

10th Conference of the Young Chemists of Serbia Program Highlights



Table of Contents

Scientific Committee	1
Organizing Committee	1
European Young Chemists' Network	1
Sponsorship	2
Acknowledgments	3
Scientific Program	4
Types of presentations	9
Plenary Lecture	10
Invited Lectures	10
Oral presentations	11
Chemistry meets Biology (CB)	11
Environmental Awereness (EA)	11
Physical and Computational Chemistry (PCC)	12
Phytochemistry and Food Chemistry (PFC)	12
Supramolecular Chemistry and Functional Materials (SCFM)	13
Flash presentations	14
Chemistry meets Biology (CB)	14
Physical and Computational Chemistry (PCC)	14
Poster presentations	15
Chemistry and Society (CS)	15
Chemistry meets Biology (CB)	16
Developments in Chemical Synthesis (DCS)	21
Environmental Awereness (EA)	24

Physical and Computational Chemistry (PCC)	27
Phytochemistry and Food Chemistry (PFC)	30
Solution Chemistry and Chemical Equilibrium (SCCE)	36
Supramolecular Chemistry and Functional Materials (SCFM)	37

Scientific Committee

- Dr. Života Selaković University of Belgrade, Faculty of Chemistry
- Dr. Dušan Dimić University of Belgrade, Faculty of Physical Chemistry
- Dr. Jelica Milošević University of Belgrade, Faculty of Chemistry
- Dr. Jelena Simić Institute of Molecular Genetics and Genetic Engineering, University of Belgrade
- Dr. Lidija Radovanović Innovation Centre of Faculty of Technology and Metallurgy, Belgrade, Serbia
- Dr. Snežana Papović University of Novi Sad, Faculty of Sciences

Organizing Committee

Dr. Jelena Kesić – University of Novi Sad, Faculty of Sciences

Mila Lazović – Innovative Centre Faculty of Chemistry Ltd., Belgrade, Serbia

Mihajlo Jakanovski – Innovative Centre Faculty of Chemistry Ltd., Belgrade, Serbia

European Young Chemists' Network

Nathan Carpentier, Treasurer

Sponsorship

The Organizing Committee is grateful for the donations from: Ministry of Science, Technological Development and Innovation



MET-EFFECT project

Innovative Centre Faculty of Chemistry Belgrade Ltd.



Analysis d.o.o.



Proanalytica d.o.o.





PrimaLab d.o.o.



European Young Chemists' Network



Acknowledgments

We acknowledge Ministry of Science, Technological Development and Innovation for financial support.

We acknowledge the University of Belgrade – Faculty of Chemistry for the use of the space of the faculty during the 10th Conference of Young Chemists' of Serbia.

We thank the Board of the Serbian Chemical Society for the support during the organization of the Conference.

We thank the Analysis d.o.o. for continued cooperation and funding the promoting material.

We acknowledge Dr. Ljiljana Mihajlović-Lalić for financial support from the MET-EFFECT project, for actively participating in the Conference organization, and presenting the project results at the Conference.

We acknowledge Proanalytica d.o.o. for financial support.

We acknowledge PrimaLab d.o.o. for financial support.

We gratefully acknowledge the financial support for the best oral and poster presentations by the European Young Chemists' Network (EYCN).

Scientific Program

Time schedule	Program		
	Registration of the participants		
8:30	Mounting posters for the Poster Session 1		
	(ODD POSTER NUMBERS AND POSTERS FROM FLASH		
	PRESENTATION APPLICATIONS)		
	Conference opening		
9:30	Serbian Chemical Society		
7.30	Scientific Committee		
	Serbian Young Chemists' Club presentation		
10:00	Sponsor presentation		
10.00	Proanalytica d.o.o.		
	Plenary Lecture		
10:05	PP OP 01 – Andrea Nikolić		
10.03	University of Belgrade, Faculty of Chemistry, Belgrade, Serbia		
	"Transition-metal catalysis in organic synthesis"		
10:40	Project presentation		
10.40	Stefan Nikolić (MET-EFFECT)		
11:00	Oral presentations, Session 1		
	CB OP 01 – Marko Jović		
	Innovative Centre Faculty of Chemistry Ltd., Belgrade, Serbia		
	"HPTLC-FTIR-MS identification of anti-MRSA and antioxidative compounds from		
	Dysidea avara"		
	CB OP 02 – Danilo Trajković		
	University of Belgrade, Faculty of Chemistry, Belgrade, Serbia		
	"Optimization of chromatographic conditions for separation of bee venom		
	constituents by high-performance thin-layer chromatography"		
	EA OP 01 – Marija Kovač		
	University of Novi Sad - Faculty of Technology, Novi Sad, Serbia		
	"Insight on the deterioration phenomena of cultural heritage objects"		

	PCC OP 01 – Aleksandar Mijajlović
	University of Belgrade – Faculty of Chemistry, Belgrade, Serbia
	"An efficient electrochemical sensor based on Y_2O_3 nanoparticles doped with
	graphitic carbon nitride for sensitive detection of triclosan in real samples"
	PCC OP 02 – Tatjana Stanković
	University of Belgrade – Faculty of Physical Chemistry, Belgrade, Serbia
	"Application of carbon aerogels for supercapacitors"
	SCFM OP 01 – Nemanja Latas
	University of Belgrade, Vinča Institute of Nuclear Sciences, National Institute of the
	Republic of Serbia, Belgrade, Serbia
	"Characterization of lithiation-induced changes in anatase TiO ₂ nanotubes:
	microstructural, electrical and optical insights"
	Coffee break
12.00	
12:00	Presentation of ongoing conference
	Scientific Society of Faculty of Technology Novi Sad
	Invited Lecture
	PPP OP 01 – Nevena Milčić
	University of Zagreb - Faculty of Chemical Engineering and Technology, Zagreb,
12:30	Croatia
	"Biocatalysis in the spotlight: exploring the complexities of enzymatic processes with
	a reaction engineering approach"
	Popular Scientific Lecture
12:55	Luka Mihajlović (Analysis d.o.o.)
	European Young Chemists' Network (EYCN)
13:15	Nathan Carpentier – Treasurer
	Soft-skills presentation
	Soft-skins presentation
13:25	Student Section of the Croatian Chemical Society

