

Program of the PNG 2010 meeting
- overview -

Monday 30.08.2010		Tuesday 31.08.2010		Wednesday 01.09.2010		Thursday 02.09.2010	
Welcome		K. L. Kiick		Chi Wu		J.-U. Sommer	
C. N. Bowman							
M. Rubinstein		W. Huck		F. Boué		B. Erman	
Coffee Break							
Cook	Suleimenov	Matsumoto	Dragan	Geissler	Costa	Engel	Economy
Otsuka	Vidal	Horkay	Zhou	Naddaf	Schmalz	Lang	Dušková-S.
Inoue	Galy	Silverstein	Holdaway	Fytas	Orakdögen	Adzima	Y.T. Joo
Tsyurupa	Makhaeva	Feng	Gorbachuk	Dai	Friedrich	Gottlieb	Poly
		Gérard	Buruiana, T.	Zrínyi	Philippova	Galina	Patrickios
Lunch		Lunch		Lunch		Farewell	
						Lunch	
V. Litvinov		Poster Session I		Poster Session II			
K. Saalwächter							
Coffee Break							
Tong	L. Valentín	P. Verdugo		C. Mieke			
Haraguchi	Kieffer						
Winter	Weber	I. Ichinose		Klüppel	Sadowski		
Karg	Pionteck			van Camp	Richtering		
Richter	Másson	van d. Gucht	Lu	Toshchevnikov	Ferse		
		Khizhnyak	Seiffert				
		Dutta	Vamvakaki				
				Conference Dinner			

Sunday Afternoon, 29.08.2010

Time

14:00 -
20:00

Registration

from
19:00

Welcoming Reception

Monday Morning, 30.08.2010

Time

09:00

Welcome

09:10

C.N. Bowman*, H. Park, C.J. Kloxin
*University of Colorado, Boulder, USA
Photoreversible Covalent Adaptable Networks

09:50

M. Rubinstein*, N. Arun Kumar, E. Stukalin, L. Leibler
*University of North Carolina, Chapel Hill, USA
Autonomous Self-Healing in Polymer Networks

10:30

Coffee Break

Session A

Session B

11:00 W.D. Cook*, F. Chen, D. Nghiem, C. Moorhoff,
J. Sun, S. Thang, C. Bowman, T. Scott
*Monash University, Clayton, Australia
**New Crosslinked Polymers Exhibiting Photo-
Induced Stress Relaxation**

I. Suleimenov*, G. Mun, N. Zhunusbekova
*AIPET, Almaty, Kazakhstan
**Kazakhstan Initiative in Nanoelectronics:
Polymer Network Applications**

11:20 H. Otsuka*, Y. Amamoto, K. Imato, M. Nishihara,
M. Kikuchi, H. Masunaga, S. Sasaki, A. Takahara
*Kyushu University, Fukuoka, Japan
**Chemically Reversible Polymer Networks Based
on Radically Exchangeable Dynamic Covalent
Bonds**

E. Vidal*, J. Juger, F. Meyer, A. Kheddar, C.
Chevrot, D. Teyssié
*Université de Cergy-Pontoise, France
**Polymeric Ionic Liquid Based Networks with
High Ionic Conductivity: New All Solid
Electrolyte Materials**

11:40 S. Inoue*, H. Aota, A. Matsumoto, M. Shibano, Y.
Matoba, K. Yokoyama
*Kansai University, Osaka, Japan
**Molecular Design of Core-Shell Type Allylic
Nanoparticles Based on Crosslinking
Multiallyl/Multivinyl Copolymerizations**

H. Benes, J. Galy*, J.-F. Gérard, L. Valette
*Université de Lyon, Lyon, France
**Hybrid Organic-Inorganic Epoxy Networks
Prepared from Sol-Gel Process**

12:00 M. P. Tsyurupa*, Z.K. Blinnikova, Yu.A. Davidovich,
V.A. Davankov
*Russian Academy of Sciences, Moscow, Russia
**Hypercrosslinked Polystyrene with Maximum
Possible Crosslinking Degrees**

E. Kozhunova, E. Makhaeva*
*Moscow State University, Moscow, Russia
**Thermosensitive Hydrogels Based on Semi-
interpenetrating Networks**

Monday Afternoon, 30.08.2010

Time

12:30

Lunch

14:00

V. Litvinov*

*DSM Resolve, Geleen, Netherlands

What One Can Learn about Polymer Networks Using Solid-State NMR?

