

PHYSICAL CHEMISTRY 2016
*13th International Conference on Fundamental
and Applied Aspects of Physical Chemistry*

**5th WORKSHOP: SPECIFIC METHODS FOR FOOD SAFETY AND
QUALITY**

organized by
VINČA INSTITUTE OF NUCLEAR SCIENCES
Vinča – Belgrade, Serbia



in co-operation with
THE SOCIETY OF PHYSICAL
CHEMISTS OF SERBIA



Held under the auspices of the
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGICAL DEVELOPMENT



Supported by
COST Action MP 1302 (Nanospectroscopy)



September 27th, 2016, Belgrade, Serbia

FINAL PROGRAM

Conference Venue

Rectorate of University of Belgrade, Studenski trg 1, Belgrade.

8:30-8:50 Registration

Registration desk will be located in the Entrance Hall of the Rectorate of University of Belgrade

Open ceremony - **B HALL**

8:50-9:00

A - SESSION

Chairperson: Milovan Stojiljković

09:00-09:35 **IL C1**

K.L. Göeken, R. Molenaar, C. Annink, V. Subramaniam and R. Gill

Toward amplification-free detection of DNA based on noble metal nanoparticles

09:35-09:55 **OP C1**

L. Lenhardt Acković, I. Zeković, T. Dramićanin and M.D.Dramićanin

Application of fluorescence spectroscopy coupled with multi-way analysis for food authentication and characterization

09:55-10:15 **IL A1**

I. Nastasijević

Antimicrobial resistance monitoring and surveillance in the food safety context

10:15-10:35 **OP B1**

I. Sredović Ignjatović, J. Tomić, Lj. Ignjatović and M. B. Rajković

Application of ion chromatography for determination of titrable acidity in fruit nectars

10:35-11:00 *Coffee break*

B - SESSION

Chairperson: Milovan Stojiljković

11:00-11:35 **IL B2**

R. Rapini and G. Marrazza

Recent progress in biosensors for acetamiprid pesticide detection

11:35-12:10 **IL B1**

C. Cristea, A. Florea, M. Tertis, B. Feier, E. Bodoki, A. Cristea and R. Sandulescu

Is electrochemistry a useful technique for food analysis?

12:10-12:30 **IL B3**

P. Trebše and M. Bavcon Kralj

Fate of pesticides within food processing – from organophosphates to ryanodines

12:30-12:50 **IL B4**

A. Tiiman, J. Jarvet, A. Gräslund and V. Vukojević

Quantitative analytical study of amyloid- β ($A\beta$) peptide aggregation by fluorescence correlation spectroscopy

13:00-14:00 **Lunch break**

14:00-14:30 **POSTER SESSION – ENTRANCE HALL**

Posters should be placed at 08:30 h and removed before 14:30 h

C - SESSION

Chairperson: Milovan Stojiljković

14:30-14:50

M. Janković

Determination of polycyclic aromatic hydrocarbons (PAHs) in moss using UPC² with UV detection

14:50-15:25 **IL C3**

E. Omanovic-Miklicanin, M. Maksimović, I. Vinkovic-Vrcek, Dz. Mulaomerovic and A. Doric

Application of nanotechnology in food packaging

15:25-16:00 IL C4

R. Săndulescu, M. Tertiș, A. Florea, L. Fritea, O. Hosu, B. Ciui, A. Cernat, B. Feier, A. Maghear, B. Iacob, E. Bodoki and C. Cristea

Nanosized and nanostructured platforms for biosensors design

16:00-16:35 IL C2

B. Kalska-Szostko, E. Wińska, U. Klekotka, and D. Satula

Ferrite nanoparticles as a new potential tool for metal detection

POSTER PRESENTATIONS

P A1. THE OXIDATIVE STABILITY OF BERRY SEED OILS AND PURE FATTY ACIDS MEASURED BY DIFFERENTIAL SCANNING CALORIMETRY

D. Micić, S. Ostojić, M. Simonović and B. Simonović

P A2. THERMAL BEHAVIOR OF DRIED STRAWBERRY JUICES FOLLOWED BY DIFFERENTIAL SCANNING CALORIMETRY

S. Ostojić, D. Micić, S. Zlatanović, B. Kovačević and B. R. Simonović

P A3. APPLICATION OF SPECIFIC METHODS IN ANALYSIS OF HERBAL PREPARATION CHLAMYFIN

S. Petrović, T. Lazarevic-Pašti, I. Pašti, B. Nastasijević and A. Leskovac

P A4. IN VITRO ASSESSMENT OF THE GLYCEMIC INDEX OF BAKERY PRODUCTS OBTAINED FROM MILLET (*Panicum miliaceum* L.) FLOUR

D. Poleksić, M. Pavličević, M. Stošić, E. Boely, B. Vucelić-Radović and V. Rakić

P A5. NUTRITIVE PROPERTIES OF NEW MAIZE INBRED LINES AND THEIR HYBRIDS

Č. N. Radenović, B. S. Dinić, M. Radosavljević, A. S. Popović, M. V. Beljanski and M. D. Pavlović