13:35	Flash presentations		
	CB FP 01 – Jelena Ožegović		
	University of Novi Sad, Faculty of Sciences, Novi Sad, Serbia		
	"Influence on iodine to the cytotoxicity of furofuranone compounds"		
	CB FP 02 – Jelena Mijatović		
	University of Novi Sad, Faculty of Sciences, Novi Sad, Serbia		
	"Synthesis and cytotoxicity of novel furofuranone analog"		
	CB FP 03 – Lazar Popović		
	Innovative Centre Faculty of Chemistry Ltd., Belgrade, Serbia		
	"Effects of different pre-processing methods on the outcome of partial least squares		
	regression in infrared spectra obtained with DoE"		
	PCC FP 01 – Katarina Ćeranić		
	Innovative Centre Faculty of Chemistry, Belgrade, Serbia		
	"Energy decomposition analysis of cation- π interactions of sandwich compouns"		
	PCC FP 02 – Milenko Bunović		
	University of Belgrade - Faculty of Chemistry, Belgrade, Serbia		
	"On the nature of O-H/M hydrogen bonds of chelate complexes – DFT and EDA study"		
	PCC FP 03 – Andrej Dedić		
	University of Belgrade – Faculty of Chemistry, Belgrade, Serbia		
	"Strong anion- π interactions between oxyanions and half-sandwich compounds – a		
	DFT study"		
13:50	*GROUP PHOTO*		
13.30	Poster session 1 (ODD POSTER NUMBERS AND POSTERS FROM FLASH		
14:00	PRESENTATION APPLICATIONS)		

	Lunch
	Luich
14:50	Removing posters from Poster Session 1
14.50	Mounting posters for Poster Session 2 (EVEN POSTER NUMBERS)
	Mounting posters for Foster Bession 2 (EVENT OBTER NONDERS)
	Invited Lecture
	PPP OP 02 – Nevena Mihailović
15:30	University of Kragujevac – Faculty of Science, Kragujevac, Serbia
	"Harnessing the power of plants: the science behind natural antioxidants in cosmetic
	formulations"
15.55	Chem2Change presentation
15:55	Slađana Savić
16:05	Oral presentations, Session 2
	CB OP 03 – Andrija Vukov
	University of Novi Sad, Faculty of Sciences, Novi Sad, Serbia
	"Physicochemical characteristics, antimicrobial activity and effect on Chard (Beta
	vulgaris L.var.cicla) of newly synthesised nicotine-based ionic liquids"
	EA OP 02 – Đorđe Todorović
	University of Novi Sad - Faculty of Sciences, Novi Sad, Serbia
	"The application of green ZnO nanoparticles based on tartaric acid for the
	sustainable removal of the antipsychotic sulpiride"
	PCC OP 03 – Aleksandra Roganović
	University of Novi Sad - Faculty of Science, Novi Sad, Serbia
	"Comparative study of synthetic, natural, and blended graphite anodes in lithium-ion
	batteries"
	PCC OP 04 – Slađana Đorđević
	University of Kragujevac - Faculty of Science, Kragujevac, Serbia
	"Magnetic properties of periodo-bicyclic hydrocarbons"
	PFC OP 01 – Anita Smailagić
	Innovative Centre Faculty of Chemistry, Belgrade, Serbia
	"Correlation between phenolic compounds and mineral content in wood species
	generated from cooperage"
	SCFM OP 02 – Jovan Rackov

	University of Novi Sad – Faculty of Science, Novi Sad, Serbia
	"Investigation of the water stability of postmodified zirconium-based metal-organic
	frameworks with 4-nitrobenzaldehyde"
17:05	Poster session 2 (EVEN POSTER NUMBERS) and Coffee break
	Closing ceremony
18:10	Best Oral Presentation Award
	Best Poster Presentation Award
19:00	End of the Conference

All scientific contributions are divided into the following categories:

Chemistry and Society (CS)

Chemistry meets Biology (CB)

Developments in Chemical Synthesis (DCS)

Environmental Awareness (EA)

Physical and Computational Chemistry (PCC)

Phytochemistry and Food Chemistry (PFC)

Solution Chemistry and Chemical Equilibrium (SCCE)

Supramolecular Chemistry and Functional Materials (SCFM)

POSTER NUMBER is the last part of the contrubition code, e.g. XY PP <u>15</u>.

VENUE:

- Lectures, oral and flash presentations will take place at the **large chemistry amphitheater** (VHA) on the ground floor, Faculty of Chemistry, University of Belgrade (address: Studentski Trg 12-16, Belgrade).
- The Poster sessions will take place in the hallway in front of the library on the 1st floor.
- The lunch will take place in Faculty council meeting room (SZS) on the 1st floor.

Types of presentations

At the 10th Conference of Young Chemists of Serbia, there will be five types of presentations: plenary lecture, invited lectures, oral presentations, flash and poster presentations.

