

**25<sup>th</sup> CONFERENCE OF THE SERBIAN CRYSTALLOGRAPHIC SOCIETY**

**BAJINA BAŠTA, JUNE 21–23<sup>rd</sup> 2018**

**CONFERENCE PROGRAM**

## THURSDAY, 21 June

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| 8 <sup>30</sup> -10 <sup>00</sup>  | <b>REGISTRATION</b><br>Poster Mounting<br>All posters should be displayed from June 21 <sup>st</sup> 12:00 to June 22 <sup>nd</sup> 18:00h.  |
| 10 <sup>00</sup> -10 <sup>45</sup> | <b>OPENING CEREMONY</b>  |
| 10 <sup>45</sup> -12 <sup>00</sup> | <b>WELCOME PARTY</b>   |
| 12 <sup>00</sup> -12 <sup>45</sup> | <b>INVITED LECTURE</b><br>Chairperson: Olivera Klisurić<br><b>Vaclav Petříček</b><br>MODULATIONS AND TWINNING – NIGHTMARE OF CRYSTALLOGRAPHERS (?)   |
| 12 <sup>45</sup> -13 <sup>30</sup> | <b>INVITED LECTURE</b><br>Chairperson: Jelena Rogan<br><b>Ivana Radosavljević Evans</b><br>STRUCTURAL STUDIES OF ENERGY MATERIALS:<br>DEVELOPMENT OF ELECTROLYTES FOR SOLID OXIDE FUEL CELLS   |
| 13 <sup>30</sup> -15 <sup>00</sup> | <b>LUNCH BREAK</b><br>PRESIDIUM OF THE SCS 13 <sup>30</sup> -14 <sup>30</sup>  |
| 15 <sup>00</sup> -15 <sup>45</sup> | <b>INVITED LECTURE</b><br>Chairperson: Snežana Zarić<br><b>Piero Macchi</b><br>CHARGE AND SPIN DENSITY IN POSITION AND MOMENTUM SPACE, DENSITY MATRICES, WAVE FUNCTIONS AND ENERGIES OF PERIODIC SYSTEMS, FROM THEORY OR EXPERIMENTS. IN ONE WORD: QUANTUM CRYSTALLOGRAPHY |
| 15 <sup>45</sup> -16 <sup>15</sup> | <b>ORAL PRESENTATIONS</b><br>Chairperson: Srećko Trifunović  |
| 15 <sup>45</sup> -16 <sup>00</sup> | <b>M.V. Rodić, S.B. Novaković, V.M. Leovac, G.A. Bogdanović</b><br>PRELIMINARY RESULTS OF EXPERIMENTAL CHARGE DENSITY DETERMINATION OF [Ni(L)py] (H <sub>2</sub> L = benzoylacetone S-methylisothiosemicarbazone)  |
| 16 <sup>00</sup> -16 <sup>15</sup> | <b>M. Milenković, A. Pevec, B. Čobeljić, M. Stojičkov, I. Turel, K. Anđelković</b><br>SYNTHESIS AND CHARACTERIZATION OF ISOTHIOCYANATO Zn(II) COMPLEX WITH THE CONDENSATION PRODUCT OF 2-ACETYLPIRIDINE AND GIRARD'S T-REAGENT   |
| 16 <sup>15</sup> -16 <sup>45</sup> | <b>COFFEE BREAK</b>  |
| 16 <sup>45</sup> -17 <sup>30</sup> | <b>INVITED LECTURE</b><br>Chairperson: Aleksandar Kremenović<br><b>J. Zdravković, D. Poleti, J. Rogan, D. M. Minić</b><br>MECHANISM AND KINETICS OF NON-ISOTHERMAL DEGRADATION OF d-METAL COMPLEXES WITH BENZENPOLYCARBOXYLATO IONS  |

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| 17 <sup>30</sup> -18 <sup>00</sup> | <b>ORAL PRESENTATIONS</b><br>Chairperson: Nataša Jović Orsini   |
| 17 <sup>30</sup> -17 <sup>45</sup> | <b>M. Fabián, V. Šepelák, P. Bottke, M. Wilkening, V. Girman</b><br>MECHANOCHEMICAL SYNTHESIS OF THE FAR-FROM-EQUILIBRIUM ZINC ALUMINATE AND ITS RESPONSE TO THERMAL TREATMENT  |
| 17 <sup>45</sup> -18 <sup>00</sup> | <b>D. Stanković, M. