

12:40	9-O6	Oil products and lubricants market in united Europe: technical regulation and participants	A. Novacheva-Runeva Bulgaria
13:00	Lunch		
	Session 5 Symposium 11: Polymers (Plastics, Rubbers, Chemical Fibres, Cellulose)		
14:00	11-2-KN1	Keynote Lecture: Stimuli sensitive polyethers: synthesis, properties and applications	A. Dworak Poland
14:40	11-1-O1	Novel polyelectrolyte copolymers with grafted double charged monomer units	D. Christova, <u>S. Todorova</u> , S. Ivanova, Ch. Wandrey Bulgaria, Switzerland
15:00	11-1-O2	Synthesis, characterization and application of poly(styrene-sulphonate)	<u>H. Musa</u> , E. Hasan, T. Cosgrove United Kingdom
15:20	11-1-O3	Reactive primary amine groups attached to crosslinked copolymers as beads and their morphology	<u>M. V. Dinu</u> , E. S. Dragan
15:40	Coffee Break		
16:10	11-2-O1	Polymer dynamers and constitutional dynamic chemistry	G. S. Georgiev Bulgaria
16:30	11-2-O2	Polyelectrolyte complex nanoparticles based on synthetic and natural polycations	E. S. Dragan, <u>M. Mihai</u> Romania
16:50	11-2-O3	Aqueous solution properties and structural polymorphism of nanoparticles prepared from polyglycidol analogues to Pluronic copolymers	<u>S. Rangelov</u> , S. Halacheva, Ch. Tsvetanov, V. Garamus, M. Almgren Bulgaria, UK, Germany, Sweden
17:10	11-2-O4	New nanostructured polymer materials (beads and nanofibres) based on chitosan or N-carboxyethylchitosan	<u>H. Penchev</u> , O. Stoilova, D. Paneva, N. Manolova, I. Rashkov Bulgaria
17:30	Coffee Break		
17:45	Poster Session 4: Symposium 11 (11-1-P1–11-1-P14 and 11-2-P1–11-2-P8)		
Hall 431	Session 3 Symposium 3: Inorganic Chemistry and Chemical Education		
11:00	3-KN1	Keynote Lecture: Morphology and characteristics of advanced electro-ceramics: from bulk to the nanoscale	Y. Sakabe Japan
11:40	3-O1	Isovalent and aliovalent co-substituted perovskite-type alkaline earth metal titanate dielectric thin films	<u>I. P. Koutsaroff</u> , K. Otsuka, Y. Takeshima, Y. Sakabe Japan
12:00	3-O2	Nitrite linkage isomerism in metalloproteins and related complexes: experimental and theoretical evidence	R. Silaghi-Dumitrescu Romania
12:20	3-O3	Optical oxygen sensors	<u>M. Milanova</u> , S. Anastasova, J. Zaharieva, D. Todorovsky Bulgaria
12:40	3-O4	State educational requirements: expectation and reality	A. Tafrova-Grigorova, <u>A. Kuzmanov</u> , E. Boiadjieva, M. Kirova Bulgaria

13:00 **Lunch**

14:00 **Poster Session 2: Symposium 3 (3-P1–3-P53)**

Hall 439 Session 4 Symposium 5: Catalysis

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| 11:00 | 5-O1 | Electrical characterization and catalytic properties of copper ferrite synthesized by non-conventional methods | C. Munteanu, M. Scurtu, M. Caldararu, D. Gingasu, L. Patron, M. Feder, L. Diamandescu, N. I. Ionescu
Romania |
| 11:20 | 5-O2 | Non-uniformity of catalyst surface and vulnerability of active sites | <u>K. Kumbilieva</u> , N. A. Gaidai, N. V. Nekrasov, L. Petrov, A. L. Lapidus
Bulgaria, Russia, Saudi Arabia |
| 11:40 | 5-O3 | Methane catalytic combustion over Cu-Mg-Al-O catalysts | S. Tanasoi, A. Urda, N. Tanchoux, <u>I. C. Marcu</u> , F. Fajula, I. Sandulescu
Romania, France |
| 12:00 | 5-O4 | Study of Pd-NiMg/SiO ₂ system by <i>in situ</i> X-ray diffraction performed under hydrogen | <u>M. Gabrovska</u> , D. Mucha, P. Tzvetkov, J. Krstić, R. Edreva-Kardjieva, D. Jovanović, M. Zimowska
Bulgaria, Poland, Serbia |

