

UNIVERSITY  
OF PLOVDIV



FACULTY  
OF CHEMISTRY

## 6<sup>th</sup> CHEMISTRY CONFERENCE

Plovdiv 20-22 June 2007

<http://6cc.argon.uni-plovdiv.bg/>

### Working language - English

University of Plovdiv "Paisii Hilendarski"  
(rectorate building – **auditorium N 6**)  
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**A G E N D A****Wednesday 20 June 2007**

**14:00-18:00** Registration of the participants – registration desk will be opened in the rectorate building at the University of Plovdiv.

**18:30-20:30** Welcome meeting – Get-together party with beer and refreshments in the Cafeteria at the rectorate building of the University of Plovdiv

**Thursday 21 June 2007**

**8:30 – 9:00** Registration continuation for newly arrived participants

**OPENNING of the 6<sup>th</sup>CC - 6<sup>th</sup> AUDITORIUM**

<b>9:15 – 9:30</b>	<b>Prof. G. Andreev – Chair 6CC</b> Vice-Rector University of Plovdiv.	
<b>M O R N I N G   S E S S I O N</b>		
Chairmen <b>Prof. Antonio Canals</b>	<b>PLENARY LECTURES - FIRST BLOCK</b>	
<b>9:30 – 10:00</b>	L1	<b>Prof. Kurt Varmuza – Vienna University of Technology, Austria</b> <i>Chemometrics for expected mass spectrometric data to be obtained near a comet</i>
<b>10:00 – 10:30</b>	L2	<b>Dr. Peter Behr - University Duisburg-Essen, Germany</b> <i>Energy and angle-dependent scattering of hyper thermal noble gases (He, Ne, Ar, Kr, Xe) and HCl on liquid sulphuric acid/water-surfaces between 210 and 240 K</i>
<b>10:30 – 11:00</b>	L3	<b>Dr. Aneta Pashkova - Karl-Winnacker-Institute, Germany</b> <i>Direct synthesis of hydrogen peroxide in a catalytic membrane contactor</i>
<b>11:00 – 11:30</b>	<b>C o f f e e   B r e a k</b>	

<b>MORNING SESSION</b>		
Chairmen <b>Prof. Hylmi IBAR</b>	<b>PLENARY LECTURES - SECOND BLOCK</b>	
<b>11:30 – 12:00</b>	<b>L4</b>	<b>Prof. Antonio Canals</b> - University of Alicante, Spain <i>New applications of microwave radiation in the total analytical process</i>
<b>12:00 – 12:30</b>	<b>L5</b>	<b>Prof. Dimiter Tsalev</b> - University of Sofia, Bulgaria <i>Method validation – how much is enough?</i>
<b>12:30 -14:00</b>	<b>LUNCH</b>	
<b>AFTERNOON SESSION</b>		
Chairmen <b>Prof. Dimiter Tsalev</b>	<b>PLENARY LECTURES – THIRD BLOCK</b>	
<b>14:30 – 15:00</b>	<b>L6</b>	<b>Dr. Doris Hernandez Dukova</b> - University Los Libertadores, Bogotá, Colombia <i>Chemistry applications in agro meteorological station</i>
<b>15:00 – 15:30</b>	<b>L7</b>	<b>Prof. Gueorgui Vassilev</b> - University of Plovdiv, Bulgaria <i>European fundamental Lead-free soldering research</i>
<b>15:30 -16:00</b>	<b>Coffee Break</b>	
<b>FIRST POSTER SESSION</b>		
<b>16:00 – 18:00</b>	<b>POSTERS</b> From: P – I – 1 to: P – I – 17	
<b>20:00</b>	<b>6CC Dinner</b>	

Friday 22 June 2007

<b>MORNING SESSION</b>		
Chairmen <b>Prof. Kurt Varmuza</b>		<b>PLENARY LECTURES - FOURTH BLOCK</b>
<b>9:00 – 9:30</b>	<b>L8</b>	<b>Dr. Anife Ahmedova – University of Sofia, Bulgaria</b> <i>Theoretical and spectroscopic study on 2-substituted 1,3-indandiones as potential optical sensors for metal ions</i>
<b>9:30 – 10:00</b>	<b>L9</b>	<b>Dr. Plamen Penchev - University of Plovdiv, Bulgaria</b> <i><sup>13</sup>C NMR Interpretive Library Search</i>
<b>10:00 – 10:30</b>	<b>Coffee Break</b>	
<b>SECOND POSTER SESSION</b>		
<b>10:30 – 12:30</b>	<b>POSTERS</b> From: P – II – 1 to: P – II – 18	
<b>12:30 -14:00</b>	<b>LUNCH</b>	
<b>14:30</b>	<b>Sightseeing in Old Plovdiv</b>	