14:40

K. Saalwächter*, J. López Valentín, A. Mujtaba, M. Beiner, T. Thurn-Albrecht,
A. Papon, F. Lequeux, H. Montes

*Martin-Luther-Universität Halle-Wittenberg, Halle, Germany

***Filler Effects on Crosslink Density, Spatial Inhomogeneities,
and Swelling of Elastomers***

15:10

Coffee Break

Session A

Session B

15:40

L. Xiong, X. Hu, T. Wang, Z. Lin, X. Liu, Z. Tong*

*SCUT, Guangzhou, China

***Fabrication and Stimuli-Responsive Properties
of Polymer/Hectorite Nanocomposite Ionic
Hydrogels with Ultrahigh Tensibility and High
Transparency***

J. L. Valentín*, M.A. Malmierca, I. Mora-Barrantes,

A. Marcos-Fernandez, A. Rodríguez, L. González, K.
Saalwächter

*CSIC, Madrid, Spain

***Network Structure and Chain Dynamics in Diene
Rubbers Vulcanized with Different Cure Systems***

16:00

K. Haraguchi*, Y. Xu

*Kawamura Inst. of Chem. Research, Chiba, Japan

***Molecular Characteristics of Poly(N-
Isopropylacrylamide) Separated from
Nanocomposite Gels by Removal of Clay from
the Polymer/Clay Network***

M. Aldridge, L. Sui, J. Kieffer*

*University of Michigan, Ann Arbor, USA

***Insights into Polymer Network Formation from
Concurrent Brillouin and Raman Light
Scattering and Numerical Modeling***

16:20

H. H. Winter*, K. Lania, F. Li, M. Dressler, X. Wang

*National Science Foundation, Arlington, USA

***Entropically Driven Exfoliation of Clay in a Clay-
Polymer Physical Gel***

J. Weber*, A. Wilke, L. Bergström

*Max-Planck-Institute of Colloids and Interfaces,
Potsdam, Germany

***Stable, Unstable and Reversible Porosity in
Mesoporous Polymer Networks***

16:40

T. Hellweg, M. Karg*, E. Carbó-Argibay, I. Pastoriza-
Santos, J. Perez-Juste, L. M. Liz-Marzán

*Universität Bayreuth, Bayreuth, Germany

***Responsive Nanoparticles/Microgel Hybrids with
Tunable Optical Properties***

J. Pionteck*, Y. Müller, L. Häußler

*Leibniz Institute of Polymer Research, Dresden,
Germany

***Changes in the Curing Behaviour of Reactive
Epoxy-CTBN Rubber Blends Analysed by
Pressure-Volume-Temperature Measurements***

17:00

S. Richter*, M. Saphiannikova, H. Kreyenschulte,
G. Heinrich

*Leibniz Institute of Polymer Research, Dresden,
Germany

***Filler Flocculation Kinetics in the Light of
Jamming Physics: New Insights in Filled
Polymer Systems?***

M. Másson*, Ö. V. Rúnarsson, M. Hjálmarsdóttir

*University of Iceland, Reykjavik, Iceland

***N-Quaternized Chitosan Derivates and
Investigation of the Structure Anti-Bacterial
Activity Relationship***

Tuesday Morning, 31.08.2010

Time

09:00

K. L. Kiick*

*University of Delaware, Newark, USA

Assembly and Characterization of Heparin-functionalized Hydrogels

09:40

W. Huck*, J. Gautrot, B. Trappmann, J. Connelly, F. Watt

*University of Cambridge, Cambridge, United Kingdom

The Effects of Surface Chemistry on Epidermal Stem Cell Differentiation

10:20

Coffee Break

Session A

Session B

10:50

A. Matsumoto*

*Kansai University, Osaka, Japan

Construction of Crosslink-System-Materials Utilizing Designed Network-Polymer-Precursor Modules

E.S. Dragan*, F. Bucatariu

*Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania

Cross-linked Single Component Multilayer Thin Films Based on Poly(Vinyl Amine) and Their Interaction with Proteins

11:10

F. Horkay*, P.J. Basser, A.M.Hecht, E.Geissler

*National Institutes of Health, Bethesda, USA

Hierarchical Organization of Proteoglycans in Cartilage

Q. Ye, F. Zhou*

*Chinese Academy of Sciences, Lanzhou, China

Surface-Initiated Polymerization from Variable Substrates Modified with Sticky Biomimic Initiator

11:30

M.S. Silverstein*, D. David, J. Lumelsky, T. Gitli

*Israel Institute of Technology, Haifa, Israel

Biodegradable and Hydrogel-Filled Porous Polymers through Emulsion Templating

J.A. Holdaway*, K.J. Edler

*University of Bath, Bath, United Kingdom

Nano-structured Glucose Responsive Hydrogel Films from Polymer-Surfactant Composites

11:50

Y. K. Feng*, H.Y. Zhao, J.T. Guo

*Tianjin University, Tianjin, China

Synthesis and Characterization of Polyester-Hydrophilic PEO Networks as Multifunctional Biomaterials

V.V. Gorbachuk*, M.A.Ziganshin

*Kazan State University, Kazan, Russia

Biomimetic Cooperative Properties of Cross-linked Hydrophilic Polymer Giving It Enhanced Affinity for Hydrophobic Solvents upon Hydration

12:10

A. Gallon, F. Lortie, J.-F. Gérard*

*INSA, Villeurbanne, France

Nanostructuring of Polymer Networks from the Introduction of Hydrogen Bond-Based Self-Associating Units - Epoxy Networks Based Both on Covalent and Physical Crosslinks

T. Buruiana*, V. Melinte, F. Jitaru, E.C. Buruiana

*Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania

Functionalized Urethane Monomers for Dental Formulations. Obtaining, Properties and Photobehavior