Plenary Lecture

- Duration time: 30 minutes for presentation
- Questions and answers (Q&A): 5 minutes

Invited Lectures

- Duration time: 20 minutes
- Q&A: 5 minutes

Oral presentations in English

- Duration time: 10 minutes including 8 minutes for presentation and 2 minutes for discussion
- Every participant has the contribution code (e.g. CB OP 01) which is written below

Flash presentation in English

- Duration time: 90 seconds for presentation (1 slide)
- Every participant has the contribution code (e.g. CB FP 01) which is written below
- Poster size must not exceed 80 cm (width) × 100 cm (height)
- Poster should be in portrait orientation

Poster presentations

- Poster size must not exceed 80 cm (width) × 100 cm (height)
- Poster should be in portrait orientation
- Every participant has the contribution code (e.g. CB PP 01) which is written below

Instruction for PowerPoint Presentation

- Slide Size 16:9 format
- Save your PowerPoint presentation with the extension ".pptx"
- Name of presentation should be as the name of Abstract (e.g. CB Petrović Analysis)

Plenary Lecture

PP OP 01 – Andrea M. Nikolić

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Transition-metal catalysis in organic synthesis"

Invited Lectures

PPP OP 01 - Nevena Milčić

University of Zagreb – Faculty of Chemical Engineering and Technology, Zagreb, Croatia "Biocatalysis in the spotlight: exploring the complexities of enzymatic processes with a reaction engineering approach"

PPP OP 02 – Nevena R. Mihailović

University of Kragujevac – Faculty of Science, Kragujevac, Serbia

"Harnessing the power of plants: the science behind natural antioxidants in cosmetic formulations"

Oral presentations

Chemistry meets Biology (CB)

CB OP 01 – Marko D. Jović

Innovative Centre Faculty of Chemistry, Belgrade, Serbia

"HPTLC-FTIR-MS identification of anti-MRSA and antioxidative compounds from *Dysidea* avara"

CB OP 02 – Danilo Trajković

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Optimization of chromatographic conditions for separation of bee venom constituents by highperformance thin-layer chromatography"

CB OP 03 – Andrija Vukov

University of Novi Sad - Faculty of Sciences, Novi Sad, Serbia

"Physicochemical characteristics, antimicrobial activity and effect on Chard (*Beta vulgaris L.var.cicla*) of newly synthesised nicotine-based ionic liquids"

Environmental Awereness (EA)

EA OP 01 – Marija K. Kovač

University of Novi Sad - Faculty of Technology, Novi Sad, Serbia

"Insight on the deterioration phenomena of cultural heritage objects"

EA OP 02 – Đorđe T. Todorović

University of Novi Sad - Faculty of Sciences, Novi Sad, Serbia

"The application of green ZnO nanoparticles based on tartaric acid for the sustainable removal of the antipsychotic sulpiride"

Physical and Computational Chemistry (PCC)

PCC OP 01 – Aleksandar Mijajlović

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"An efficient electrochemical sensor based on Y₂O₃ nanoparticles doped with graphitic carbon nitride for sensitive detection of triclosan in real samples"

PCC OP 02 – Tatjana Stanković

University of Belgrade - Faculty of Physical Chemistry, Belgrade, Serbia

"Application of carbon aerogels for supercapacitors"

PCC OP 03 – Aleksandra Roganović

University of Novi Sad – Faculty of Science, Novi Sad, Serbia

"Comparative study of synthetic, natural, and blended graphite anodes in lithium-ion batteries"

PCC OP 04 – Slađana Đorđević

University of Kragujevac – Faculty of Science, Kragujevac, Serbia

"Magnetic properties of *per*iodo-bicyclic hydrocarbons"

Phytochemistry and Food Chemistry (PFC)

PFC OP 01 – Anita T. Smailagić

Innovative Centre Faculty of Chemistry, Belgrade, Serbia

"Correlation between phenolic compounds and mineral content in wood species generated from cooperage"

Supramolecular Chemistry and Functional Materials (SCFM)

SCFM OP 01 – Nemanja Latas

University of Belgrade - Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Characterization of lithiation-induced changes in anatase TiO₂ nanotubes: microstructural, electrical and optical insights"

SCFM OP 02 – Jovan M. Rackov

University of Novi Sad – Faculty of Science, Novi Sad, Serbia

"Investigation of the water stability of postmodified zirconium-based metal-organic frameworks with 4-nitrobenzaldehyde"

Flash presentations

Chemistry meets Biology (CB)

CB FP 01 – Jelena Ožegović

University of Novi Sad – Faculty of Science, Novi Sad, Serbia

"Influence on iodine to the cytotoxicity of furofuranone compounds"

CB FP 02 – Jelena Mijatović

University of Novi Sad – Faculty of Science, Novi Sad, Serbia

"Synthesis and cytotoxicity of novel furofuranone analog"

CB FP 03 – Lazar Popović

Innovative Centre Faculty of Chemistry Ltd., Belgrade, Serbia

"Effects of different pre-processing methods on the outcome of partial least squares regression in infrared spectra obtained with DoE"

Physical and Computational Chemistry (PCC)

PCC FP 01 – Katarina A. Ćeranić

Innovative Centre Faculty of Chemistry, Belgrade, Serbia

"Energy decomposition analysis of cation- π interactions of sandwich compounds"

PCC FP 02 – Milenko Bunović

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"On the nature of O-H/M hydrogen bonds of chelate complexes – DFT and EDA study"

PCC FP 03 – Andrej B. Dedić

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Strong anion- π interactions between oxyanions and half-sandwich compounds – a DFT study"

Poster presentations

Chemistry and Society (CS)

CS PP 01 – Adela Zeković

State University of Novi Pazar – Department of Natural Sciences and Mathematics, Vuka Karadžića 9, Novi Pazar, Serbia

"Can the Android applications be successfully used in chemistry classes?"