Saturday 23 June 2007

Departure of foreign participants

I<sup>st</sup> Poster session - Inorganic, Analytical, Physical Chemistry & Technology

**Thursday 21 July 2007, 16:00 – 18:00h**

**P-I-1**

**DETERMINATION OF SOME TRACE METAL IONS FROM SOIL SAMPLES BY FLAME ATOMIC ABSORPTION SPECTROMETRY**

Dilek Bakircioglu, Muhammet Kuscu and Yasemin Bakircioglu

**P-I-2**

**STUDY OF HEME PROTEINS IN ADSORBED STATE**

N. Dimcheva<sup>1</sup>, E. Horozova<sup>1</sup>, T. Dodevska<sup>2</sup>

**P-I-3**

**Cu-Cr/ $\gamma$ -ALUMINA CATALYSTS FOR DIMETHYL ETHER SYNTHESIS**

Dimitar Dimitrov and Krasimir Ivanov

**P-I-4**

**BIOSENSOR FOR XANTHINE WITH IMPROVED SENSITIVITY AND DETECTION LIMIT**

T. Dodevska, E. Horozova, N. Dimcheva

**P-I-5**

**COMPARISON OF DIGESTION METHODS FOR AAS DETERMINATION OF TOTAL IRON AND MANGANESE IN TOBACCO LEAVES**

Lilko Dospatliev, Penka Zapryanova, Violina Angelova\* and Krasimir Ivanov

**P-I-6**

**HYDROGEN AND HYDROGEN-INDUCED PHASE TRANSITIONS IN Zr and Ti BASED ALLOYS**

Tsveta Himitliiska, Tony Spassov

**P-I-7**

**MERCURY RELEASE FROM DENTAL AMALGAMS**

M. Kakalova, G. Bekyarov

**P-I-8**

**ON THE EXERGOECOLOGICAL EFFICIENCY OF THE PROCESSES OF ZINC SULPHIDE CONCENTRATES PROCESSING TO ZINC AND SULPHURIC ACID**

Sn.Magaeva, G.Patronov

**P-I-9**

**CHEMICAL AND ELECTROCHEMICAL STABILITY OF LEAD ALLOY ANODES IN 'CHROMISPEL-C' ELECTROLYTE**

Rossitsa Mantcheva, Kostadin Kanchev, Detelina Mileva

**P-I-10**

**KINETICS OF ANODE PROCESSES IN “CHROMISPEL-C” ELECTROLYTE FOR CHROMIUM PLATING**

Rossitsa Mantcheva, Kostadin Kanchev, Nikolina Milcheva

**P-I-11**

**KINETIC OF SULPHATIZATION IN HETEROGENIC SYSTEM  
MnCO<sub>3</sub>-MnO-FeSO<sub>4</sub>-O<sub>2</sub> AS A FUNCTION OF TEMPERATURE**

Goran Nacevski, Eftimija Hristova, Nikola Nacevski,

**P-I-12**

**DIRECT DETERMINATION VERSUS CLOUD POINT EXTRACTION FOR ICP-MS ANALYSIS OF Rh, Pd, AND Pt IN PHARMACEUTICAL PRODUCTS**

K. Simitchiev, V. Stefanova, V. Kmetov, N. Kovachev,  
A. Canals, G. Andreev

**P-I-13**

**OPERATION OF H<sub>2</sub>S-O<sub>2</sub> FUEL CELL AT ATMOSPHERIC PRESSURE AND LOW TEMPERATURE**

Stefan Slavov

**P-I-14**

**PREPARATION, CHARACTERIZATION AND CATALYTIC ACTIVITY OF ALUMINA-SUPPORTED COBALT OXIDE FOR DESTRUCTIVE OXIDATION OF ORGANIC COMPOUNDS IN GASEOUS PHASE**