12:20 **Lunch**

14:00 **Poster Session 3: Symposium 5 (5-P1–5-P18) and Symposium 9 (9-P1–9-P4)**

20:00 **Welcome Reception at Sofia Archaeological Museum**

Friday, 12 September 2008

Asen Zlatarov Hall

- 9:00 PL2 Plenary Lecture: Design, synthesis, and applications of new asymmetric catalysts for organic chemistry E. Peter Kündig
Switzerland
- 10:00 **Coffee Break**
- Session 6 Symposium 2: Organic Chemistry**
- 10:30 2-KN1 Keynote Lecture: Spins in motion: chemical applications of NMR-diffusion measurements S. Berger
Germany
- 11:10 2-O5 Synthesis and antiproliferative activity of new (+)-goniofufurone analogue bearing a hydrophobic C₁₃ side chain B. M. Srećo, P. Hadžić, M. Popsavin,
G. Bogdanović, V. Kojić, S. Trifunović, V. Popsavin
Serbia
- 11:30 2-O6 Design, synthesis and antitumor activity of new 7-deoxygenated (+)-goniofufurone analogues J. M. Francuz, B. Srećo, M. Popsavin,
G. Benedeković, G. Bogdanović,
V. Kojić, V. Popsavin
Serbia
- 11:50 2-O7 Theoretical rationalization of the stereoselectivity of free radical addition reactions M. Georgieva, A. G. Santos
Bulgaria, Portugal
- 12:10 **Lunch**
- 14:00 **Poster Session 5: Symposium 2 (2-P39–2-P75)**

Hall 424 Session 7 Symposium 11: Polymers (Plastics, Rubbers, Chemical Fibres, Cellulose)

- 10:30 11-3-KN1 Keynote Lecture: Non-covalent interactions of polymers to aid the dissolution of drugs D. Gorman, S. Brocchini
United Kingdom
- 11:10 11-6-KN1 Keynote Lecture: Rubber-based composites with active behaviour to microwaves N. Dishovsky
Bulgaria
- 11:50 11-3-O1 Models of integrated energetic bio-sources management for residential areas N. Sdrula, I. Frasinianu
Romania
- 12:10 11-3-O2 Functional polyphosphoesters for biomedical purposes N. Koseva, A. Bogomilova,
I. Tsacheva, K. Troev
Bulgaria
- 12:30 11-3-O3 Novel antibacterial electrospun micro- and nano-fibrous mats containing quaternized chitosan or poly(vinyl pyrrolidone)-iodine complex, tailored for wound dressing applications M. Ignatova, N. Manolova, I. Rashkov
Bulgaria
- 12:50 11-3-O4 Polyzwitterionic effect on the complement C1q interaction with IgG I. Ivanov, M. Nikolov, I. Tsacheva,
S. Petrova, M. Chorbadjieva,
V. Georgieva, L. Christov, G. Georgiev
Bulgaria
- 13:10 **Lunch**
- 14:00 11-4-O1 Polybenzimidazole-graft-polyvinylphosphonic acid: a new membrane material for polymer electrolyte membrane fuel cells S. Shenkov, V. Sinigersky,
I. Schopov, J. Belack
Bulgaria, Germany