Tuesday Afternoon, 31.08.2010

Time

12:30

Lunch

13:30

POSTER SESSION I

15:20

P. Verdugo*

*University of Washington, Friday Harbor, USA

Biopolymer Self-Assembly and Carbon Cycling in the Ocean

16:00

I. Ichinose*

*National Institute for Materials Science, Ibaraki, Japan

Nanoporous Ultrathin Protein Films for Water Purification

Session A

Session B

16:40

W. van Camp*, T. Dispinar, F.E. Du Prez

*Ghent University, Gent, Belgium

Poly(ethylene glycol) Based Degradable Cryogels

W. Richtering*, J. Meid, S. Lehmann, T. Friedrich,

B. Tieke

*RWTH Aachen University, Aachen, Germany

Temperature Sensitive Composite Hydrogels

17:00

P.J. Skrzyszewska, F.A. de Wolf, M.A. Cohen

Stuart, J. van der Gucht*

*Wageningen University, Wageningen, Netherlands

Self-assembled Polymer Networks with Precisely Defined Functionality: Structure, Rheology and Fracture

Y. Lu*, M. Ballauff

*Helmholtz-Zentrum Berlin für Materialien und Energie, Berlin Germany

Thermosensitive Core-Shell Microgels as Active "Nanoreactors" for Metal Nanoparticles

17:20

S. Khizhnyak*, P. Pakhomov, P. Komarov, M. Ovchinnikov

*Tver State University, Tver, Russia

Supromolecular Polymeric Network in Hydrogels Based on L-Cysteine and AgNO₃

S. Seiffert*, D. A. Weitz

*Harvard University, Cambridge, USA

Functional Microgels Tailored by Droplet Microfluidics

17:40

N.K. Dutta*, M.Y. Truong, S. Mayavan,

N.R. Choudhury, M. Kim, C.M. Elvin, A.J. Hill

*University of South Australia, Mawson Lakes, Australia

Tunable Biopolymer Derived from Resilin-mimetic Protein Rec1-resilin

K.E. Christodoulakis, M. Vamvakaki*

*Foundation for Research and Technology, Heraklion, Greece

Contraphilic Core-Shell Microgel Particles

Wednesday Morning, 01.09.2010

Time

09:00

Chi Wu*

*Chinese University of Hong Kong, Hong Kong, China

The Slow Relaxation Mode - From Solutions to Gel Networks

09:40

F. Boué*

*LLB, Gif-sur-Yvette, France

Chain Response to Deformation, Filler Displacement, and Mechanical Reinforcement in Polymer Nanocomposites

10:20

Coffee Break

Session A

Session B

10:50

K. László, A. Fluerasu, A. Moussaïd, E. Geissler*

*Université J. Fourier de Grenoble, St Martin d'Hères, France

Kinetics of Jammed Systems

M. Gonçalves, V. Pinto, R. Dias, M.R. Costa*

*LSRE, Universidade do Porto, Porto, Portugal

Kinetic Modeling of the Inverse Suspension Production of Acrylic Gels Using In-Line FTIR-ATR Monitoring and Off-Line SEC/RI/MALLS Product Characterization

11:10

A.A. Naddaf*, H.-J. Bart

*Kaiserslautern University of Technology, Kaiserslautern, Germany

Transport Kinetics in Thermosensitive Hydrogels

H. Schmalz*, S. Reinicke, J. Schmelz, A. Lapp, M. Karg, T. Hellweg

*Universität Bayreuth, Bayreuth, Germany

Smart Hydrogels Based on Double Responsive Triblock Terpolymers

11:30

R. Raccis, R. Roskamp, U. Jonas, W. Knoll, G. Fytas*

*Institute of Electronic Structure and Laser-FORTH, Heraklion, Greece

Tracer Diffusion and Submicroscopic Structure in Grafted Hydrogels

N. Orakdöğen*, O. Okay

*Istanbul Technical University, Istanbul, Turkey

Poly(N,N-Dimethylacrylamide) Hydrogels: Formation by Free Radical Crosslinking Copolymerization, Characterization and Gel Properties

11:50

Zhuojun Dai*, Chi Wu

*Chinese University of Hong Kong, Hong Kong, China

Comparison of Internal Motions of Linear Chains and a Gel Network

T. Friedrich*, B. Tieke

*University of Cologne, Cologne, Germany

Thermoresponsive Copolymer Hydrogels Based on N-Isopropylacrylamide Prepared via Gamma-ray Induced Polymerization of Micellar Monomer Solutions

12:10

M. Zrínyi*

*Semmelweis University, Budapest, Hungary

Electrically and Magnetically Induced Motility of Polymer Gels and Smart Composites

