1	11:00-11:20	Kinetics of Curing for a Silicone-Based Drug Delivery System: Counter Effects of Curing System and Drug <u>F. Farahmand</u> , M. Imani, H. Mirzadeh, C. Jolly, and M. Farhadi

A-10-263-3	11:20-11:40	Bond Strength of a Novel Dental Adhesive to Dentin: The in vitro Study <u>M. Sadat-Shojai</u>, M. Atai, A. Nodehi, and L. Nasiri Khanlar
A-10-635-1	11:40-12:00	Association and Degradation Behavior of Aqueous Solutions of Pig Gastric Mucin and Hyaluronan. Rheo-Small Angle Light Scattering and High Pressure Studies <u>A. Maleki</u>, A.L. Kjøniksen, and B. Nyström
A-10-242-1	12:00-12:20	Controlled Radical Polymerization of <i>N</i>-Acryloyl-L-phenylalanine via ATRP S. Mallakpour and <u>Z. Rafiee</u>

12:30-14:00 Lunch Break, Exhibition & Poster Viewing

Fibers, Films and Polymeric Membranes

14:00-14:30 Keynote Lecture: Prof. M. Haghghat Kish (Amir Kabir University of Technology, Iran)
Future Trends in Fiber Science and Technology

A-10-781-1	14:30-14:50	Effect of Multi-Walled Carbon Nanotubes on the Morphology, Thermal and Mechanical Properties of Electrospun Polyacrylonitrile Nanofibers <u>K. Saeed</u>, and S.Y. Park
A-10-115-1	14:50-15:10	Evaluation the Structural Changes of PVP Composite Membranes as a Function of Salt Addition for Facilitated Transport Process <u>M. Esmaeili</u>, J. Barzin, and S.S. Madaeni
A-10-84-1	15:10-15:30	Wide Angle X-ray Diffraction and DSC Analysis of Grafted Polypropylene/Polypropylene/Nylon 6 Blended Filaments <u>E. Fallahi</u>, M. Barmar, and M. Haghghat Kish

15:30-16:00 Break, Exhibition & Poster Viewing

A-10-619-2	16:00-16:20	Consideration of Temperature Effects on the Morphology of PVDF Membrane by SEM and AFM A. Akbari, <u>A. Yunessnia Lehi</u>, M.Bojaran, and V. Jabbari
A-10-696-2	16:20-16:40	Preparation and Characterization of a Novel Membrane Electrode Assembly As Cathode For Advanced Chlor-Alkali Application F. Mohammadi, <u>E. Joudaki</u>, A.A. Yousefi, and M. Eyvazkhani

A-10-683-1	16:40-17:00	The Effect of Aging on Physical and Mechanical Properties of As-spun Polypropylene Fibers with Various Molecular Weights <u>H. Haddadi</u> , M.R. Mohades-Mojtahedi, and M.A. Tavanaie
A-10-503-1	16:40-17:00	Thermodynamic Evaluation of Quaternary Membrane-forming System of Water/NMP/PES/PVP <u>B. Sadatnia</u> and Jalal Barzin

Hall E

Physical Chemistry of Polymers

9:00-9:30

Keynote Lecture: Prof. M.A. Semsarzadeh (Tarbiat Modares University, Iran)
Atom Transfer Radical Polymerization Reaction of Vinyl Acetate Structures with other Monomers

Code	Time	Title
A-10-564-1	9:30-9:50	Adsorbed Polymer Layers With Temperature and PH Responsive Adhesive and Frictional Properties Investigated by Atomic Force Microscopy <u>E. Thormann</u> , A. Dédinaité, and P. Claesson
A-10-561-1	9:50-10:10	Comparative Thermodynamic Studies of Some Hydrogen Bonded Interpolymer Complexes <u>B. Vasheghani Farahani</u> , F.H. Rajabi, M.H. Ahmadi, and N. Zenooz
A-10-459-1	10:10-10:30	Chemical Cross-Linked Nanoparticles with Potential for Enhanced Oil Recovery Applications <u>N. Al-Manasir</u> , A.L. Kjøniksen, and B. Nyström
10:30-11:00		Break, Exhibition & Poster Viewing
A-10-579-4	11:00-11:20	Segmental Dynamics and Fragility of PMMA-SAN Miscible Blends - Clay Nanocomposites <u>N. Taheri Qazvinj</u> , E. Chehrazi, and S. Ghanbar
A-10-28-1	11:20-11:40	Study of the Glass Transition Temperatures of Polyvinylacetate-b-poly(MA-co-MMA) Block Terpolymers <u>M.R. Rostami Daronkola</u> and M.A. Semsarzadeh