14:20	11-5-O1	Effect of clay loadings on photooxidative degradation of polystyrene/organophilic montmorillonite nanocomposites	<u>M. Kaci</u> , C. Remili, S. Kachbi, S. Bruzaud, Y. Grohens Algeria, France
14:40	Poster Session 8: Symposium 11 (11-3-P1–11-3-P10, 11-4-P1–11-4-P7 and 11-5-P1–11-5-P17)		
15:40	11-6-O1	New possibility to poly(dimethylsiloxane) surface modification	<u>T. G. Vladkova</u> , I. L. Keranov, P. D. Dineff, G. P. Altankov Bulgaria, Spain
16:00	11-6-O2	Reinforcing effect of cold-plasma modified carbon blacks on the properties of SBR and NBR based rubber composites	<u>D. Pishinkov</u> , N. Dishovsky, S. Borros Bulgaria, Spain
16:20	Coffee Break		
16:50	11-7-O1	Chemical aids for hydrophobicity of paper	K. Ivanov Austria
17:10	11-7-O2	The antimicrobial efficiency of cotton and hemp fabrics loaded with silver nanoparticles	<u>M. Radetić</u> , Z. Šaponjić, V. Ilić, V. Vodnik, S. Dimitrijević, D. Mihailović, P. Jovančić, J. Nedeljković Serbia
17:30	11-7-O3	Sizing of wood free fine papers with alkenyl succinic anhydride	<u>K. Todorova</u> , D. Todorova Bulgaria
17:50	Poster Session 9: Symposium 11 (11-6-P1–11-6-P11 and 11-7-P1–11-7-P7)		
Hall 431 Session 8 Symposium 8: Inorganic Technologies			
10:30	8-KN1	Keynote Lecture: Nanopowders produced by ICP technique and their application	J. Grabis Latvia
11:10	8-O1	Mineral fertilizers in Bulgaria at the beginning of 21st century	<u>K. Petkov</u> , Z. Kirova, Y. Pelovski, M. Nikolova, V. Georgiev Bulgaria
11:30	8-O2	Nanopowders: plasmachemical synthesis and properties	G. Vissokov Bulgaria
11:50	8-O3	Preparation of dense silicon nitride ceramics using nanodispersed powders as sintering additives	<u>M. Georgieva</u> , G. Vissokov, I. Grancharov Bulgaria
12:10	8-O4	Nanostructured silica obtained by sol-gel polymerization mediated by structure directing agents	R. Stan, C. Ott, S. Rosca, A. Badanoiu, S. Stoleriu, G. Voicu Romania
12:30	Lunch		
14:00	Poster Session 6: Symposium 6(6-P1–6-P30) and Symposium 8 (8-P1–8-P7)		
Hall 439 Session 9 Symposium 4: Analytical Chemistry			
10:30	4-KN1	Keynote Lecture: Speciation analysis of some less investigated elements: analytical methods and environmental impact	E. Rosenberg Austria

11:10	4-O1	Use of open-tubular capillary electrochromatography and micellar electrokinetic chromatography for the separation of cholinesterase inhibitors	<u>C. P. Kapnissi-Christodoulou</u> , I. Nicolaou, A. Constantinou Cyprus
11:30	4-O2	Preparation of cesium(I)-selective PVC membrane electrode and its analytical application	<u>N. Aslan</u> , E. Canel, M. Yilmaz, E. Kiliç Turkey
11:50	4-O3	Determination of aluminium with morin indicator in ionic liquid containing media	<u>O. Oter</u> , S. Aydogdu Turkey
12:10	Lunch		
14:00	Poster Session 7: Symposium 4 (4-P1–4-P26)		

Saturday, 13 September 2008

Asen Zlatarov Hall

- 9:00 PL3 Plenary Lecture: Design of functional and intelligent polymeric carriers for improved cellular transport and biorecognition N. A. Peppas
USA
- 10:00 **Coffee Break**
- Session 10 Symposium 7: Chemistry and Environmental Protection**
- 10:30 7-O1 Advances in nanotechnology for environmental and health protection T. A. Felekis, S. Plaskassovitis, G. Kaloudis, N. Katsaros
Greece
- 10:50 7-O2 Synthesis and characterization of some eco-friendly disazo dyes based on harmless aromatic precursors G. M. Simu, S. A. Chicu, S. G. Muntean, G. Agrigoroaie
Romania
- 11:10 7-O3 Solubilization of mechanical activated Tunisian phosphorite with soil bacteria D. Bojinova, R. Teodosieva, K. Nedialkova
Bulgaria
- 11:30 7-O4 Comparison of VOCs extraction techniques in soil gas survey quantification B. Zdravkov, M. Kubal, J. Janků
Czech Republic
- 11:50 7-O5 Conversion of agricultural wastes to useful products J. Yanik, M. Yüksel, M. Sağlam, C. Kornmayer
Turkey, Germany
- 12:10 **Lunch**
- 14:00 **Poster Session 10: Symposium 7 (7-P1–7-P19)**
- 15:00 **Round table discussion: Sofia domestic waste: a challenge to management**