O.E. Philippova*, J.A. Shashkina, V.S. Molchanov

*Moscow State University, Moscow, Russia

Responsive Properties of Networks Consisting of Polymer and Micellar Chains

Wednesday Afternoon, 01.09.2010

Time

12:30	Lunch	
13:30	POSTER SESSION II	
15:20	<u>C. Miehe*</u> *University of Stuttgart, Germany <i>Micromechanism–Based Continuum Modeling of Dissipative Effects in Rubbery and Glassy Polymers</i>	
	Session A	Session B
16:00	<u>M. Klüppel*</u> , H. Lorenz *Deutsches Institut für Kautschuktechnologie, Hannover, Germany <i>A Micro-Structure Based Model of Stress Softening and Hysteresis of Filled Polymer Networks</i>	<u>G. Sadowski*</u> *Technische Universität Dortmund, Dortmund, Germany <i>The DFG Priority Programme Intelligent Hydrogels</i>
16:20	<u>V. Ermatchkov*</u> , L. Ninni Schäfer, H. Hasse, G. Maurer *University of Kaiserslautern, Kaiserslautern, Germany <i>Swelling of N-Isopropyl Acrylamide Hydrogels in Aqueous Solutions: Experimental Results and Modelling</i>	N. Orakdöğen, B. Erman, F. Topuz, <u>O. Okay*</u> *Istanbul Technical University, Istanbul, Turkey <i>Swelling and Elasticity of Responsive DNA Hydrogels</i>
16:40	<u>V. Toshchevikov*</u> , Yu. Gotlib, G. Heinrich *Leibniz Institute of Polymer Research, Dresden, Germany <i>Shear Dynamic Moduli of Statically Stretched Polymer Networks</i>	<u>B. Ferse*</u> , M. Graf, F. Krahl, K.-F. Arndt *Technische Universität Dresden, Dresden, Germany <i>Photopolymerization as Alternative Concept for Synthesis of Poly(N-Isopropylacrylamide)-Clay Nanocomposite Hydrogels</i>
18:00	Buses Depart for Visitation of an Ancient Mine (UNESCO World Cultural Heritage "Rammelsberg")	
20:00	Conference Dinner	

Thursday Morning, 02.09.2010

Time

09:00

J.-U. Sommer*

*Leibniz Institute of Polymer Research, Dresden, Germany

Network Properties as Revealed by Segmental Order

09:40

B. Erman*

*Koc University, Istanbul, Turkey

Native Proteins as Physical Networks - Energy and Geometry Fluctuations and Their Relation to Function

10:20

Coffee Break

Session A

Session B

10:50

J. Engel*, O. Peleg, Y. Rabin, M. Kröger

*ETH Zürich, Zürich, Switzerland

Elastic Lennard Jones model for soft solids, networks and gels

Z. Parkar, J. Economy*

*University of Illinois, Urbana, USA

Design of 3-D Polymer Networks with Liquid Crystalline Character

11:10

M. Lang*, J.-U. Sommer

*Leibniz Institute of Polymer Research, Dresden, Germany

Analysis of Residual Segment Orientation in Entangled Networks Using Computer Simulations

M. Dušková-Smrčková*, K. Dušek, H. Valentová

*Academy of Sciences of the Czech Republic, Prague, Czech Republic

Diluted Non-aqueous Networks from Star-shaped Precursors Pre-Gel and Post-Gel Effects of Diluent

11:30

B.J. Adzima*, C.J. Kloxin, C.N. Bowman

*University of Colorado, Boulder, USA

Fracture Healing of a Polymer Network via Hysteresis Heating

Y.T. Joo*, Y. Kim

*Inje University, Gimhae, Korea

Preparation of Antibacterial MWNT/PDMAEMA Nanocomposites via an Atom Transfer Radical Polymerization (ATRP)

11:50

Y. Yagen, O. Ben David, E. Dvash, I. Levine,

L. Laufer, M. Gottlieb*

*Ben Gurion University, Beer Sheva, Isreal

Design of polymeric networks for implantable devices

J. Poly*, D. Taton

*Université de Haute Alsace, Mulhouse, France

Controlled Radical Crosslinking Copolymerizations: a General Concept for Miscellaneous Macromolecular Architectures and Various Applications

12:10

M. Krawczyk, J.B. Lechowicz, H. Galina*

*Rzeszów University of Technology, Rzeszów, Poland

Forced Gelation of Non-gelling Systems in Step Polymerization of Multifunctional Monomers

C.S. Patrickios*, N.A. Hadjiantoniou, M.D. Rikkou,

K.S. Pafiti, E. Loizou, L. Porcar, P.D. Butler

*University of Cyprus, Nicosia, Cyprus

Synthesis and Characterization of Well-defined, Functional End-linked Polymer Conetworks

12:30

Farewell
and
Lunch

POSTER SESSION I

Tuesday Afternoon

No.