P A6. MULTIRESIDUE ANALYSIS OF PESTICIDES IN HONEY BY MATRIX-SOLID PHASE DISPERSION AND LIQUID CHROMATOGRAPHY-MASS SPECTROMETRY

M. Radišić and M. Laušević

P A7. SYNTHESIS AND CHARACTERIZATION OF FLUORAPATITE/POLYETHYLENE COMPOSITE

V. Stanić, K. Kalić, V. Živković-Radovanović, D. V. Milojkov, D. Topalović, S. T. Tanasković and S. Dimović

P A8. RADIOSTRONTIUM LEVEL IN FRUITS

N. B. Šarap and M. M. Janković

P A9. TOTAL PHENOLICS AND ANTI-DPPH RADICAL ACTIVITY OF MONTENEGRIN WINES

N. Đorđević, M. Novaković, B. Pejčin, V. Vajs and V. Tešević

P A10. PORTABLE SENSOR FOR NON-DESTRUCTIVE DETERMINATION OF GLUCOSE IN FOOD, PHARMACEUTICALS AND MEDICINE

D. B. Topalović, D. V. Milojkov, V. Stanić and Z. Krstić

P A11. IMMUNOCHEMICAL DETERMINATION OF GLUTEN IN BEERS

B. Vidović, A. Paunović, V. Todorović, B. Đorđević, S. Šobajić and I. Stanković

P B1. IDENTIFICATION OF DEGRADATION PRODUCTS OF CHLORPYRIFOS IN FOOD MATRIX BY GC-MS AND FTIR

M. Cvijović, Z. Nedić, P. Đurđević, V. Beškoski, G. Gojgić-Cvijović, B. Nastasijević, J. Savić, S. Stanković, B. Tanović and V. Vasić

P B2. EFFICIENCY OF DIFFERENT SOLVENTS MIXTURES IN EXTRACTION OF TOTAL VITAMIN C IN COMMERCIAL MILK SAMPLES AND INFANT FORMULAS

M. Denić, S. Sunarić and G. Kocić

P B3. DETERMINATION OF TRICHOTECENES CONTENT IN COMMERCIALY AVAILABLE CEREAL PRODUCTS

J. Mesarović, S. Drinić Mladenović, A. Obradović, V. Dragičević and S. Stanković

P B4. ANALYSIS OF GENTIANA LUTEA EXTRACTS BY ATMOSPHERIC SOLIDS ANALYSIS PROBE MASS SPECTROMETRY

B. Nastasijević, S. Petrović and A. Leskovac

P B5. DETERMINATION OF PHENOLIC COMPOUNDS IN AUTOCHTHONOUS MONTENEGRIN WINES BY HPLC/MS/MS

N. Đorđević, M. Živković, N. Todorović, S. Pajović and V. Tešević

P B6. MULTI-ELEMENT ANALYSIS OF NOVEL RED WINE CLONES BY ICP-OES AND ICP-MS METHODS

N. Đorđević, J. Mutić, B. Radović, V. Vajs and V. Tešević

P B7. DEVELOPMENT OF A CHROMATOGRAPHIC METHOD FOR DETERMINATION OF SELECTED COMPOUNDS IN BEER

J. Savić and V. Vasić

P B8. DETERMINATION OF CURCUMIN IN TURMERIC PRODUCTS BY UV-VIS SPECTROPHOTOMETRY

S. Zlatanović, O. Kovačević, B. Kovačević, S. Ostojčić and S. Gorjanović

P C1. PREPARATION OF SERS SUBSTRATE BASED ON Ag COATED MICROPOROUS SILICON

L. Mikac, M. Ivanda, M. Gotić, H. Gebavi and V. Đerek

P C2. PHYSICOCHEMICAL PROPERTIES OF MULTILAYERED FERRITE NANOPARTICLES

U. Klekotka, B. Kalska-Szostko, and D. Satuła

P C3. REMOVAL OF ORGANOPHOSPHATE PESTICIDES FROM DRINKING WATER USING HETEROATOM-DOPED MESOPOROUS CARBONS

T. Lazarević-Pašti, I. Pašti, B. Babić and V. Vasić

P C4. SYNTHESIS AND CHARACTERIZATION OF LUMINESCENT FLUORAPATITE NANOMATERIAL AS POTENTIAL DOSIMETER FOR FOOD IRRADIATION

D. V. Milojkov, J. Savić, J. Maletaškić, V. Živković-Radovanović, G. V. Janjić and V. Stanić

P C5. REMOVAL OF ORGANOPHOSPHATE PESTICIDE FROM WATER BY GOLD NANOPARTICLES

T. Momić, T. Lazarević Pašti, U. Bogdanović, V. Vodnik and V. Vasić