

73<sup>rd</sup> PMM:

## New Frontiers in Macromolecular Science:

### From Macromolecular Concepts of Living Matter to Polymers for Better Quality of Life

*Chairman:* F. Rypáček

*Honorary Chairmen:* H. Morawetz, J. Kopeček, H. Ringsdorf

The Institute of Macromolecular Chemistry of the Academy of Sciences of the Czech Republic continues in organizing the world-acclaimed series of Prague Meetings on Macromolecules. In 2009, the Institute will celebrate **50<sup>th</sup> anniversary of its foundation**. Therefore the PMM 2009 being the 73<sup>rd</sup> symposium of Prague Meetings on Macromolecules will be somewhat special!

#### INTERNATIONAL ADVISORY COMMITTEE

A.C. Albertsson (Sweden) E. Schacht (Belgium)  
K. Kataoka (Japan) H.W. Spiess (Germany)  
J. Kopeček (USA) M. Stamm (Germany)  
L. Leibler (France) K. Ulbrich (Czech Republic)  
C.K. Ober (USA) G. Wegner (Germany)  
J. Rychlý (Slovakia) S. Zhang (USA)  
M. Žigon (Slovenia)

#### VENUE

Institute of Macromolecular  
Chemistry AS CR, v.v.i.  
Heyrovského nám. 2  
CZ-162 06 Praha 6  
Czech Republic



#### CONFERENCE TOPICS

##### I. Bioanalogous and Biomimetic Principles and Materials

*Chairmen:* J. Kopeček, K. Ulbrich

bioanalogous and biomimetic concepts in design of polymer biomaterials – biomaterial/cell interfaces – bio-interactions of polymers through molecular recognition – polymer-derived stealth properties – drug targeting and delivery through macromolecular carriers

##### II. Molecular and Supramolecular Organization in Macromolecular Systems

*Chairmen:* C. K. Ober, P. Štěpánek

polymeric materials with hierarchical structure - supramolecular polymer assemblies - targeted synthesis of self-ordering polymers - self-organized polymer materials responsive to external stimuli - polymers at ordered surfaces and interfaces - dynamics in organized polymeric systems - theoretical models of self-organized polymer systems - advanced methods for structure analysis of macromolecules

##### III. Polymers for Advancement in Technologies

*Chairman, chairwoman:* G. Wegner, V. Cimrová

advanced materials – photonics and electronics – polymer nanocomposites – smart gels and polymer networks – (bio)degradable polymer materials – polymers in energy production and conservation

#### INVITED LECTURES

D. Cohn (Israel)	Engineering nano and macro-sized “smart” biomedical structures
R. Duncan (UK)	Bioresponsive polymer therapeutics for cancer and tissue repair
T. Etrych (CZ)	Polymer therapeutic architecture: a major factor in achieving highly efficient polymer medicines
A. Hoffman (USA)	How the Institute of Macromolecular Chemistry inspired and influenced my research over the past 40 years
K. Kataoka (Japan)	will be specified later
B. Ratner (USA)	Biostable and biodegradable methacrylate hydrogels for healing and tissue regeneration
L. W. Seymour (UK)	Polymers for improved delivery of cancer-killing viruses
J. Spatz (Germany)	Formation of tissue through nanoactions of cells
E. Wagner (Germany)	Dynamic polymers for therapeutic DNA and RNA delivery
C. Werner (Germany)	Biohybrid hydrogels for regenerative therapies
S. Zhang (USA)	Self-assembling peptide materials for diverse applications
R. Borsali (France)	Self-assemblies in hybrid block copolymer systems
S. P. Brown (UK)	New solid-state NMR methodology for probing structure-determining hydrogen-bonding interactions
J. Brus (CZ)	Nanostructured polymer systems as seen by solid-state NMR spectroscopy
K. Mortensen (Denmark)	The nano-scale structure of polymer amphiphilic systems: tailored new phases and applications as smart materials
C. K. Ober (USA)	Polymer brushes as responsive materials for the biology-materials interface
V. Percec (USA)	Bioinspired synthesis of nonbiological systems exhibiting biological functions
K. Procházka (CZ)	Stimuli-responsive nanoparticles based on interaction of metallocarboranes with poly(ethylene oxide)-block-poly(methacrylic acid) copolymer
A. J. Ryan (UK)	Making polymers swim
H. W. Spiess (Germany)	Self-assembly and dynamics of synthetic polymers and polypeptides from NMR spectroscopy
G. Storm (Netherlands)	Targeted nanomedicines and EC-sponsoring in FP6
O. Azzaroni (Argentina)	Polymer brushes in confined environments: New challenges and opportunities for designing advanced functional materials
Zhishan Bo (China)	will be specified later
R. H. Friend (UK)	Polymer semiconductor solar cells – design of structures for charge photogeneration, separation and collection
G. Nelles (Germany)	Functional material for future devices
Z. Pientka (CZ)	Polymeric membranes for hydrogen energetics
S. Slomkowski (Poland)	Polymer nano- and microparticle based systems for medical diagnostics
B. Voit (Germany)	Thin functional polymer films for micro- and nanopatterning
G. Wegner (Germany)	Ion-transport in polymers: How to improve the performance of batteries and fuel-cells?



## CALL FOR POSTERS

The international polymer science community is cordially invited to contribute posters on their most recent research in macromolecular science to the 73<sup>rd</sup> PMM!

## REGISTRATION AND ABSTRACTS

Please register and submit your abstract on-line by **April 30, 2009**.

## REGISTRATION FEES

	Before May 10, 2009	After May 10, 2009
Participant	480 €	580 €
Student	280 €	380 €
Accompanying persons	80 €	80 €

## PMM 2009 CONTACT

PMM SECRETARIAT  
Institute of Macromolecular Chemistry AS CR, v.v.i.  
Heyrovského nám. 2  
CZ-162 06 Praha 6  
Czech Republic

Telephone: +420-296 809 332

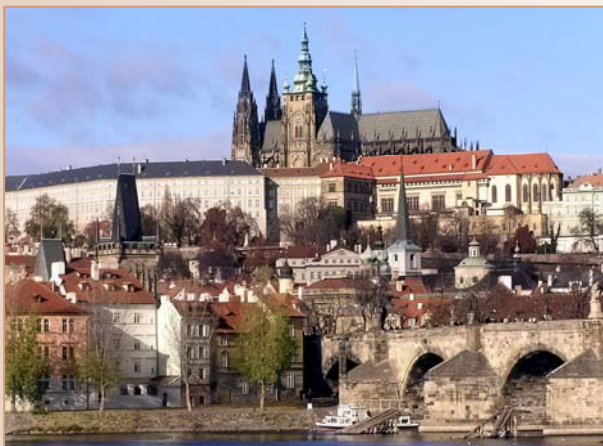
Telefax: +420-296 809 410

E-mail: [PMM2009@imc.cas.cz](mailto:PMM2009@imc.cas.cz)

Web: <http://www.imc.cas.cz/sympo/73pmm/index.html>



Welcome to Prague!



**SECOND CIRCULAR  
& CALL FOR POSTERS !**



**PRAGUE MEETINGS ON  
macromOLECULES**

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**Prague, Czech Republic**

**July 5 - 9, 2009**



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