CS PP 02 – Filip Stašević

University of Kragujevac - Faculty of Science, Kragujevac, Serbia

"Chemistry educational outcomes and standards in Serbia and Montenegro. Analysis of the teachers' attitudes"

CS PP 03 – Aleksa Vizi

Innovative Centre Faculty of Chemistry, Ltd., Belgrade, Serbia

"Becoming a lab detective: an introduction to qualitative chemical analysis"

CS PP 04 – Aleksa Vizi

Innovative Centre Faculty of Chemistry, Ltd., Belgrade, Serbia

"Efficient distribution ratio lab exercise for college students"

Chemistry meets Biology (CB)

CB PP 01 – Andrej Nikolić

University of Rijeka, Rijeka, Croatia

"Studying the aggregation of antiviral porphyrins and their peptide conjugates by molecular dynamics and UV/Vis spectroscopy"

CB PP 02 – Milica Bojić

University of Novi Sad – Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia

"Synthesis and in silico ADMET testing of novel 10-propargyloxy estrane derivatives"

CB PP 03 – Jovana Marjanović

University of Kragujevac – Faculty of Science, Department of Chemistry, Kragujevac, Serbia "Synthesis, antimicrobial, antioxidant activities and BSA binding properties of some new Schiff's bases derived from benzylamine"

CB PP 04 – Tamara Petrović

University of Belgrade – Faculty of Chemistry, Department for General and Inorganic Chemistry, Belgrade, Serbia

"Synthesis, chemical characterization, cytotoxic effect, and cellular localization of iridium(III) complexes"

CB PP 05 – Budimir Ilić

University of Niš – Faculty of Medicine, Department of Chemistry, Niš, Serbia

"Molecular dynamics of peptide-based inhibitor targeting Aβ42 fibril formation in Alzheimer's"

CB PP 06 – Budimir Ilić

University of Niš – Faculty of Medicine, Department of Chemistry, Niš, Serbia

"Disarming Parkinson's: targeting key residues in alpha-synuclein with VAQKTmV"

CB PP 07 – Gvozden Jovanović

Institute for Technology of Nuclear and Other Mineral Raw Materials, Belgrade, Serbia "Application of MIPAR Software in the Identification and Quantification of Novel Antifungal Agents"

CB PP 08 – Sergej Cvijić

University of Novi Sad – Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia

"Design and synthesis of novel steroidal NRF2 activators"

CB PP 09 – Ljubica Popović

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Effect of pH on piroxicam interactions with Fe³⁺ ions in water"

CB PP 10 – Dragana Mekić

University of Novi Sad – Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia

"Assessment of lipophilicity of thiocarbohydrazone by using thin-layer chromatography"

CB PP 11 – Marija Dimitrijević

University of Belgrade - Faculty of Technology and Metallurgy, Belgrade, Serbia

"The influence of the chemical structure on the antioxidant activity of acridine-1,8-dione derivatives"

CB PP 12 – Andriana Stoilković

University of Belgrade – Institute of Chemistry, Technology and Metallurgy, National Institute of the Republic of Serbia, Belgrade, Serbia

"Synthesis and biological evaluation of amodiaquine derivatives as inhibitors of human cholinesterase"

CB PP 13 – Vladimir Vlatković

University of Belgrade – Institute of Physics Belgrade, National Institute of the Republic of Serbia, Belgrade, Serbia

"Lipophilicity assessment using the biomimetic immobilized artificial membrane chromatography"

CB PP 14 – Milica Savić

University of Belgrade – Institute of Chemistry, Technology and Metallurgy, National Institute of the Republic of Serbia, Belgrade, Serbia

"Biological activity of Zn(II) hydrazone complexes"

CB PP 15 – Jelena Živanović

University of Niš – Faculty of Sciences and Mathematics, Department of Chemistry, Niš, Serbia "Antioxidant properties of ferrocenyl cinnamoyl derivatives"

CB PP 16 – Đorđe Janković

University of Novi Sad - Faculty of Sciences, Novi Sad, Serbia

"Synthesis, *in vitro* hormonal activity and *in silico* analysis of new 17a-homolactone androstane carbamates"

CB PP 17 – Anastasija Dimčić

University of Novi Sad - Faculty of Sciences, Novi Sad, Serbia

"Efficient synthesis, ADME-Tox analysis and cytotoxic activity of benzoyl analogues of (-)-goniofufurone"

CB PP 18 – Teodora Vujanić

University of Novi Sad – Faculty of Sciences, Novi Sad, Serbia

"Synthesis, ADME-Tox analysis and antiproliferative activity of new chloro analogue of (–)-goniofufurone"

CB PP 19 – Marija Pavlović

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Synthesis, characterization, antimicrobial activity of Cd(II) complex with a salicylaldehyde derivate"

CB PP 20 – Ljubodrag Aleksić

University of Belgrade – Faculty of Chemistry, Department of Biochemistry, Belgrade, Serbia "Novel 4-aminoquinoline derivatives exhibit pro-ferroptotic activity in MIA PaCa-2 and PANC-1 cell lines"

CB PP 21 – Vanja Tatić

University of Novi Sad – Faculty of Sciences, Department of Biology and Ecology, Novi Sad, Serbia

"Optimization of sample preparation for short peptide sequencing by tandem mass spectrometry"

CB PP 22 – Luka Golubović

Department of Chemistry, College of Science, University of Ha'il, Ha'il 81451, Saudi Arabia "Crystallographic, quantum-chemical, protein-, and DNA-binding properties of two novel copper(II)–pyridoxal-aminoguanidine complexes with differing counterions (SO₄²⁻ and NO₃⁻)"

CB PP 23 – Anabela Dragićević

University of Belgrade - Faculty of Physical Chemistry, Belgrade, Serbia

"Assessing stem cell viability and redox potential using electrochemical and EPR techniques"

CB PP 24 – Jana Miloradović

Petnica Science Center – Valjevo, Serbia

"Synthesis of 8-((2-aminoethyl)amino)-caffeine and investigation of its inhibitory effect on chymotrypsin and pepsin"

CB PP 25 – Snežana Selaković

University of Belgrade – Faculty of Pharmacy, Belgrade, Serbia

"Synthesis, characterization, antimicrobial activity of Zn(II) complex with a salicylaldehyde derivate"

CB PP 26 – Jelena Spremo

University of Novi Sad – Faculty of Sciences, Department of Biology and Ecology, Novi Sad, Serbia

"Changes in histone acetyltransferase activity in ageing honey bees (Apis mellifera L.)"