M. Stoyanova, P. Konova, St. Christoskova, A. Naydenov,  
D. Mehandjiev

**P-I-15**

**KINETICS OF NANOCRYSTALLIZATION OF Mg<sub>6</sub>Ni IN Mg RICH AMORPHOUS ALLOYS**

Stanislava Todorova, Tony Spassov

**P-I-16**

**INVESTIGATIONS OF NEW ANODIC MATERIALS FOR ZINC ELECTROWINNING**

Ivanka Valchanova, Yavor Stefanov

**P-I-17**

**PREPARATION OF SILVER CONTAINING CATALYSTS FOR METHANOL SYNTHESIS**

I. Yovchev

**II<sup>nd</sup> Poster session - Organic, Bioorganic, Quantum and Coordination Chemistry****Friday 22 July 2007, 10:30 – 12:30 h****P-II-1****PREPARATION AND PROPERTIES OF ETHYL 2-(7-HYDROXY-2-OXO-2H-CHROMEN-4-YL) ACETATE DOPED SOL-GEL MATERIALS: NEW MATERIALS WITH POTENTIAL OPTICAL APPLICATION**G. Ahmed, B. Koleva, S. Gutzov, T. Tsvetkova, T. Deligeorgiev, I. Petkov**P-II-2****THE INVESTIGATION OF THE REACTION KINETICS OF o-PHENYLENEDIAMINE AND m-PHENYLENEDIAMINE IN THE PRESENCE Ag(I)**Özlen ALTUN, Emre DÖLEN**P-II-3****EXTRACTION OF NATURAL BIOACTIVE SUBSTANCES (ANTIOXIDANTS) FROM MEDICINAL PLANTS**G. Angelov, P. Penchev, J.-S. Condoret**P-II-4****EFFECT OF THE TYPE OF PROTEINURIA ON TWO METHODS FOR TOTAL PROTEIN DETERMINATION IN URINE**Svetlana Cekovska, Biljana Bauer Petrovska, Blagoja Jordanovski, Petar Korneti**P-II-5****THEORETICAL MODELING OF THE GROUND STATE INTRAMOLECULAR PROTON TRANSFER IN CYTOSINE: DFT LEVEL STUDY**

Vassil B. Delchev, Maria V. Nenkova

**P-II-6****CLIMATIC CHANGES AND HUMAN MIGRATION**Doris Hernández Dukova, Rosa Maria Melo Arroyo, Ivan Meluk Acuña, Guillermo Guzmán Castro,**P-II-7****COPPER COMPLEXES OF THE POLYETHER IONOPHORE MONENSIN A**Rumyana Jorova, Ivayla N. Pantcheva, Mariana Mitewa**P-II-8****PREDICTION OF BOILING POINT OF ALICYCLIC ALIPHATIC ALCOHOLS FROM THEIR STRUCTURE**

Plamen N. Penchev, Nickolay Kochev, Vicktoria Vandeva, George Andreev

**P-II-9****SYNTHESIS, SPECTROSCOPIC, THERMAL AND STRUCTURAL ELUCIDATION OF 5-AMINO-2-METHOXYPYRIDINE ESTER AMIDE OF SQUARIC ACID ETHYL ESTER: A NEW MATERIAL WITH AN INFINITE PSEUDO LAYERED STRUCTURE AND MANIFESTED NLO APPLICATION**

Tsonko Kolev, Bojidarka B. Koleva, Tony Spassov, Emilya Cherneva, Michael Spittler, Heike Mayer-Figge, William S. Sheldrick.

**P-II-10****SUBSTITUTION INFLUENCE ON THE SPECTRAL AND STRUCTURAL PROPERTIES OF SOME PYRIDINIUM-BETAINES OF SQUARIC ACID**

Tsonko Kolev, Denitsa Yancheva, Boris Shivachev & Rosica Petrova

**P-II-11****SYNTHESIS AND STRUCTURE OF METAL COMPLEXES OF 2-SUBSTITUTED 1,3-INDANDIONES**

Petya Marinova, Anife Ahmedova, Neyko Stoyanov

**P-II-12****CHARACTERIZATION OF CHROMATOGRAPHIC PHASE SELECTIVITY BY QSRR APPROACH**

M.Moskovkina, I.Bangov

**P-II-13****BIOFLAVONOIDS – COMPLEXATION PROPERTIES AND BIOLOGICAL ACTIVITY**

Momchil Ninov, Ivayla N. Pantcheva, Vasil Atanasov, Mariana Mitewa, Svetla Petrova

**P-II-14****MADURAMYCIN: COORDINATION PROPERTIES TOWARD TRANSITION METAL IONS**

Ivayla N. Pantcheva, Mariana Mitewa

**P-II-15****COMPOSITION STUDY OF DIETARY FIBRE IN THE MACEDONIAN EDIBLE BOLETACEAE MUSHROOMS**

Biljana Bauer Petrovska, Blagoja Jordanoski, Svetlana Cekovska

**P-II-16****DECOLORIZATION OF THE AZO DYE REACTIVE ORANGE 16 BY FENTON OXIDATION**

-Sezer K, Ibar H,

**P-II-17****TEMPLATE SYNTHESIS OF THE NEW SCHIFF-BASE COMPLEXES AND DETERMINATION OF THE STRUCTURE OF THESE COMPLEXES**

ULUÇAM Gühergöl, BEYNEK Nesrin

**P-II-18****ESTIMATION OF THE HEATING VALUE OF BIOMASS FUEL FROM THE ELEMENTAL COMPOSITION**

Kurt Varmuza and Anton Friedl