A-10-268-1	11:40-12:00	Thermodynamic Study of a Water-Tetrahydrofuran-Polyvinylchloride Ternary System Z. Maghsoud, M.H.N. Famili, and S.S. Madaeni
12:30-14:00 Lunch Break, Exhibition & Poster Viewing		
Polymer Blends and Composites		
A-10-634-1	12:00-12:20	Thermal and Dynamic Mechanical Properties of Polymer Bio-nanocomposites Reinforced by Cellulose Whiskers A. Shakeri and A. Etang
A-10-641-1	14:00-14:20	Synthesis and Characterization of Polystyrene-clay Nanocomposites: Two Comparative Synthesis Methods A. Olad and M. Hayasi
A-10-695-1	14:20-14:40	Morphology and Tensile Properties of LDPE/EVA Nanocomposite Foams M. Riahi Nezhad, I. Ghasemi, M. Karrabi, and H. Azizi
A-10-619-1	14:40-15:00	The Influence of Inorganic Nanoparticles on the PVDF Polymeric Membrane: Effects on the Morphology and Crystallinity A. Akbari, A. Yunessnia Lehi, M. Bojaran, V. Jabbari
15:30-16:00 Break, Exhibition & Poster Viewing		
Modeling and Simulation		
A-10-312-1	16:00-16:20	Simulation and Experimental Evaluation of Surfactant and Coagulation Effects on Polymer Particle Size Distribution in Emulsion Polymerization H. Abedini and M. Shahrokhi
A-10-152-4	16:20-16:40	Numerical Investigation of First Normal Stress Differences in Flow of Short Fiber Suspensions in the Circular Die M. Kanvisi and A. Ramazani
A-10-66-1	16:40-17:00	Advanced Computer Simulation of Rubber Curing Process M.H.R. Ghoreishy, G. Naderi, M. Rafej, G.R. Bakhshandeh, and M. Nasiri
A-10-729-1	17:00-17:20	Rapid 3-Dimensional Simulation of Curing in Thick Parts of Fiber Reinforced Composites Using Dynamic Artificial Neural Networks P.E. Jahromi, A. Shojaei, and M.R. Pishvaie

Hall A

Tuesday, October 20, 2009

8:15-8:45

Plenary Presentation: Prof. R.P. Burford (**University of New South Wales, Australia**)
Polymer Composites with Controlled Nanodispersion

Nano-structured Polymers

9:00-9:30

Keynote Lecture: Associate Prof. S.H. Jafari (**University of Tehran, Iran**)
Structure-properties Correlations in Multicomponent Nano-filled Polymer Blends

Code	Time	Title
A-10-438-1	9:30-9:50	Effect of Maleic Anhydride Modified Polystyrene on Polystyrene/Clay Nanocomposites <u>M. Mehrabzadeh</u> and M. Kamal
A-10-172-1	9:50-10:10	Effect of Weathering on Mechanical and Morphological Properties of Modified NanoTiO ₂ Particles-Poly(urethane-acrylic) Composite Coating M. Sabzi and <u>S.M. Mirabedini</u>
A-10-712-1	10:10-10:30	Using Silica and Polymethacrylic Acid Grafted Nanoclay in an Experimental Dental Adhesive as Fillers and Stability Investigation <u>L. Solhi</u>, M. Atai, and A. Nodehi
10:30-11:00 Break, Exhibition & Poster Viewing		
A-10-263-4	11:00-11:20	Synthesis of Nanosized Hydroxyapatite Particles: The Morphology Control <u>M. Sadat-Shojai</u>, M. Atai, and A. Nodehi
A-10-276-1	11:20-11:40	Dielectrophoretic Assembly of TiO ₂ Particles in Silicone Rubber Composites <u>S. Javadi</u> and M. Razzaghi Kashani
A-10-72-3	11:40-12:00	Modification of Layered Montmorillonite (MMT) for Polymer Nanocomposite Preparation <u>F. Mohammadi</u>, M.R. Moghbeli, and S.H. Jazayeri

A-10-119-2	12:00-12:20	Novel Highly Swelling Nanoporous Hydrogel Based on Polysaccharide/Protein Hybrid Backbone A. Pourjavadi, R. Soleyman, G.R. Bardajee, and F. Jafarpour
12:30-14:00 Lunch Break, Exhibition & Poster Viewing		
Rheology and Polymer Processing		
A-10-298-1	14:00-14:20	Effect of Particle Size and Surface Treatment on Viscoelastic Properties of PP/Silica Nano-composites A. Haghtalab and R. Marzban
A-10-240-1	14:20-14:40	Silane Crosslinking of Polyethylenes: The Effect of EVA H. Azizi, J. Morshedian, and M. Barikani
A-10-42-1	14:40-15:00	Experimental Study of Relationship Between Interfacial Instabilities and Mechanical Strength of Three-layer (PP/HDPE/PP) Symmetric Polymer Melts M.M. Ranjbaran
15:30-16:00 Break, Exhibition & Poster Viewing		
A-10-295-1	16:00-16:20	Rheological Properties of Poly(2-acrylamido-2-methylpropan sulfonic acid) as Thickener A. Askarizadeh and H. Bouhendi
A-10-306-3	16:20-16:40	Relationship Between Rheology and Morphology of Solution Prepared PU/PCL Blends F. Mostafavi and N. Golshan Ebrahimi
A-10-683-1	16:40-17:00	The Effect of Aging on Physical and Mechanical Properties of As-spun Polypropylene Fibers with Various Molecular Weights H. Haddadi, M.R. Mohades-Mojtahedi, and M.A. Tavanaie
A-10-414-1	16:40-17:00	Rheologically Determined Phase Separation of PVME Aqueous Solution H.S. Asli, A. Gharachorlou, and F. Goharpey

Hall B

Novel Polymer Applications

9:00- 9:30

Keynote Lecture: Prof. P. Saha (Tomas Bata University in Zlin, Czech Republic)
Electro and Magnetorheology of Polymer Systems

Code	Time	Title
A-10-60-1	9:30-9:50	Triazine Based Hyperbranched Polyethers as Flame Retardant Polymeric Additives J. Borah , C. Wang , and N. Karak
A-10-626-1	9:50-10:10	New Conducting Polymer Composite Films as an Electromagnetic Interference (EMI) Shielding Material H.N.M. Ekramul Mahmud , M. M.Abdi , and A. Kassim
A-10-284-5	10:10-10:30	Grafting of Amine Groups to Polyacrylonitrile Nanofibers for Metal Ion Adsorption P. Karimi , M. Rafizadeh , and F. Afshar Taromi
10:30-11:00 Break Exhibition & Poster Viewing		
A-10-782-1	11:00-11:20	Molecularly Imprinted Polymeric Microbeads: An Efficient HPLC Stationary Phase for the Chiral Separation of Phenylalanine Race Mate H. Khan
A-10-512-1	11:20-11:40	Effect of Molecular Weight and Temperature on the Behavior of Synthesized Polyacrylamide and Cationic Polyacrylamide in Water Z. Abdollahi , M. Frounchi , and S. Dadbin
A-10-688-1	11:40-12:00	Electrical Conductivity/Microstructure Correlation in Nanocomposite Based on RTV Liquid Silicon Rubber/Ultrasonic Sonicated Expanded Graphite A.A. Katbab and R. Soltani
12:30-14:00 Lunch Break, Exhibition & Poster Viewing		
Polymer Synthesis and Characterization		
A-10-319-1	14:00-14:20	Indirect Synthesis of Bis-2PhIndZrCl ₂ Metallocene Catalyst Used for Ethylene Polymerization

		M.M. Mortazavi, H. Arabi, G.H. Zohuri, M. Nekoomanesh, S. Ahmadjo, and A. Farhadi
A-10-265-1	14:20-14:40	Synthesis, Characterization, Ion-exchange and Electrochemical Studies of Anthranilic Acid-salicylic Acid-formaldehyde Terpolymer and Its Polychelates A. Burkanudeen, R. Azarudeen, and M. Riswan Ahamed
A-10-710-1	14:40-15:00	Synthesis of the Spherical Poly(vinylidene difluoride) Particles via Dispersion Polymerizations in Supercritical CO₂ R. Najjar
15:30-16:00 Break, Exhibition & Poster Viewing		
A-10-158-1	16:00-16:20	A New Procedure for the Synthesis of Living Polymethylene: Application of Simmons-Smith Reagents toward Homologation A. Abdolmaleki and S. Heshmat-Azad
A-10-405-1	16:20-16:40	Study of Non-isothermal Cure Kinetics of Two Synthesized α-Methyl Propionate Monomers S. Bekhradnia and M. Ghaemy
A-10-65-1	16:40-17:00	Comparative Study of Conducting Polyaniline, Polypyrrole and Poly(3, 4-ethylenedioxythiophene) Salts as Solid Acid Catalysts for the Synthesis of Diacetates (acylals) Under Solvent-free Conditions M.R. Nabid, S.J. Tabatabaei Rezaei, M. Abedi, and Z. Hosseini

Hall C

Polymers and Environment & Polymer Wastes and Recycling

9:00-9:30 Keynote Lecture: Prof. H. Esmail (University Sains Malaysia, Malaysia)
Recycling of Rubber Wastes: Properties and Products

Code	Time	Title
A-10-406-2	9:30-9:50	Evaluation of Biodegradability of Expanded Polystyrene by Rhizopus Oryzae NA1 N. Ati, M. Asif, S. Andleeb, M. Ishtiaq Ali, M.S. Shaukat, and S. Ahmed
A-10-237-1	9:50-10:10	Toward Sustainable Polymerization: Glycerol as a Green Monomer S. Salehpour and M.A. Dubé

A-10-86-1	10:10-10:30	Separation of Heavy Metal Cations by Anionic Polyelectrolyte Nanoparticles with Super Paramagnetic Characteristics A.R. Mahdavian and M.A. Mirrahimi
10:30-11:00 Break, Exhibition & Poster Viewing		
A-10-48-1	11:00-11:20	Significant Influence of Microwave Dielectric Heating on Ionic Liquid as a Medium for Acceleration of the Polycondensation Reaction S. Mallakpour and M. Dinari
A-10-633-2	11:20-11:40	Synthesis of Rigid Polyurethane Foam from Glycolysis of PET Wastes A.H. Haghighi and F. Afshar Taromi
A-10-173-2	11:40-12:00	Equilibrium and Kinetic Adsorption Study of Methylene Blue by Polyacrylamide Polymers H. Zavvar Mousavi and J. Rahchamani
A-10-680-2	12:00-12:20	Effect of Silica Based Tire Tread on Fuel Economy and CO ₂ Production in Iran E. Behazin and A. Abbasian
12:30-14:00 Lunch Break, Exhibition & Poster Viewing		
Polymer Blends and Composites		
14:00-14:30 Keynote Lecture: Associate Prof. M.H. Beheshty (Iran Polymer and Petrochemical Institute, Iran) (To be announced)		
A-10-609-1	14:30-14:50	Study on the Effect of Processing Conditions on the Impact Strength of PP/PC/SEBS Ternary Blends Using Taguchi Experimental Analysis O. Moini Jazani, A. Arefazar, S.H. Jafari, M.H. Beheshty, M.R. Saeb, and A. Ghaemi
A-10-329-2	14:50-15:10	Morphology and Mechanical Property of PP/EPDM Dynamically Vulcanized Blend in the Presence of Compatibilizer P. Ezzati, I. Ghasemi, M. Karrabi, H. Azizi, and P. Ehsani Namin
A-10-98-5	15:10-15:30	Effect of Nano-Clay on Mechanical Properties of Unsaturated Polyester Resin S. Shaghaghi and M.H. Beheshty
15:30-16:00 Break, Exhibition & Poster Viewing		
A-10-176-1	16:00-16:20	Characterization of Halloysite Nanotubes Filled Ethylene Propylene Diene Monomer Nanocomposites

		<u>P. Pasbakhsh</u>, H. Ismail, M.N. Ahmad Fauzi and A. Abu Bakar
A-10-169-1	16:20-16:40	Optimized Silicon Rubber/irradiated PTFE/Fumed Silica Nanocomposite for Abrasion Resistance <u>Y. Kashcooli</u>, S. Dadbin, and M. Frounchi
A-10-143-2	16:40-17:00	Compatibility Investigation of PVC/ABS Blends in Presence of MAH <u>P.M. Hosseinpour</u>, J. Morshedian, M. Barikani, and H. Azizi
A-10-253-1	17:00-17:20	Heterogeneous Preparation of Starch-Polyaniline Conductive Composite E. Nazarzadeh Zareh, E. Azaryan, and <u>P. Najafi Moghadam</u>

Hall D

Fibers, Films and Polymeric Membranes

9:00-9:30

Keynote Lecture: Prof. J.M. Abadie (École Polytechnique Universitaire, France)

Sulfonated Aromatic Polyethers Based on TNT Derivatives Useful for Proton Exchange Membranes for Fuel Cells (PEMFCs)

Code	Time	Title
A-10-463-2	9:30-9:50	Synthesis of New Type Polybenzimidazole/Polymer-grafted Silica Nanocomposite Membranes for Proton Exchange Applications in Fuel cells H. Namazi and <u>H. Ahmadi</u>
A-10-679-1	9:50-10:10	Investigation the Effect of Nanoclay on Electrochemical Performance of Proton Exchange Membranes <u>M.M. Hasani-Sadrabadi</u>, S.R. Ghaffarian, E.D. Moghadam, and N. Mokarram
A-10-434-1	10:10-10:30	Study on Interfacial Pressure Between Cylindrical Rigid Limbs and Rubber Shell and Investigation on Pressure Prediction <u>M. Aghajani</u>, A.A. Jeddi, and M. Amani Tehran
10:30-11:00		Break, Exhibition & Poster Viewing
A-10-728-1	11:00-11:20	Preparation, Characterization and Pervaporative Properties of a Composite PDMS/PA Membrane <u>M. Sadrzadeh</u>, M. Asghari, and T. Mohammadi

A-10-383-1	11:20-11:40	The Mechanical Properties of Multiwall Carbon-nanotube-reinforced Polyaniline Fibres Produced by Wet Spinning Process S. Ghanbari, A. Mirmohseni, V. Mottaghtalab, and A. Rostami
A-10-727-1	11:40-12:00	Introduction and Characterization of a new Solvent System for Polycarbonate Electrospinning S. Rahmani, Y. Mohammadi, V. Hadadi Asl, and A. Gazme
A-10-761-1	12:00-12:20	Evaluation of PDMS/PMMA IPN Mixed Matrix Membranes for Separation of Linear and Non-linear Hydrocarbons S. Payami, Z. Kanani, F. Abbasi, and A.A. Babaluo

12:30-14:00 Lunch Break, Exhibition & Poster Viewing

Biopolymers and Biocompatible Polymers...

14:00-14:30 Keynote Lecture: Prof. K. Tarverdi (Brunel University, U.K)
Present Trends and Future Uses of Biodegradable Polymers

A-10-485-1	14:30-14:50	Microencapsulation of Dispersed Dye Particles Through Layer by Layer Technique S.A. Hashemi, M. Zandi, P. Aminayi, and F. Hosseinali
A-10-277-1	14:50-15:10	Indirect Synthesis of Novel Thermally Stable Poly(ester-imide)s Using <i>N,N'</i> -(Pyromellitoyl)-bis-(L-tyrosine dimethyl ester) S. Mallakpour and F.Tirgir
A-10-245-1	15:10-15:30	Preparation and Characterization of Thermogelling Copolymers for Use in Controlled Drug Delivery systems E. Khodaverdi, F. Hadizadeh, F.S. Mirzazadeh Tekie, and F. Ganji

15:30-16:00 Break, Exhibition & Poster Viewing

A-10-485-2	16:00-16:20	A Novel Porous Scaffold Comprising Gelatin/Chitosan for Skin Tissue Engineering M. Pezeshki Modaress, H. Mirzadeh, M. Zandi, and M.T. Khorasani
A-10-177-1	16:20-16:40	Synthesis of pH-sensitive Nanoparticles with Core-Shell-Corona Morphology for Drug Delivery Application S. Khoee and N. Nikfarjam
A-10-690-2	16:40-17:00	Using Mixed Substrate to Enhance PHB Production from Methanol by <i>Methylobacterium Extorquens</i> Z.B. Mokhtari-Hosseini, E. Vasheghani-Farahani, S.A. Shojaosadati, and R. Karimzadeh
A-10-85-1	17:00-17:20	Preparation and Characterization of Polystyrene-based Magnetic Nanofiber by Electrospinning Method S.H. Hosseini, and M. Sadeghi

Hall E

Physical Chemistry of Polymers

9:00-9:30

Keynote Lecture: Prof. B. Nyström (University of Oslo, Norway)
Thermosensitive Triblock Copolymer

Code	Time	Title
A-10-443-1	9:30-9:50	Characterization of Interactions in Mixed Oppositely Charged Polyelectrolyte Systems <u>N. Beheshti</u> , K. Zhu, A.L. Kjøniksen, K.D. Knudsen, and B. Nyström
A-10-58-5	9:50-10:10	Kinetic Studies of Chemical Graft Copolymerization of 2-Anilinoethanol onto Chitosan <u>S.H. Hosseini</u>
A-10-561-2	10:10-10:30	Effect of Different Interacting Forces Involved in Some Multicomponent Interpolymer Complexes on Their Stability B. Vasheghani Farahani, <u>F.H. Rajabi</u> , M. H.Ahmadi, and N. Zenooz
10:30-11:00 Break, Exhibition & Poster Viewing		
A-10-566-2	11:00-11:20	Isothermal Cure Kinetics of an Epoxy Resin Containing Tetrabromobisphenol-A as Flame Retardant <u>F. Shokrollahi</u> , A.R. Mahdavian, P. Shokrollahi, and S. Khoei
A-10-435-1	11:20-11:40	Phase Inversion Emulsification of Bitumen/Styrene-Butadiene Rubber/Aromatic Hydrocarbon (Solvento) in Water: Toward Nanoemulsions <u>S. Ghasemirad</u> , N. Mohammadi, and J. Mashayekhi
A-10-579-3	11:40-12:00	Structural Evolution in Gelatin Solutions in the Presence of Different Chemical Cross-linking Agents N.T. Qazvini, <u>S. Pouresmael</u> , H. Mahdavi, and Z. Zanganeh
A-10-579-1	12:00-12:20	A Turbidimetric Study of Physical Gelation in Gelatin-Clay Nanocomposites <u>Z. Zanganeh</u> , and N.T. Qazvini

12:30-14:00

Lunch Break, Exhibition & Poster Viewing

Modeling and Simulation

14:00-14:30 **Keynote Lecture: Associate Prof. A.S. Ramazani (Sharif University of Technology)**
(To be announced)

A-10-108-4	14:30-14:50	Sequence Length Study of Styrene-n-Butyl Acrylate Copolymer in FRcP and ATRcP Systems by Monte Carlo Simulation Method <u>M. Najafi</u>, H. Roghani-Mamaqani, M. Salami-Kalajahi, and V. Haddadi-Asl
A-10-399-6	14:50-15:10	Prediction of Bivariate Molecular Property and Property Distributions in Free Radical Copolymerization <u>K. Jalili</u>, F. Abbasi, and M. Nasiri
A-10-661-1	15:10-15:30	On the Kinetics of the Capillary Imbibitions of a Polymer at Nanoscale with the aid of Molecular Dynamics Simulation Approach <u>S. Ahadian</u> and Y. Kawazoe
15:30-16:00 Break, Exhibition & Poster Viewing		
A-10-204-1	16:00-16:20	A Novel Model of Hydrodynamic Friction in SMC Compression Molding Considering Thermal Effects M.M. Shokrieh and <u>R. Mosalmani</u>
A-10-441-1	16:20-16:40	Ab Initio Calculations on the Interactions Between 1R-2R Isomer of Pseudoephedrinium Cation as Template and Methacrylic Acid Monomer <u>Z. Shariatinia</u>, N. Arabzadeh, and M. Abdous
A-10-334-1	16:40-17:00	Numerical Simulation of Nonlinear Mechanical Behavior of Single-walled Carbon Nanotubes M.R. Ayatollahi, <u>S. Shadlou</u>, and M.M Shokrieh
A-10-568-1	17:00-17:20	Polymers Crosslinking Process Simulation by Monte Carlo Method <u>Z. Ahmadi</u>, F. Afshar-Taromi, and H. Nazockdast

Hall A

Wednesday, Oct 21, 2009

8:15-8:45

Plenary Presentation: Prof. B. Nyström (University of Oslo, Norway)

Characterization of Structural and Dynamical Features in Aqueous Solutions of Amphiphilic Copolymers

Nanostructured Polymers

9:00-9:30

Keynote Lecture: Associate Prof. M. Atai (Iran Polymer and Petrochemical Institute)
Nanotechnology in Dentistry

Code	Time	Title
A-10-189-1	9:30-9:50	XRD Pattern of Chitin Based Polyurethane Nanocomposites <u>K.M. Zia</u> and <u>M. Barikani</u>
A-10-311-1	9:50-10:10	Barrier Film of Poly(styrene-co-butyl acrylate)/Cloisite 30B Nanocomposite Prepared via Miniemulsion Polymerization <u>M. Mirzataheri</u> , <u>A.R. Mahdavian</u> , and <u>M. Atai</u>
A-10-186-1	10:10-10:30	A Newly Surface Modified Nanosilica Incorporated in Unsaturated Polyester Nanocomposites <u>M. Sarmadian</u> and <u>M.T. Angaji</u>
10:30-11:00 Break, Exhibition & Poster Viewing		
A-10-730-1	11:00-11:20	Modification of Photocatalytic Activity of TiO ₂ Nanoparticles by Silane Surface Treatment <u>A. Mirabedini</u> , <u>A.A. Babaloo</u> , <u>S.M. Mirabedini</u> , and <u>S. Pazoki Fard</u>
A-10-401-1	11:20-11:40	Modification of Acrylic Emulsion Resins Properties by Reducing the Organic Raw Material Contents and Using Silica Nanocomposite <u>A. Dashtizadeh</u> , <u>M. Abdouss</u> , <u>H. Mahdavi</u> , and <u>M. Khorassani</u>
A-10-73-1	11:40-12:00	Nanocomposite Hydrogels with Nano-rod Shaped Bentonite <u>Z. Darvishi</u> , <u>M.J. Zohuriaan-Mehr</u> , <u>K. Kabiri</u> , and <u>A. Morsali</u>
12:30 -14:00 Lunch Break, Exhibition & Poster Viewing		

Rheology and Polymer Processing

14:00-14:20 **Keynote Lecture: Associate Prof. B. Kafashi (University of Tehran, Iran)**
The Role of Rheology in Reaction Cast Polymer Nanocomposite Fabrication

A-10-360-1	14:20-14:40	Study of TiO ₂ Pigment Effect on Rheological Properties of ABS Polymer <u>S. Farshbaf Taghinejad</u> and <u>S. Asiaban</u>
A-10-586-1	14:40-15:00	On the Stability of Fracture Path in PMMA Under to Model Loading <u>M.R. Ayatollahi</u>, <u>M.R.M. Aliha</u>, and <u>M. Rezaei</u>
A-10-704-1	15:00-15:20	Design and Manufacture of Co-rotating Glassy Barrel Twin Screw Extruder <u>M.H.N. Famili</u> and <u>M. Ako</u>
15:30-16:00		Break Poster Viewing
16:00-18:00		Closing Ceremony

Hall B

Polymer Synthesis and Characterization

9:00-9:30 **Keynote Lecture: Associate Prof. S. Mehdipour-Ataei (Iran Polymer and Petrochemical Institute, Iran)**
Preparation and Properties of Novel Polyimide Nanofoams

Code	Time	Title
A-10-523-1	9:30-9:50	Preparation of Tethered Half-Titanocene Complex on Cross Linked Polystyrene Beads for Using in Syndiospecific Polymerization of Styrene <u>S. Rahmani</u> and <u>A. A. Entezami</u>
A-10-283-2	9:50-10:10	Synthesis of Nonspherical Nano-particles by Two-stage Emulsion Polymerization <u>S. Mastour Tehrani</u>, <u>H. Eslami</u>, and <u>S. Pourmahdian</u>

A-10-709-1	10:10-10:30	Synthesis and Characterization of Epoxy/Polyurethane Interpenetrating Polymer Networks <u>A. Sayadi</u>, <u>G. Mir Mohamad Sadeghi</u>, and <u>J. Morshedian</u>
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10:30-11:00 Break, Exhibition & Poster Viewing

A-10-302-3	11:00-11:20	Dynamic Light Scattering as a New Technique to Determine Monomer Concentration in the Polymer Particles of Emulsion Polymerization Systems <u>M. Abdollahi</u>, <u>M. Hemmati</u>, and <u>F. Rekabdar</u>
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A-10-371-2	11:20-11:40	Study of Kinetic Parameters in Copolymerization of Ethylene -1-butene with $MgCl_2/SiO_2/TiCl_4/Al(Et)_3$ Catalyst System by Tagouchi Experimental Design <u>M. Vakili</u>, <u>H. Arabi</u>, <u>H. Salehi</u>, and <u>M. Ghafelebashi</u>
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A-10-126-2	11:40-12:00	Alcohol Absorbent Gels <u>K. Kabiri</u>, <u>S. Lashani</u>, <u>M.J. Zohuriaan-Mehr</u>, and <u>M. Kheirabadi</u>
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A-10-460-1	12:00-12:20	Liquid Crystalline Dendrimers: Synthesis and Characterization <u>K. Didehban</u>, <u>H. Namazi</u>, and <u>A.A. Entezami</u>
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12:30 -14:00 Lunch Break, Exhibition & Poster Viewing

Foams and Surface Coatings

A-10-93-1	14:00-14:20	The Efficacy of an Amino Silane Coupling Agent to Surface Treat Calcium Carbonate in the Presence of Phosphoric Acid <u>V.Tavakoli</u>, <u>M. Mohseni</u>, and <u>M. Rostami</u>
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A-10-694-1	14:20-14:40	A Novel Method for Microcellular Foaming of High Density Polyethylene Using Supercritical CO_2 <u>M.M. Khorasani</u> and <u>S.R. Ghaffarian</u>
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A-10-672-1	14:40-15:00	Effects of Material Parameters on Void Fraction and Cell Morphology of Polypropylene/Bagasse Foamed Composites <u>S. Ghanbar</u> and <u>H. Garmabi</u>
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A-10-399-4	15:00-15:20	Expansion Characteristics of Lost Foam Copolymer Beads. 1. Determination of VOCs by a Combined TG/DTA-GC/MS Technique <u>E. Mehravar</u>, <u>K. Jalili</u>, and <u>F. Abbasi</u>
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15:30-16:00 Break Poster Viewing

Hall C

Smart and Functional Polymers

9:00-9:30 Keynote Lecture: Associate Prof. M.J. Zohuriaan-Mehr (Iran Polymer and Petrochemical Institute, Iran)
Natural Based Superabsorbent Hydrogels

Code	Time	Title
A-10-50-1	9:30-9:50	An Efficient Method for the Synthesis of Acylals From Aldehydes Using Polystyrene Supported FeCl ₃ as a Catalys K. Parvanak
A-10-212-1	9:50-10:10	Preparation of Electrically Conductive TPV Nanocomposite Based on PP/EPDM/Nanographite: Effect of Feeding Route upon Viscoelasticity and Conductivity B. Ranjbar and A.A. Katbab
A-10-517-1	10:10-10:30	Cross-Linker-Free(<i>N</i> -Isopropylacrylamide–Vinylpyrrolidone- Acrylamide) Thermosensitive Nanogel Terpolymer: Synthesis and Characterization M. Fathi and A.A Entezami
10:30-11:00 Break, Exhibition & Poster Viewing		
A-10-58-3	11:00-11:20	Synthesis and Characterization of Polythiophene with Liquid Crystalline Azobenzene as Side Chains S.H. Hosseini , M. Shirazi , and M. Ashjari
A-10-366-1	11:20-11:40	A Novel Vapor Sensor Based on Multi-Walled Carbon Nanotube-PMMA Porous Composite Film P. Molla-Abbasi , S.R. Ghaffarian , and E. Danesh
A-10-253-5	11:40-12:00	Ceftriaxone Controlled Release by pH and Thermo-sensitive Hydrogels Based on Poly(styrene-alt-maleic anhydride) Copolymer E. Azaryan , P. Najafi Moghadam , and B. Zeynizade
A-10-269-1	12:00-12:20	Frequency Dependence Conductivity of Hydrogel Composites Based on Polyaniline and Poly(vinyl pyrrolidone) Crosslinked by γ - Irradiation M.H. Askaryan , S. Dadbin , and M. Frounchi

12:30 -14:00 Lunch Break, Exhibition & Poster Viewing

Polymer Blends and Composites

A-10-263-1	14:00-14:20	Effect of the Hydroxyapatite Nanofibers as a Novel Filler on the Mechanical Properties of an Ethanol Based One-bottle Dental Adhesive <u>M. Sadat-Shojai</u> , M. Atai, and A. Nodehi
A-10-739-1	14:20-14:40	Optimization Mechanical Behavior of PP/EPDM Blends Using Taguchi Method of Experimental Design <u>F. Arabpour</u> , H. Garmabi, and E. Effati
A-10-210-1	14:40-15:00	Fabrication and Characterization of Polymer-Zeolite Nanocomposite and Comparison the Effect of Nano-Zeolites on Gas Separation Membrane <u>H. Karkhanechi</u> , H. Kazemian, H. Nazokdast, M.H. Sayyar, and S. Moghaddam
A-10-451-1	15:00-15:20	Effect of Elastomer Type and Functionality on Mechanical Behavior of Toughened Polyamide 6 Nanocomposites <u>H. Ramezani-Dakhel</u> and H. Garmabi
15:30-16:00 Break Poster Viewing		

Hall D

Biopolymers and Biocompatible Polymers

9:00-9:30

Keynote Lecture: Dr. C. Jolly (MED- EL Medical Electronics, Austria)

Considerations for Fast and Slow Release of Simple and Complex Drugs from the Cochlear Implant Electrode Polymer Matrix

Code	Time	Title
A-10-113-1	9:30-9:50	Effect of a Novel Urethane Dimethacrylate Monomer on the Fracture Toughness of Dental Composites <u>M. Atai</u> , N. Sheibani, and A.A. Ghasemi
A-10-566-1	9:50-10:10	Synthesis and Characterization of Biodegradable Poly(urethaneurea)s Based on PCL/PEG for Tissue Engineering <u>F. Shokrolahi</u> , H. Mirzadeh, H. Yeganeh
A-10-390-1	10:10-10:30	Study on a Novel Self-assembled Injectable System for Tissue Engineering Application <u>S. Bagheri-Khoulenjani</u> and H. Mirzadeh