- 1 Nyczyk, A.*; Paluszkiwicz, C.; Hasik, M.; Cypryk, M.; Pospiech, P.
*AGH University of Science and Technology, Kraków, Poland
Preceramic networks prepared from methylvinylpolysiloxanes
- 2 Bukowska, A.; Bukowski, W.; Matkiewicz, K.*
*Rzeszów University of Technology, Rzeszów, Poland
HEMA Terpolymers as Supports for Chiral (Salen)Mn(III) Complex and Their Application in Asymmetric Epoxidation of Selected Olefins
- 3 Murias, P.*; Galina, H.; Maciejewski, H.
*Rzeszów University of Technology, Rzeszów, Poland
Epoxy Functionalized Siloxanes as Fire Retardants and Modifiers of Mechanical Properties of Epoxy-Amine Networks
- 4 Karadağ, E.*; Kundakçı, S.; Üzümlü, Ö.B.
*Adnan Menderes University, Aydın, Turkey
Swelling Characterization and Dye Sorption Studies of Novel Semi IPN's: Acrylamide/2-acrylamido-2-methyl-1-propanesulfonic acid/PEG hydrogels
- 5 Üzümlü, Ö.B.*; Karadağ, E.
*Adnan Menderes University, Aydın, Turkey
Dye sorption and water uptake properties of chemically crosslinked acrylamide/sodium copolymers and semi-interpenetrating polymer networks
- 6 Ghaemy, M.*; Amini Nasab, S.M.
*University of Mazandaran, Babolsar, Iran
Synthesis and identification of organosoluble polyamides and polyimides: Thermal, photophysical and chemiluminescence properties
- 7 Suleimenov, I.*; Mun, G.; Rahmetullaeva, R.; Mun, E.; Reva, Yu.; Zaitova, L.; Nakan, U.
*AIPET, Almaty, Kazakhstan
Trigger-Like Structures Based on Stimuli-Sensitive Hydrogels
- 8 Suleimenov, I.*; Yergozhin, Ye.; Mun, G.; Panchenko, S.; Vasin, V.; Gapparova, G.
*AIPET, Almaty, Kazakhstan
Artificial Neural Networks Based on Stimuli-Sensitive Hydrogels
- 9 Suleimenov, I.*; Mun, G.; Reva, Yu.; Semenyakin, N.; Bobrovnikov, D.; Timofeyev, A.; Konyrbayeva, Zh.; Bakytbekov, R.
*AIPET, Almaty, Kazakhstan
Printing Devices Based on Stimuli-Sensitive Hydrogels
- 10 Turgumbaeva, R. Kh.*; Abdikarimov, M.N.; Zhubanov, B.A.
*Kazakh National Pedagogical University, Almaty, Kazakhstan
Synthesis of Modified Polyurethanes with Various Additives of Industrial Wastes
- 11 Aoun, N.*; Johannsmann, D.
*Clausthal University of Technology, Clausthal-Zellerfeld, Germany
Simulation of Diffusivity in Partially Crosslinked Gels
- 12 Bünsow, J.; Johannsmann, D.*
*Clausthal University of Technology, Clausthal-Zellerfeld, Germany
Functional Hydrogel Coatings for Biomedical Applications Produced By Electrochemically Induced Polymerization

- 13 Grube, S.*; Oppermann, W.
*Clausthal University of Technology, Clausthal-Zellerfeld, Germany
Hydrogels Prepared by Thiol-Ene-Polymerization and Their Characterization by Dynamic Light Scattering
- 14 Seiffert, S.*; Menut, P.; Sprakel, J.; Weitz, D.A.
*Harvard University, Cambridge, Massachusetts, USA
Size Doesn't Matter: Elasticity of Compressed Pastes of Brownian and Non-Brownian Microgels
- 15 Bertz, A.*; Wöhl-Bruhn, S.; Bunjes, H.; Menzel, H.
*Technische Universität Braunschweig, Braunschweig, Germany
Hydroxyethyl starch-polyethylene glycol methacrylate Hydrogels for Drug Delivery
- 16 Kamoun, E.A.*; Menzel, H.
*Technische Universität Braunschweig, Braunschweig, Germany
Hydrogels for Biomedical Applications by Visible Light Induces Crosslinking Using Carboxylated Camphorquinone as New Photoinitiator
- 17 Harling, S.*; Meola, G.; Schulthess, A.; Meincke, O.
*Zurich University of Applied Sciences Winterthur, Winterthur, Switzerland
Latent reactive polyurethane adhesives
- 18 Usatenko, Z.*
*Institute for Condensed Matter Physics, Lviv, Ukraine
Adsorption of star polymers: massive field theory approach
- 19 Ionov, A.*; Rentsch, R.
*Ioffe Physico-Technical Institute, St. Petersburg, Russian Federation
Resonant Tunneling in Polymer with Charge Injection Doping
- 20 Pavlova, L.A.*; Timofeeva, G.I.; Maerle, K.V.; Davankov, V.A.
*Nesmeyanov-Institute of Organo-Element Compounds RAS, Moscow, Russian Federation
3D Nanostructures Based on Poly(4-Vinyl-N-Alkylpyridinium) Salts
- 21 Orakdöğen, N.*; Jonas, U.; Knoll, W.
*Istanbul Technical University, Istanbul, Turkey
Swelling Behavior of Thermoresponsive Hydrogels from Photo-Crosslinked Terpolymers
- 22 Uygun, A.*; Kirisiti, M.; Oksuz, L.; Manolache, S.; Ulusoy, S.
*Süleyman Demirel University, Isparta, Turkey
Modification and Characterization of Chitosan Using Rf-Plasma
- 23 Takamori, T.*; Aota, H.; Matsumoto, A.
*Kansai University, Osaka, Japan
Design of Nanogel- or Microgel-like Particles Based on Free-Radical Crosslinking Multivinyl Polymerization under Inhomogeneous Polymerization Conditions
- 24 Tamezawa, H.*; Inoue, S.; Aota, H.; Matsumoto, A.; Shibano, M.; Matoba, Y.; Yokoyama, K.
*Kansai University, Osaka, Japan
Predominant Methyl Radical Initiation Preceded by β -Scission of Alkoxy Radical in Allyl Polymerization with Organic Peroxide Initiators at Elevated Temperatures
- 25 Yamada, K.*; Shimazaki, R.; Kashiwada, A.; Matsuda, K.
*Nihon University College of Industrial Technology, Chiba, Japan
Removal of Bisphenol A by Porous Chitosan Beads through Enzymatic Quinone Oxidation

- 26 Chatani, S.*; Otani, G.; Sanefuji, K.; Hattori, T.; Nodono, M.; Uozu, Y.; Ito, M.
*Mitsubishi Rayon Co., Ltd., Hiroshima, Japan
Periodic Refractive Index Distribution Formed in Photopolymers - Formation Mechanism and Structural Control
- 27 Li, Y.*; Kleijn, M.; Slaghek, T.; Timmermans, J.; Stuart, M.C.; Norde, W.
*Laboratory of Physical Chemistry and Colloid Science, Wageningen, The Netherlands
Interaction of between lysozyme and oppositely charged starch polymer microgels
- 28 Ivaneyko, D.*; Toshchevikov, V.; Saphiannikova, M.; Heinrich, G.
*Leibniz Institute of Polymer Research, Dresden, Germany
Mechanical Properties of Magneto-Sensitive Elastomers in Homogeneous Magnetic Field
- 29 Chassé, W.*; Saalwächter, K.
*Martin-Luther-Universität Halle-Wittenberg, Halle, Germany
NMR investigations on dry and swollen solution cross-linked polymer networks
- 30 Buruiana, E.C.*; Jitaru, F.; Buruiana, T.; Olaru, N.
*Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
Synthesis and properties of block copolymers containing cinnamate and adamantane units prepared by atom transfer radical polymerization
- 31 Dragan, E.S.*; Dinu, M.V.
*Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
Novel composites based on chitosan and natural zeolites with enhanced adsorption properties for heavy metal ions
- 32 Pana, A.-M.*; Bandur, G.; Rusnac, L.; Sillion, M.
*University Politehnica of Timisoara, Timisoara, Romania
Thermal analysis of glycopolymers obtained by copolymerization of a new D-glucose oligomer with 2-hydroxy-propyl acrylate
- 33 Rose, S.*; Hourdet, D.; Marcellan, A.; Narita, T.
*PPMD - ESPCI, Paris, France
Nano-hybrids PDMA/silica hydrogels: from structure to properties
- 34 Vernaëz, O.*; Tomassi, A.
*PDVSA Intevep, Los Teques, Venezuela
Free Radical Polybutadiene Crosslink Reaction Controlled by an Alkylbenzene Solvent
- 35 Antunes, F.E.*; Marques, E.F.; Miguel, M.G.; Lindman, B.
*University of Coimbra, Coimbra, Portugal
Polymer-vesicle association
- 36 Raue, M.*; Martins, J.; Küppers, M.; Stapf, S.; Mang, T.; Blümich, B.
*RWTH Aachen University, Aachen, Germany
Hydrogels with a higher charge density for switchable porous media
- 37 Schneider, S.*; Richtering, W.
*RWTH Aachen University, Aachen, Germany
Ion Distribution inside and around a Charged Permeable Sphere - a Model System for Nanogel Particles
- 38 Widling, C.*; Sprick, R.S.; Scherf, U.; Thomas, A.
*Bergische Universität Wuppertal, Wuppertal, Germany
Carbonyl Functionalized Microporous Ladder Polymers with High Surface Area

- 39 Graf, M.*; Ferse, B.; Krahl, F.; Arndt, K.-F.
*Technische Universität Dresden, Dresden, Germany
Smart shake-gels: Investigations on gelation behavior in aqueous mixtures of poly(N-isopropylacrylamide) and clay
- 40 Lehmann, S.*; Arndt, K.-F.
*Technische Universität Dresden, Dresden, Germany
Characterization of Microgels of Poly(N-vinylamide)-Clay-complexes
- 41 Kuszpet, N.; Edelman, R.; Ramon, O.*; Livney, Y.L.
*Israel Institute of Technology, Haifa, Israel
Hydration-Mediated Effects of Saccharide Stereochemistry on PNIPA Gel Swelling
- 42 Aldridge, M.*; Shankar, C.; Zhen, C.G.; Kieffer, J.
*University of Michigan, Ann Arbor, Michigan, USA
Concurrent Brillouin and Raman Light Scattering for the Investigation of Polymer Network Formation – Case of Dicyclopentadiene (DCPD)
- 43 Snorradóttir, B.S.*; Thorsteinnsson, F.; Guðnason, P.I.; Másson, M.
*University of Iceland, Reykjavik, Iceland
Experimental Design for Optimization of the Material Properties of Silicone Drug Delivery Matrix and in vitro Transdermal Permeations Studies

POSTER SESSION II

Wednesday Afternoon

No.