CB PP 27 – Bojan Levovnik

University of Novi Sad – Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia

"Synthesis and in silico analysis of new iodinated furodioxol epimer"

Developments in Chemical Synthesis (DCS)

DCS PP 01 – Marijana Kostić

University of Novi Sad – Faculty of Science, Novi Sad, Serbia

"Synthesis and crystal structure of a Ni(II) complex with a novel Schiff base of 2,6-diacetylpyridine"

DCS PP 02 – Jovana Bugarinović

University of Kragujevac – Faculty of Science, Department of Chemistry, Kragujevac, Serbia "Synthesis and electrochemical properties of a series of pyrazolines containing a ferrocenyl group"

DCS PP 03 – Bojana Pantović

University of Kragujevac, Faculty of Science, Department of Chemistry, Kragujevac, Serbia "Platinum(II) complex with promethazine: Synthesis, crystal structure and DNA/BSA binding affinity"

DCS PP 04 – Tina Andrejević

University of Kragujevac – Faculty of Science, Department of Chemistry, Kragujevac, Serbia "New palladium(II) complex with promethazine and its interaction with biomolecules"

DCS PP 05 – Nevena Stevanović

University of Kragujevac – Faculty of Science, Department of Chemistry, Kragujevac, Serbia "Synthesis and structural characterization of a copper(II) complex with antifungal tebuconazole"

DCS PP 06 – Miloš Jović

University of Belgrade - Institute of Chemistry, Technology and Metallurgy - National Institute of the Republic of Serbia, Serbia

"A New, Selective, and Ratiometric Fluorescent Sensor for Zinc(II)"

DCS PP 07 – Ana Kandić

Innovative Centre Faculty of Chemistry, Ltd., Belgrade, Serbia

"Synthesis, chemical characterization and X-ray analysis of rhenium(V) complexes with apigenin and its derivatives"

DCS PP 08 – Jana Timotijević

University of Belgrade – Faculty of Chemistry, Department for General and Inorganic Chemistry, Belgrade, Serbia

"Synthesis, chemical characterization and X-ray analysis of oxorhenium(V) complexes with picolinic acid derivatives"

DCS PP 09 – Paul Thomashausen

University of Applied Sciences Merseburg - Department of Engineering and Natural Sciences, Merseburg, Germany

"Synthesis and crystal structure of a new Ag(I) polymeric complex with 3-(pyrazol-1-yl)-L-alanine"

DCS PP 10 – Milica Budai

University of Novi Sad – Faculty of Science, Novi Sad, Serbia

"Synthesis and characterization of a Ni(II) complex with asymmetric Schiff base of 2,6-diacetylpyridine"

DCS PP 11 – Branka Krnjaja

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Novel atom-efficient photocatalyst-free visible light-induced approach to the synthesis of 2-methyl-4-(phenylsulfonyl)butan-2-ol"

DSC PP 12 – Marijana Kasalović

University of Applied Sciences Merseburg, Department of Engineering and Natural Sciences, Merseburg, Germany

University of Kragujevac – Faculty of Science, Kragujevac, Serbia

"Synthesis and structural characterization of a novel trimethyltin(IV) complex with 3-(4-methyl-2-oxoquinolin-1(2H)-yl)propanoic acid"

DSC PP 13 – Anđela Stanisavljević

University of Belgarde – Faculty of Chemistry, Belgrade, Serbia

"Selective mono-alkylation of a primary amine"

DSC PP 14 – Emilija Nidžović

University of Belgrade – Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"A novel synthesis route to high-entropy spinel oxides"

DSC PP 15 – Kristina Piskulić

University of Kragujevac – Faculty of Science, Department of Chemistry, Kragujevac, Serbia "Anticancer evaluation, mechanism of action, and protein binding study of some Schiff bases: Molecular docking study"

DSC PP 16 – Vanja Nikolić

University of Novi Sad – Faculty of Sciences, Novi Sad, Serbia

"Synthesis of a new polymeric Zn(II) complex with bis(4-carboxybenzyl)ammonium chloride and *o*-phenanthroline"

Environmental Awereness (EA)

EA PP 01 – Dušica Jovanović

University of Novi Sad – Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia

"Unveiling the reactive species involved in the photocatalytic degradation mechanisms of ciprofloxacin and sulpiride"

EA PP 02 – Nataša Mladenović Nikolić

University of Belgrade – Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Impact of concentration of NaOH in alkali solution on the structural and radiological characteristics of alkali-activated material based on fly ash and metakaolin"

EA PP 03 – Dragana Žmukić

University of Novi Sad – Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental Protection, Novi Sad, Serbia

"Analysis of sludge content from wastewater treatment plant for the presence of specific organic and inorganic compounds"

EA PP 04 – Noemi Kiš

"Europa" Student Centre – Student Dormitory, Novi Sad, Serbia

"A comparative analysis of the quality of tap water and yellow well water in Srbobran"

EA PP 05 – Marija Kuč

University of Novi Sad – Faculty of Sciences, Department of Chemistry, Biochemistry and Environmental protection, Novi Sad, Serbia

"The role of quenching experiments in UV-based advanced oxidation processes"

EA PP 06 – Natalija Nedić

University of Belgrade – Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia "Removal of crystal violet from aqueous solution using *Ambrosia artemisiifolia* based biosorbent"

EA PP 07 – Marija Šobić

University of Novi Sad – Faculty of Technology Novi Sad, Novi Sad, Serbia

"Efficient removal of bezafibrate using acid-modified hydrochar"

EA PP 08 – Teodora Taškov

University of Belgrade – Faculty of Technology and Metallurgy, Belgrade, Serbia

"Removal of polluting organic substances from aqueous solutions by adsorption on hydroxiapatiteenriched natural zeolite"

EA PP 09 – Sara Hourani

University of Novi Sad – Faculty of Technology, Novi Sad, Serbia

"Application of sodium stearoyl glutamate and polyacrylic acid mixture in cosmetic emulsions"

EA PP 10 – Miloš Ilić

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Leaching of antimony from water bottle materials"

