

**Feature Contributions**

- A. Ayral: Colloid Science for Functional Nanomaterials:  
Application to Oxide Ceramic Membranes ..... 1
- F. Horkay: Biopolymer Gels: Nanostructure and Macroscopic Properties ..... 10

**Nanoparticles, Colloid Systems**

- R. Koeppe, A. Fuchsbauer,  
S. Lu, N. S. Sariciftci: Energy Transfer from CdSe/ZnS Nanocrystals to Zinc-Phthalocyanine  
for Advanced Photon Harvesting in Organic Photovoltaics ..... 16
- E. Szabó-Bárdos, Z. Zsilák,  
O. Horváth: Photocatalytic Degradation of Anionic Surfactant  
in Titanium Dioxide Suspension ..... 21
- A. Hajdú, E. Tombácz,  
E. Illés, D. Bica, L. Vékás: Magnetite Nanoparticles Stabilized Under Physiological Conditions  
for Biomedical Application ..... 29
- L. Trif, G. Tolnai, I. Sajó, E. Kálmán: Preparation and Characterization  
of Hexagonal W-type Barium Ferrite Nanoparticles ..... 38
- N. Molnár, G. Tolnai,  
S. Mészáros, E. Kálmán: Preparation and Characterization  
of Y-Fe-Al Garnet Nanostructured Materials ..... 44
- P. Dokić, L. Dokić,  
T. Dapčević, V. Krstonošić: Colloid Characteristics and Emulsifying Properties of OSA Starches ..... 48
- Á. Figyelmesi, B. Pukánszky Jr.,  
K. Bagdi, Z. Tóvölgyi, J. Varga,  
L. Botz, S. Hudak,  
T. Dóczi, B. Pukánszky: Preparation and Characterization of Barium Sulfate Particles  
as Contrast Materials for Surgery ..... 57
- T. Chambino, A. Correia, S. Barany: Aluminium Salts Hydrolysis Products from Industrial Anodising Sludges  
in Wastewater Treatment ..... 65
- R. Mészáros, S. Bárány: Strength of Flocs Formed  
from Aluminium Sulfate Hydrolysis Product Particles ..... 70
- Nanolayers, Drug Delivery Systems**
- J. Teleghi, T. Rigó, É. Pfeifer,  
T. Keszthelyi, E. Kálmán: Nanolayer Coatings ..... 77
- K. Hill, C. B. Péntes, B. G. Vértessey,  
Z. Szabadka, V. Grolmusz, É. Kiss: Amphiphilic Nature of New Antitubercular Drug Candidates  
and Their Interaction With Lipid Monolayer ..... 87

---

A. Süle, F. Csempesz:	Complexation of Statins with $\beta$ -Cyclodextrin in Solutions of Small Molecular Additives and Macromolecular Colloids .....	93
J. Balogh, J. S. Pedersen:	Investigating the Effect of Adding Drug (Lidocaine) to a Drug Delivery System Using Small-Angle X-Ray Scattering .....	101
L. Naszályi Nagy, N. Ábrahám, A. L. Kovács, A. van der Lee, V. Rouessac, D. Cot, A. Ayral, Z. Hórvölgyi:	Zinc Oxide LB Films with Improved Antireflective, Photoactive and Mechanical Properties.....	107
F. O. Costa-Balogh, E. Sparr, J. J. S. Sousa, A. A. C. C. Pais:	Drug Release and Skin Permeation from Lipid Liquid Crystalline Phases ...	119
<b>Porous Systems, Surfaces</b>		
K. Sinkó, A. Meiszterics, L. Rosta:	Comparative Study of Calcium Silicate Bulk Systems Produced by Different Methods .....	130
O. Czakkel, I. Miklós Szilágyi, E. Geissler, N. Kanellopoulos, K. László:	Morphological Characterization of Oxidized and Metal Impregnated Spherical Carbons.....	139
A. Tóth, C. Novák, K. László:	The Effect of Ionic Environment on the Adsorption of Phenol .....	148
I. Pászli, K. F. Csáki, Z. Hórvölgyi:	On the Magnitude of Line Tension .....	157
I. Pászli, K. F. Csáki, J. Bódiss:	Autophobic Wetting and Captation .....	160
R. Maršálek, B. Taraba:	Adsorption of the SDS on Coal .....	163
<b>Polymers, Gels, Biocolloids</b>		
M. Kolosofszki, Á. Karsai, K. Soós, B. Penke, M. S. Z. Kellermayer:	Thermally-Induced Effects in Oriented Network of Amyloid $\beta$ 25–35 fibrils .....	169
A. González-Pérez, S. Bulut, U. Olsson, B. Lindman:	Temperature Induced DNA Compaction in a Nonionic Lamellar Phase .....	174
L. B. Pártay, M. Segá, P. Jedlovszky:	A Two-step Aggregation Scheme of Bile Acid Salts, as Seen From Computer Simulations.....	181
A. Borsos, R. Acciaro, R. Mészáros, T. Gilányi:	Interaction of Cetyl Trimethylammonium Bromide With Poly-( <i>N</i> -Isopropylacrylamide- <i>Co</i> -Acrylic Acid) Copolymer Nanogel Particles .....	188

---

Á. Némethy, A. Szilágyi, G. Filipcsei, E. Tombácz, M. Zrínyi:	Characterization of Poly( <i>N</i> -isopropylacrylamide) and Magnetic Poly( <i>N</i> -isopropylacrylamide) Latexes .....	194
Z. Nagy, L. Novák, C. Kozma, M. Berka, I. Bánya:	NMR Study of Poly( $\gamma$ -Glutamic Acid) and Partially Benzylated Poly( $\gamma$ -Glutamic Acid): Nanoparticles in Solution .	200
E. Fleit, Z. Melicz, D. Sándor, M. Zrínyi, G. Filipcsei, K. László, I. Dékány, Z. Király:	IASON – Intelligent Activated Sludge Operated by Nanotechnology – Hydrogel Microcarriers in Wastewater Treatment .....	209
B. Pukánszky Jr., K. Bagdi, Z. Tóvölgyi, J. Varga, L. Botz, S. Hudak, T. Dóczi, B. Pukánszky:	Effect of Interactions, Molecular and Phase Structure on the Properties of Polyurethane Elastomers .....	218
D. Kaneko, H. Furukawa, Y. Tanaka, Y. Osada, J. P. Gong:	Flower Petal-like Pattern on Soft Hydrogels during <i>Vodka</i> Spreading .....	225
Author/Title Index .....		231
Keyword Index .....		233