- 1 Abbasi, F.*; Ghoreishi, S.G.; Jalili, K.
*Sahand University of Technology, Tabriz, Iran
Surface Modification of PDMS through Networking of Surface Proximal Layers
- 2 Alizadeh, M.; Abbasi, F.*; Jalili, K.
*Sahand University of Technology, Tabriz, Iran
Swelling Properties and Confinements Effects on the Kinetics of Silicone-Based IPNs Formation
- 3 Mehrabova, M.A.*
*Azerbaijan National Academy of Sciences, Baku, Azerbaijan
Thermo-Electromotive Force of Hot Electrons in a Quantum Well
- 4 Topchiyeva, S.A.*; Mehrabova, M.A.; Babaev, E.T.; Hasanov, N.H.; Huseynov, N.I.
*Azerbaijan National Academy of Sciences, Baku, Azerbaijan
Photodetectors on the Base of Heterocontact Semiconductor - Snake Venom
- 5 Radoman, T.S.*; Nikolić, V.B.; Veličković, S.J.
*University of Belgrade, Belgrade, Serbia
Swelling of Pectin Modified Methacrylic Acid Hydrogels
- 6 Benito-Lopez, F.*; Byrne, R.; Diamond, D.
*Dublin City University, Dublin, Ireland
Photo-responsive Ionogels: Versatile Flow Control in Micro-fluidic Manifolds
- 7 Byrne, R.*; Benito-Lopez F.; Diamond, D.
*Dublin City University, Dublin, Ireland
Photo-responsive ionogels
- 8 Sheridan, R.*; Bowman, C.
*University of Colorado, Boulder, Colorado, USA
Factors controlling fracture healing performance in thermoreversible polymer networks
- 9 Shuttelworth, P.*; Budarin, V.; MacQuarrie, D.; Clark, J.
*University of York, York, United Kingdom
Novel surface controllable mesoporous polysaccharide derived materials and their uses
- 10 Tisserand, Ch.; Brunel, L. (Kotzev, R.*; Meunier, G.*)
*Formulation, L'Union, France
Laser Microrheology for soft materials
- 11 Benediktsdóttir, B.E.*; Gaware, V.S.; Jenssen, K.J.; Hansen, P.R.; Másson, M.
*University of Iceland, Reykjavik, Iceland
A novel and selective synthesis of N-alkyl-N,N-dimethyl- and N,N,N-trimethyl chitosan
- 12 Benediktsdóttir, B.E.*; Sørensen, K.K.; Jenssen, K.J.; Másson, M.
*University of Iceland, Reykjavik, Iceland
Fluorescent end labeling of N,N,N-trimethyl chitosan
- 13 Gaware, V.*; Rúnarsson, Ö.V.; Benediktsdóttir, B.E.; Song, W.; Mano, J.F.; Másson, M.
*University of Iceland, Reykjavik, Iceland
Optimization of the tert-butyl dimethylsilyl protection of Chitosan, useful for Functionalized Superhydrophobic Biomimetic Films

- 14 Sato, T.*; Matsunaga, T.; Ichinokawa, A.; Kanou, A.
*The Society of Polymer Science, Saitama, Japan
Synthesis and Characterization of Hydrogel, which Contains Anionic and Cationic Groups in Side Chain, to Drug Delivery Contact Lens
- 15 Enomoto, T.*; Aota, H.; Matsumoto, A.
*Kansai University, Osaka, Japan
Specific Network Structure Formation in Free-Radical Crosslinking Monomethacrylate/Multimethacrylate Copolymerization Equilibrated near Ceiling Temperatures
- 16 Himei, K.*; Hamamoto, H.; Aota, H.; Matsumoto, A.
*Kansai University, Osaka, Japan
Degradation of Extreme Network Polymers to Their Precursors by Ultrasonic Irradiation
- 17 Gotoh, T.*; Tanaka, K.; Sakohara, S.
*Hiroshima University, Hiroshima, Japan
Separation of Phosphate Ions by Thermosensitive Gel with Tertiary Amino Groups
- 18 Hoffmann, M.*; Lang, M.; Sommer, J.-U.
*Leibniz Institute of Polymer Research, Dresden, Germany
Cross-linked Polymer Brushes
- 19 Toshchevnikov, V.*; Saphiannikova, M.; Heinrich, G.
*Leibniz Institut of Polymer Research, Dresden, Germany
Light-induced deformation of photo-sensitive elastomers bearing azobenzene chromophores in side chains
- 20 Gaitzsch, J.*; Appelhans, D.; Schwille, P.; Voit, B.
*Leibniz Institute of Polymer Research, Dresden, Germany
pH-Sensitive and Cross-linkable Polymersomes for Applications in Synthetic Biology
- 21 Schwenke, K.*; Lang, M.; Sommer, J.-U.
*Leibniz Institute of Polymer Research, Dresden, Germany
Polymer Networks from Binary 4-Arm-Star Polymer Solutions: A Monte Carlo Study
- 22 Tshmel, A.*; Jehnichen, D.; Hofmann, T.; Pakhomov, P.; Khizhnyak, S.; Galitsyn, V.
*Ioffe Physico-Technical Institute, St. Petersburg, Russian Federation
Crystalline phase in gelled ultra high molecular weight polyethylene
- 23 Pletneva, V.A.; Molchanov, V.S.*; Philippova, O.E.
*Lomonosov Moscow State University, Moscow, Russian Federation
Effect of polymer structure on rheological properties of its mixture with wormlike micelles
- 24 Tsyurupa, M.P.*; Blinnikova, Z.K.; Davidovich, Yu.A.; Davankov, V.A.
*Nesmeyanov-Institute of organo-element compounds RAS, Moscow, Russian Federation
Hypercrosslinked Polystyrene with Maximum Possible Crosslinking Degrees
- 25 Lange, F.*; Kurakazu, M.; Akagi, Y.; Chung, U.; Sakai, T.; Saalwächter, K.
*Martin-Luther-Universität Halle-Wittenberg, Halle, Germany
NMR observation of "quantized" defect structures in hydrogels
- 26 Papon, A.; Schäler, K.*; Saalwächter, K.
*Martin-Luther-University Halle-Wittenberg, Halle, Germany
Solid state ¹H NMR investigations of glassy shells in model-filled rubbers