Hall 424 Session 11 Symposium 1: Physical Chemistry and Electrochemistry

- 10:30 1-O1 Production and characterization of amorphous phosphate coatings L. Fachikov, Y. Tumbaleva, D. Ivanova
Bulgaria
- 10:50 1-O2 State of the art of lithium-ion batteries A. Momchilov
Bulgaria
- 11:10 1-O3 Phospholipid monolayers as model systems to understand the anionic Hofmeister effect E. Leontidis, A. Aroti, M. Christoforou
Cyprus
- 11:30 1-O4 Self-organization phenomena during electrodeposition of some silver alloys Ts. Dobrovolska, I. Krastev
Bulgaria
- 11:50 1-O5 Study of the formation of poly-azo-azulene films by electrochemistry E.-M. Ungureanu, G. O. Buica, A. C. Razus, L. Birzan, C. A. Amarandei, A.-L. Carabăț, M. D. Pop
Romania
- 12:10 1-O6 Complexation of ferric oxide particles with pectins of different charge density V. Milkova, K. Kamburova, I. Petkanchin, Ts. Radeva
Bulgaria

12:30	1-O7	Schiff base compounds as corrosion inhibitors for the acidic corrosion of mild steel for wound dressing applications	<u>K. C. Emregül</u> , O. Atakol, Ü. Ergun Turkey
12:50	1-O8	The Mössbauer spectroscopy is 50 years old	T. M. Peev Bulgaria
13:10	Lunch		
14:00	Poster Session 11: Symposium 1 (1-P1–1-P32)		

Hall 431 Session 12 Symposium 10: Nutritional Chemistry and Biotechnologies

10:30	10-O1	Structure and composition analysis of triglycerides from Romanian oilseeds by modern techniques	<u>N. Chira</u> , C. Todasca, A. Nicolae, I. David, N. Ionescu, S. Rosca Romania
10:50	10-O2	New carriers for cell immobilization	<u>E. Velickova</u> , P. Petrov, C. Fodor, V. Manojlovic, V. Nedovic, B. Ivan, E. Winkelhausen, Ch. Tsvetanov R. Macedonia, Bulgaria, Hungary, Serbia
11:10	8-O2	10-O3. Analysis and control of antinutrients	B. Tchorbantov Bulgaria
11:30	Lunch		
14:00	Poster Session 12: Symposium 10 (10-P1–10-P22)		

Hall 439 Session 13 Symposium 4: Analytical Chemistry

10:30	4-O4	Complexation of polyether ionophore antibiotics with metal(II) ions	<u>I. N. Pantcheva</u> , P. Dorkov, M. Io. Mitewa Bulgaria
10:50	4-O5	Chemometric approaches to analysis and interpretation of conventional (linear) and two-photon absorption spectra	<u>L. Antonov</u> , S. Stoyanov, D. Nedeltcheva, V. Petrov, K. Kamada, K. Ohta Bulgaria, Portugal, Japan
11:10	4-O6	Discriminant analysis of clinical data	C. Sârbu Romania
11:30	4-O7	Impact of preliminary chemical separation on the combined uncertainty of atomic spectrometry results	<u>V. Kmetov</u> , V. Stefanova, K. Simitchiev, A. Canals Bulgaria, Spain
11:50	Lunch		
14:00	Poster Session 13: Symposium 4 (4-P27–4-P51)		

15:30 **Excursion: Sofia Sightseeing**

20:00 **Conference Dinner**

Sunday, 14 September 2008

Asen Zlatarov Hall

9:00	PL4	Plenary Lecture: Quality of life. Free radicals and EPR	N. D. Yordanov Bulgaria
10:00	Coffee Break		
	Session 14 Symposium 6: Chemical Engineering		
10:30	6-KN1	Keynote Lecture: Enzyme reactors for the elimination of micropollutants	H. Cabana, J. Peter Jones, <u>S. N. Agathos</u> Canada, Belgium
11:10	6-O1	Immobilized cells and mass transfer phenomena in bioreactors	V. Beschkov Bulgaria
11:30	6-O2	CFD assessment of biofilm stability conditions in particle-based biofilter reactors in view of enhancing the performance of the biotic phase	<u>S. D. Vlaev</u> , D. Georgiev, Z. Csanadi, E. Nagy, C. Sisak Bulgaria, Hungary
11:50	6-O3	Some possibilities for significant increasing of the energy efficiency of a gas turbine	<u>N. Kolev</u> , D. Kolev Bulgaria
12:10	6-O4	On the velocity influence on the gas maldistribution in packed columns	S. Darakchiev, <u>T. Petrova</u> , K. Semkov, R. Darakchiev Bulgaria
12:30	6-O5	Particle entrapment efficiency in the hydrodynamic boundary layers	<u>L. Nikolov</u> , E. Mileva Bulgaria
12:50	Closing Session		