EA PP 11 – Jovana Aćimović

University of Belgrade – Environmental Physics Laboratory, Institute of Physics Belgrade, National Institute of the Republic of Serbia, Belgrade, Serbia

"Hansen solubility parameters as predictor of polymer compatibility for binding fluoxetine"

EA PP 12 – Anđela Malović

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Decolorization of Indigo carmine dye with ozone"

EA PP 13 – Igor Kodranov

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Absorption of the Red F3B azo dye by humic acid"

EA PP 14 – Jasmina Mušović

University of Belgrade – Laboratory of Physical Chemistry, Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Partitioning behavior of polyphenolic compounds in choline-based ionic liquid aqueous biphasic systems"

EA PP 15 – Dunja Banđur

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Influence of Fe³⁺ ions and citrate in the photodegradation of levofloxacin in water solution at pH 5"

EA PP 16 – Ana Lazić

University of Belgrade – Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Development and application of electrochemical sensor for metol detection in adsorption studies"

EA PP 17 – Marija Kovačević

University of Belgrade – Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Photodegradation of ciprofloxacin with zirconium-modified titan(IV)-oxide"

EA PP 18 – Nadežda Seratlić

University of Novi Sad – Faculty of Technology Novi Sad, Novi Sad, Serbia

"Valorization of shells from the invasive river crayfish *Faxonius limosus*: Chitosan extraction and characterizartion"

Physical and Computational Chemistry (PCC)

PCC PP 01 - Meriene Gandara

Technological Institute of Aviatio, São José dos Campos, Brazil

"Study of Nb₂CT_x properties for application in microsupercapacitors"

PCC PP 02 – Katarina A. Ćeranić

 ${\it University~of~Belgrade-Faculty~of~Physical~Chemistry,~Belgrade,~Serbia}$

Innovative Center Faculty of Chemistry, Belgrade, Serbia

"Designing a crown ether detector for Mg²⁺ ions"

PCC PP 03 - Ana Nastasić

University of Belgrade – Faculty of Physical Chemistry, Belgrade, Serbia

"Glassy carbon electrode modified by ZnO/GO composite for electrochemical detection of diclofenac"

PCC PP 04 – Ana Nastasić

University of Belgrade – Faculty of Physical Chemistry, Belgrade, Serbia

"Zn/rGO nanosize electrocatalyst for oxygen reduction reaction in alkaline media"

PCC PP 05 – Danijela S. Kretić

University of Belgrade – Faculty of Physical Chemistry, Belgrade, Serbia

"Analysis of trigger bond strength in nitroaromatic systems with intermolecular hydrogen bonding using Wiberg bond indices"

PCC PP 06 – Kristina A. Živković

University of Novi Sad – Faculty of Sciences, Novi Sad, Republic of Serbia

"Development and validation of QSRR models of 3-(4-substituted benzyl)-cycloalkylspiro-5hidantoins"

PCC PP 07 – Naima S. Crnišanin

State University of Novi Pazar – Department of Natural Science and Mathematics, Novi Pazar, Serbia

"The influence of solvent polarity on the kinetic and thermodynamic parameters of the reaction of substitution of methyl chloride with p-hydroxybenzoate anion"

PCC PP 08 – Milica B. Marković

University of Belgrade – Faculty of Physical Chemistry, Belgrade, Serbia.

"Effects of sulfuric acid on pig bone quality: Implications for forensic analysis"

PCC PP 09 – Ivana S. Veljković

University of Belgrade – Institute of Chemistry, Technology and Metallurgy, National Institute of the Republic of Serbia, Belgrade, Serbia

"Elucidating nonclassical hydrogen bonding between water and pyramidane molecule"

PCC PP 10 – Aleksandra B. Đunović

Innovative Centre Faculty of Chemistry, Ltd., Belgrade, Serbia

"Investigation of C-H/O interactions between series of some aromatic and anti-aromatic cyclic hydrocarbons and water"

PCC PP 11 – Nikola I. Fišić

University of Belgrade – Faculty of Physical Chemistry, Belgrade, Serbia

"Helical ladderanes – the first few steps"

PCC PP 12 – Sonja S. Zrilić

Innovative Centre Faculty of Chemistry, Ltd., Belgrade, Serbia

"Energy decomposition analysis of hydrogen bonds of coordinated glycine complexes with waters"

PCC PP 13 – Isidora G. Janković

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Hydrogen bonds between aqua complexes – crystallographic and DFT study"

PCC PP 14 – Milica M. Jakovljević

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Weak C-H/O hydrogen bonds become stronger upon transition metal coordination – a crystallographic and computational study"

PCC PP 15 – David M. Tomić

University of Belgrade – Faculty of Physical Chemistry, Belgrade, Serbia

"Catalysis of oxygen electrode reactions using transition metal fluorides"

PCC PP 16 – Emilija V. Tošić

Petnica Science Center – Valjevo, Serbia

Knjaževačka gimnazija – Knjaževac, Serbia

"Voltammetric determination of paracetamol using glassy carbon electrode modified with gold nanoparticles and molecularly imprinted polypyrrole"

PCC PP 17 - Đorđo M. Tintor

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Half-sandwich compounds of heavier transition metals form the strongest anion- π interactions – a DFT study"

PCC PP 18 – Bogdan K. Pantelić

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Influence of the nature of ligands in square-planar complexes on the electrostatic potential of iodine"

Phytochemistry and Food Chemistry (PFC)

PFC PP 01 – Ivana Grbić

University of Belgrade – Faculty of Agriculture, Belgrade, Serbia

"Fatty acid profile of different avocado varieties"

PFC PP 02 – Sofija Kilibarda

University of Belgrade – Faculty of Agriculture, Belgrade, Serbia

"Phytochemical profile and antioxidant activity of Galium verum L. monocomponent tea"

PFC PP 03 – Sofija Kilibarda

University of Belgrade – Faculty of Agriculture, Belgrade, Serbia

"Lavender: nutrients, chemical composition and bioactivity"

PFC PP 04 – Helena M. Todorović

University of Belgrade - Faculty of Agriculture, Belgrade, Serbia

Tamiš Research and Development Institute, Pančevo, Serbia

"Photosynthetic pigments, carotenoids, phenolics and antioxidant properties of five microgreen species"

PFC PP 05 – Sara M. Pantović

State University of Novi Pazar – Department of Natural Science and Mathematics, Novi Pazar, Serbia

"Can the medicinal plant Symphytum officinale L. be a rich source of macroelements?"