- 27 Sadowski, G; Poggendorf, S.*
*Technische Universität Dortmund, Dortmund, Germany
Diffusion of PEG in NIPAAm-Hydrogel measured by Confocal Raman Spectroscopy
- 28 Große, A.*; Klatt, S.; Ferse, B.; Arndt, K.-F.
*Technische Universität Dresden, Dresden, Germany
Smart Hydrogel Beads in Different Dimensions
- 29 Doğu, S.*; Oppermann, W.
*Clausthal University of Technology, Clausthal-Zellerfeld, Germany
Effect of Measurement Temperature on the Excess Scattering from Poly(N-isopropylacrylamide) Hydrogels at Different Crosslinker Concentrations
- 30 Tuncaboylu, D.C.*; Okay O.
*Istanbul Technical University, Istanbul, Turkey
Organic - Inorganic Hybrid Cryogels with Two Generations of Pores
- 31 Uğur, Ş.*; Yargı, Ö.; Pekcan, Ö.
*Istanbul Technical University, Istanbul, Turkey
Oxygen Diffusion into Clay-Doped PS Films by Using Fluorescence Technique
- 32 Hsu, K.C.*; Jhuang, J.S.; Hung, W.H.
*National Taiwan Normal University, Taipei, Taiwan
Effects of an Amphoteric Hydrogel on the Curing Properties of Cementitious Materials
- 33 He, T.*; Fabio, D.L.; Neo, K.C.; Brendan, B.; Chai, L.L.
*Institute of Chemical and Engineering Sciences, Jurong Island, Singapore
Direct Synthesis of pH-Responsive Branched Polymer Nanoparticles
- 34 Naik, J.B.*; Mishra, S.
*North Maharashtra University, Jalgaon, India
Esterification effect of maleic anhydride on swelling and mechanical properties of natural fiber/polystyrene composites
- 35 Nigam, I.*; Rai, J.S.P.
*Harcourt Butler Technological Institute, Kanpur, India
Effect Of Higher Acrylates On Water Resistance Of Crosslinked Films Of MMA
- 36 Tomassi, A.*; Vernaez, O.
*PDVSA - Intevep, Los Teques, Venezuela
Structural differences between crosslinking of polyacrylamide with free radicals and chromium acetate (III) near the liquid solid transition
- 37 Airinei, A.*; Stelescu, D.; Homocianu, M.; Timpu, D.; Berechet, D.
*Petru Poni' Institute of Macromolecular Chemistry, Iasi, Romania
Properties of some EPDM/modified-organoclay nanocomposites
- 38 Alexandru, M.*; Cazacu, M.; Nistor, A.
*Petru Poni' Institute of Macromolecular Chemistry, Iasi, Romania
New crosslinked poly(siloxane-urethane)s
- 39 Nistor, A.*; Alexandru, M.; Cazacu, M.; Vlad, A.; Vlad, S.
*Petru Poni' Institute of Macromolecular Chemistry, Iasi, Romania
Surface properties of polyurethane modified by a dihydroxy-terminated polydiorganosiloxane

- 40 Vlad, S.; Ciobanu, C.; Macocinschi, D.; Filip, D.; Nistor, A*; Gradinaru, L.M.
*Petru Poni' Institute of Macromolecular Chemistry, Iasi, Romania
Nanoporous Membranes Based on Polyetheruethanes Filled with Hydroxypropyl Cellulose
- 41 Bukowska, A.*; Bukowski, W.
*Rzeszów University of Technology, Rzeszów, Poland
Peculiarity of Sorption of Metal Ions on Polyamine Modified Glycidyl Methacrylate Gels in Organic Media
- 42 Bukowska, A.*; Bukowski, W.
*Rzeszów University of Technology, Rzeszów, Poland
Polyamine Functionalized Glycidyl Methacrylate Terpolymers As New Nucleophilic Scavengers