10:30-11:00 Break, Exhibition & Poster Viewing

A-10-559-1	11:00-11:20	Microcrystallization of Piroxicam by Polyoxyethylene(23) Lauryl Ether and Poly(ethylene oxide)–Poly(propylene oxide)–Poly(ethylene oxide) Block Copolymer <u>J. Varshosaz</u> , <u>N. Tavakoli</u> , and <u>M. Ghasemloo</u>
A-10-168-2	11:20-11:40	A New Smart Hydrogel Based on Polyacrylonitrile Grafted onto Starch/Carrageenan <u>G.R. Bardajee</u> , <u>A. Pourjavadi</u> , <u>R. Soleyman</u> , and <u>F. Safdari</u>
A-10-34-2	11:40-12:00	Lignin Reactions During the Chlorine Dioxide Delignification Stage- New Insights into the Secondary Reactions <u>Y. Hamzeh</u> , <u>G. Mortha</u> , and <u>D. Lachenal</u>
A-10-125-1	12:00-12:20	Hydrogel Composites Based on Sodium Alginate- Montmorillonite for Seed Coating <u>M. Mohebi</u> , <u>S.A. Hashemi</u> , <u>K. Kabiri</u> , and <u>M. Alinia</u>

12:30 -14:00 Lunch Break, Exhibition & Poster Viewing

Fibers, Films and Polymeric Membranes

**9:00-9:30 Keynote Lecture: Prof. Nourpanah (Amir Kabir University of Technology, Iran)
(To be announced)**

A-10-306-1	14:00-14:20	Effect of Gamma Radiation on Ethylene Vinyl Acetate Copolymer Hollow Fiber <u>F. Khodkar</u> and <u>N. Golshan Ebrahimi</u>
A-10-698-1	14:20-14:40	Three-Phase Structure and Thermal Properties of Poly(L-lactic acid) Multifilament Studied by DSC and DMA <u>M. Radjabian</u> , <u>M. Haghighat Kish</u> , and <u>N. Mohammadi</u>
A-10-386-1	14:40-15:00	Three Phase Structure of Proton-irradiated Polyester Microfibre <u>B. Mallick</u>

15:30-16:00 Break Poster Viewing

Hall E

Physical Chemistry of Polymers

9:00-9:30

Keynote Lecture: Prof. N. Mohammadi (Amir Kabir University of Technology, Iran)
The Conformational Transitions of Polyacrylonitrile (PAN) /Sodium Dodecylbenzene Sulfonate (SDBS) Complex in Dimethylformamide (DMF)

Code	Time	Title
A-10-258-1	9:30-9:50	Morphological Studies of UY-irradiated Chitin Based Polyurethane Elastomers I.A. Bhatti and M. Barikani
A-10-344-1	9:50-10:10	Measurement and Correlation of Viscosity and Density of Dilute Solution of Aqueous PEG/PVA System at Different Temperatures A. Salabat and M. Aria
A-10-413-1	10:10-10:30	Morphology Prediction in Ternary Polymer Blends M.R. Saeb , H. Heydari , M.S. Darami , A. Kiani , H.D. Ramezani , and H. Garmabi
10:30-11:00		Break, Exhibition & Poster Viewing
A-10-396-1	11:00-11:20	The Effect of Radiation-Induced Crosslinking on Crystallinity and Tensile Properties of Electron Beam Irradiated-Annealed LDPE/PAG Multi-Layer Films E. Rajaei , Y. Jahani , and M.A. Safarpour
A-10-603-1	11:20-11:40	Thermo-physical Properties of Epoxy/1,8- NDA/Barium Carbonate Composite for Coating Applications E. Sedaghat , A. Omrani , A.A. Rostami
A-10-733-1	11:40-12:00	Epoxidation of Styrene-Butadiene Rubber Using Dimethyldioxirane in Presence of Phase Transfer Catalyst: Kinetic Study F.H. Rajabi , M.M. Alavi Nikje , and T. Taslimipour
12:30 -14:00		Lunch Break, Exhibition & Poster Viewing

Polymers and Environment

14:00- 14:30 **Keynote Lecture: Miss H. Mivehchi (Iran Polymer and Petrochemical Institute, Iran)**
Environmental Aspects of Biodegradable Polymers

A-10-848-1 **14:30-14:50** **The Applications of Recycled Calcium Carbonate Powders in Tire Industry**
M.R. Vaseghi, M.H. Azadi, and M. Karimi

A-10-633-1 **14:50-15:10** **Synthesis of Polyester Polyol for Rigid Polyurethane Foams from PET Wastes**
A.H. Haghighi and F. Afshar Taromi

A-10-554-1 **15:10-15:30** **Mechanical and Morphological Properties of Waste Short Nylon Fiber Composites Based on NR/SBR**
S. Soltani, G. Naderi, M.H.R. Ghoreishy

15:30-16:00 **Break Poster Viewing**