PFC PP 06 – Zorana Z. Kovačević

University of Novi Sad – Faculty of Sciences, Novi Sad, Serbia

"Teas for weight loss-truth or myth? Teas as lipase inhibitors in vitro"

PFC PP 07 – Marko Z. Jovanović

Institute of General and Physical Chemistry, Belgrade, Serbia

"Antiradical activity of Prunus spinosa fruit extract determined by EPR spectroscopy"

PFC PP 08 – Filip E. Sekereš

University of Belgrade – Faculty of Physical Chemistry, Belgrade, Serbia

"Radical scavenging potential of medicinal plants used in wart treatment: An EPR study"

PFC PP 09 – Simona Bukonja

University of Belgrade – Faculty National Institute of the Republic of Serbia, Institute of Field and Vegetable Crops, Novi Sad, Serbia

"Amino acid composition in selected sorghum genotypes (Sorghum bicolor L. Moench)"

PFC PP 10 – Jovana P. Ljujić

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Characterization of natural deep eutectic solvents extracts of raspberry with ¹H NMR multisuppression experiment"

PFC PP 11 – Sanja V. Vukadinović

University of Novi Sad – Faculty of Sciences, Novi Sad, Serbia

"Can "weight loss" teas inhibit α-amylase?"

PFC PP 12 – Tamara G. Timotić

University of Belgrade – Faculty of Physical Chemistry, Belgrade, Serbia

"Application of 2D EPR imaging in studying the redox and oxymetric properties of lettuce and chia seedlings"

PFC PP 13 – Milica Petković

University of Novi Sad – Faculty of Agriculture, Novi Sad, Serbia

"Antioxidant and antidiabetic potential of grape pomace extracts"

PFC PP 14 – Nevena R. Preradović

 $University\ of\ Belgrade-Institute\ for\ Multidisciplinary\ Research,\ Belgrade,\ Serbia$

"Hydroxyl radical scavenging activity of *Dictamnus albus* and *Asplenium ceterach* assessed by EPR spectroscopy"

PFC PP 15 – Zsóka Kratofil

University of Novi Sad – Faculty of Technology, Novi Sad, Serbia

"Europa" Student Centre – Student Dormitory, Novi Sad, Serbia

"Unveiling household food waste: Survey results from the housholds from Vojvodina region, Serbia"

PFC PP 16 – Laura Dobo

University of Novi Sad – Faculty of Technology, Novi Sad, Serbia

"Europa" Student Centre – Student Dormitory, Novi Sad, Serbia

"Eating habits of students from Vojvodina"

PFC PP 17 – Šejla Gusinac Avdović

University of Niš – Faculty of Sciences and Mathematics, Niš, Serbia

"Synthesis of small libraries of natural products: Identification of the new esters from the essential oil of *Pelargonium asperum* (Geraniaceae)"

PFC PP 18 – Bojana Anđelković

University of Belgrade – Faculty of Agriculture, Belgrade, Serbia

"Mineral profile of persimmon (Diospyros kaki L.) fruit"

PFC PP 19 – Emilija Nešković

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Impact of cultivation year on total phenolic content and radical scavenging activity in strawberry genotypes: a comparative analysis of parental and progeny lines"

PFC PP 20 – Una Rankov

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Influence of cultivation year on sugar profiles in strawberry genotypes"

PFC PP 21 – Elena Vukašinović

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Assessment of physico-chemical parameters in strawberry genotypes: chemometric differentiation of parental and progeny lines"

PFC PP 22 – Predrag Karas

University of Novi Sad – Faculty of Technology, Novi Sad, Serbia

"Functional and biological properties of pumpkin leaf concentrates for potential application in the food industry"

PFC PP 23 – Lea H. Malešević

University of Novi Sad – Faculty of Sciences, Novi Sad, Serbia

"Phenolic profile and hypoglycemic potential of petal extracts of new garden rose genotypes grown in Vojvodina (Serbia)"

PFC PP 24 – Ozrenka R. Jeftić

University of Novi Sad – Faculty of Sciences, Novi Sad, Serbia

"Assessment of rosehips from new garden rose genotypes grown in Vojvodina as a potential functional food"

PFC PP 25 – Marko D. Jović

Innovative Centre Faculty of Chemistry, Belgrade, Serbia

"HPTLC fingerprint and bioautographic evaluation of antibacterial activity of *Galium verum* L. monocomponent tea"

PFC PP 26 – Marinela Cvetanoska

University in Skopje – Faculty of Natural Sciences and Mathematics, Skopje, R. N. Macedonia "Deep eutectic solvent for eco-friendly extraction of phenolic compounds from endemic plant *Stachys iva* Griseb. – optimization by Box-Behnken design"

PFC PP 27 – Uroš I. Popov Tapavički

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Efficient detection of invertase adulteration in honey using ion chromatography"

PFC PP 28 – Mihajlo Kulizić

Innovative Centre Faculty of Chemistry, Belgrade, Serbia

"Application of a gas-diffusion flow injection system with activated platinum electrode for the bromate determination in real samples"

PFC PP 29 – Luka R. Vasić

University of Niš – Faculty of Sciences and Mathematics, Niš, Serbia

"Alkan-2-ones and alken-2-ones in *Laurus nobilis* L. essential oil"

PFC PP 30 – Nemanja Đ. Živanović

University of Novi Sad – Faculty of Sciences, Novi Sad, Serbia

"Evaluation of *Pleurotus ostreatus* (Jacq. ex Fr.) P. Kumm. edible mushroom as a novel source of natural antioxidants"

