



ACADEMIA ROMÂNĂ

*INVITAȚIE-PROGRAM*

BUCUREȘTI  
15 februarie 2013

ACADEMIA ROMÂNĂ  
*Secția de Științe Chimice*  
*Comisia de Analiză Termică și Calorimetrie*

Vă invită să participați la

**LUCRărILE CELUI DE AL 22-LEA SIMPOZION  
ANUAL DE COMUNICĂRI ȘTIINȚIFICE**

care va avea loc vineri, 15 februarie 2013, ora 8<sup>30</sup>,  
în Amfiteatrul *Heliade Rădulescu* al Bibliotecii  
Academiei Române, Calea Victoriei nr.125  
(intrarea și prin B-dul Dacia)

Domnului / Doamnei \_\_\_\_\_

**Program:**

**February 15, 2013, 8<sup>30</sup>h**

Acad.prof. MARIUS ANDRUH  
President of the Section of Chemistry Sciences of Romanian Academy  
*Opening address*

**NICOLAE DOCA**

West University of Timisoara, Research Center for Thermal Analysis in  
Environmental Problems, Timisoara

*Topical trends in Thermal and Calorimetry. Report on the ICTAC Congress, Osaka*

**TITUS VLASE, GABRIELA VLASE, NICOLAE DOCA**  
West University of Timisoara, Research Center for Thermal Analysis in  
Environmental Problems, Timisoara

*The Non Parametric Kinetic (NPK) method. Possibilities and limits*

**GABRIEL MUNTEANU**

„Ilie Murgulescu” Institute of Physical Chemistry of the Romanian Academy, Bucharest  
*Evaluation of TPR kinetic parameters by simulating the reduction processes*

**E.M. ANGHEL, V.T. POPA, M. CONSTANTINESCU,  
M. ANASTASESCU, I. ATKINSON**

„Ilie Murgulescu” Institute of Physical Chemistry of the Romanian Academy, Bucharest  
*Kinetic study of a PEG-epoxy blend as a latent heat storage material*

**MIHAELA BADEA<sup>1</sup>, EUGEN SEGAL<sup>1</sup>, PETRU BUDRUGEAC<sup>2</sup>**

<sup>1</sup> Faculty of Chemistry, University of Bucharest

<sup>2</sup> INCIDIE ICPE – CA, Bucharest

*Non-isothermal kinetics of [MPy<sub>2</sub>]Cl<sub>2</sub> (M=Cd, Cu, Mn; Py = pyridine)  
thermal decomposition*

**V.Z. SASCA, LIVIA AVRAM, ORSINA VERDES, A. POPA**

<sup>1</sup> Institute of Chemistry Timisoara of Romanian Academy

*Thermal decomposition of tungstophosphoric acid and some  
of its cesium salts containing Pd*

MIRCEA NICULESCU, RALUCA DUMITRU,  
MARIUS MILEA, MIHAIL BÎRZESCU

University "Politehnica" of Timisoara, Faculty for Industrial Chemistry  
and Environmental Engineering, Timisoara

*Al(III)-M(II) heteropolymeric coordination compounds (M: Co, Ni)  
containing glyoxylate and oxalate as bridging ligands as precursors  
for mixed oxides of spinel type,  $MA_2O_4$*

11<sup>00</sup>-11<sup>30</sup>

### Coffee break

OANA CARP<sup>1</sup>, ALINA TARSOAGĂ<sup>2</sup>, BOGDAN JURCA<sup>2</sup>

<sup>1</sup> „Ilie Murgulescu” Institute of Physical Chemistry of the Romanian Academy, Bucharest

<sup>2</sup> Faculty of Chemistry, University of Bucharest

*The influence of the synthesis parameters on the thermal  
behaviour of ZnO-starch composites*

ALEXANDRU MILEA, OANA GINGU,  
PETRE ROTARU, SPERANȚA TANASESCU

„Ilie Murgulescu” Institute of Physical Chemistry of the Romanian Academy, Bucharest

*Thermodynamic data of the Ag-Cu nanoalloys processed  
by mechanical alloying route*

DANIELA GHEORGHE<sup>1</sup>, ANA NEACSU<sup>1</sup>, IULIA CONTINEANU<sup>1</sup>,  
SPERANȚA TANASESCU<sup>1</sup>, STEFAN PERISANU

<sup>1</sup> „Ilie Murgulescu” Institute of Physical Chemistry of the Romanian Academy, Bucharest

<sup>2</sup> University “Politehnica” of Bucharest

*The calorimetric study of L-, D- and DL-isomers of serine*

ROMICA SANDU<sup>1</sup>, CRISTINA TABLET<sup>2</sup>, MIHAELA HILLEBRAND<sup>2</sup>

<sup>1</sup> „Ilie Murgulescu” Institute of Physical Chemistry of the Romanian Academy, Bucharest

<sup>2</sup> Faculty of Chemistry, University of Bucharest

*Interaction of 7-diethylaminocoumarin-3-carboxylic acid with serum albumins:  
isothermal titration calorimetry and steady-state fluorescence spectroscopy*

LUCIA ODOCHIAN, C. MOLDOVEANU, DAN MAFTEI  
„Al. I. Cuza” University, Iasi, Faculty of Chemistry

*Contributions to the thermal degradation mechanism under nitrogen and air atmosphere of PTFE by TG-FTIR analysis. Influence of the particle size*

ANDREI CUCOS, PETRU BUDRUGEAC  
INCDIE ICPE - CA, Bucharest

*TGA-FTIR characterization of collagen in inert and oxidative atmospheres*

ADINA MAGDALENA MUSUC<sup>1</sup>, MIHAELA BADEA-DONI<sup>2</sup>,  
LUIZA JECU<sup>2</sup>, V.T. POPA<sup>1</sup>

<sup>1</sup> „Ilie Murgulescu” Institute of Physical Chemistry of the Romanian Academy, Bucharest

<sup>2</sup> National Research & Development Institute for Chemistry & Petrochemistry – ICECHIM, Bucharest

*MicroDSC analysis of low density polyethylene biodegradability*

VIORICA MUŞAT<sup>1</sup>, GHEORGHE GURĂU<sup>1</sup>, ELENA VALCU<sup>1</sup>,  
BOGDAN JURCA<sup>2</sup>, EUGEN SEGAL<sup>2</sup>

<sup>1</sup> Departments of Metals and Materials Science, “Dunărea de Jos” University of Galati

<sup>2</sup> Faculty of Chemistry, University of Bucharest

*Investigation of thermal behaviour of materials using modulated thermogravimetry and modulated differential scanning calorimetry techniques*

CRISTINA CARSOTE<sup>1</sup>, PETRU BUDRUGEAC<sup>2</sup>, ELENA BADEA<sup>3,4</sup>,  
IRINA PETROVICIU<sup>1</sup>, LUCREȚIA MIU<sup>5</sup>, GIUSEPPE DELLA GATTA<sup>6</sup>

<sup>1</sup> National Museum of Romanian History, Centre of Research and Scientific Investigation, Bucharest

<sup>2</sup> INCDIE ICPE – CA, Bucharest

<sup>3</sup> National R&D Institute for Textile and Leather, ICPI Division, Bucharest

<sup>4</sup> Department of Chemistry, Faculty of Sciences, University of Craiova

<sup>5</sup> National R&D Institute for Textile and Leather, Bucharest

<sup>6</sup> Department of Chemistry, University of Turin, Italy

*Comparison between artificially and naturally aged leathers.  
A MHT and DSC study*