PFC PP 31 – Jelena D. Božović

University of Belgrade – Institute of Forestry, Belgrade, Serbia

"Influence of pH value on the mineral composition of medical mushrooms"

PFC PP 32 – Nenad Đ. Mićanović

University of Belgrade – Faculty of Agriculture, Belgrade, Serbia

"Effect of ripening process in an uncontrolled atmosphere on the nutritional elements in medlar fruits"

PFC PP 33 – Jelena N. Vukosavljević

University of Novi Sad – Faculty of Technology, Novi Sad, Serbia

"Extraction of propolis polyphenols with natural deep eutectic solvents"

PFC PP 34 – Nevena D. Đorđić

University of Novi Sad – Faculty of Technology, Novi Sad, Serbia

"Potential and application of Natural Deep Eutectic Solvents (NADES) as co-solvents in the extraction of bioactive compounds from sage (*Salvia officinalis L.*)"

Solution Chemistry and Chemical Equilibrium (SCCE)

SCCE PP 01 – Snežana S. Kretić

University of Belgrade - Faculty of mining and geology, Belgrade, Serbia

"The distribution of aqueous species and saturation index calculations in the mineral waters of Mataruška Spa"

SCCE PP 02 – Andrej B. Dedić

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Reactive extraction of lactic acid using different extractants"

Supramolecular Chemistry and Functional Materials (SCFM)

SCFM PP 01 – Tamara T. Tadić

University of Belgrade – Institute of Chemistry, Technology and Metallurgy, Belgrade, Serbia "Sorptive extraction of aniline from aqueous solution using reusable molecularly imprinted polymer"

SCFM PP 02 – Tijana T. Stamenković

University of Belgrade – Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Correspondence between photocatalytic and photoluminescent properties of novel nanophosphors"

SCFM PP 03 – Nevena D. Bozinovic

University of Belgrade – Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Analysis of the structure and chemical composition of the laser-modified Ti/Cu/Ti system"

SCFM PP 04 – Slađana R. Laketić

University of Belgrade – Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Impact of the laser irradiation parameters on the surface characteristics of coarse- and ultra-finegrained β -Ti alloy"

SCFM PP 05 – Majda Kolenović Serezlić

State University of Novi Pazar – Department of Natural Science and Mathematics, Novi Pazar, Serbia

"The ion selectivity of the cryptand: prediction of ion selectivity by quantum chemical calculations XVII\$"

SCFM PP 06 – Natalija D. Milojković

University of Belgrade - Faculty of Technology and Metallurgy, Belgrade, Serbia

"Ru-doped TiO2: Novel photocatalyst for Reactive Orange 16 dye degradation"

SCFM PP 07 – Katarina S. Postolović

University of Kragujevac – Faculty of Science, Kragujevac, Serbia

"Preparation of curcumin-loaded polysaccharide-based films for food freshness monitoring"

SCFM PP 08 – Giovanni Di Ruzza

Sapienza University of Rome – Faculty of Chemistry, Rome, Italy

"Production and characterization of polylactic acid-based biocomposites"

SCFM PP 09 – Miljan S. Barić

University of Belgrade – Institute for Multidisciplinary Research, Belgrade, Serbia

"A novel lignin-based nanomaterial from silicon-doped dehydrogenated polymer of coniferyl alcohol"

SCFM PP 10 - Anđelka B. Stolić

University of Belgrade – Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Controlled drug delivery using methacrylate-based hydrogels: Copolymerization as a strategy to mitigate the burst effect"

SCFM PP 11 – Vesna Miljić

University of Novi Sad – Faculty of Technology, Novi Sad, Serbia

"Methyl orange degradation with photocatalytic suspension: efficiency across concentrations"

SCFM PP 12 – Ilija G. Anđelković

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Molecular imprinting of polymers with lactoferrin"

SCFM PP 13 – Maša N. Radisavljević

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Preparation of sorbents with a potential application in solid-phase extraction of octyl salicylate"

SCFM PP 14 – Luka Z. Blagojević

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Methacrylate esters of riboflavin as novel functional monomers for molecular imprinting of polymers with riboflavin binding protein"

SCFM PP 15 – Aleksandar J. Pavićević Nedeljković

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Solid phase extraction of Padimate O using sorbents based on molecularly imprinted polymers"

SCFM PP 16 – Jovan Z. Cvetković

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"Controlled release of furosemide in physiologically relevant media by molecularly imprinted polymers"

SCFM PP 17 – Aleksandar S. Radovanović

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Synthesis of silica-based matrices modified with Rhodamine B derivate for the sorption of α -1-acid glycoprotein"

SCFM PP 18 – Marija G. Krstić

University of Novi Sad – Faculty of Technology, Novi Sad, Serbia

"Microwave-assisted synthesis as a sustainable alternative: comparing two methods for poly(N-isopropylacrylamide) polymerization"

SCFM PP 19 – Aleksa T. Dakić

University of Belgrade – Faculty of Chemistry, Belgrade, Serbia

"Examination of the effect of functional monomer mole fraction on the imprinting of polymers with procaine"

SCFM PP 20 – Aleksa P. Vulićević

University of Belgrade - Faculty of Chemistry, Belgrade, Serbia

"HPLC-monitored controlled release of donepezil by molecularly imprinted polymers under various physiological conditions"

SCFM PP 21 – Barbara Ramadani

University of Belgrade – Vinča Institute of Nuclear Sciences, National Institute of the Republic of Serbia, Belgrade, Serbia

"Investigation of UV and moisture induced degradation of FAPbI₃ perovskite: impact of polyionic additives on stability and phase transition"

SCFM PP 22 – Dušan V. Trajković

University of Belgrade - Faculty of Technology and Metallurgy, Belgrade, Serbia

"The impact of organic polymers on the mechanical properties of geopolymers based on fly ash and slag"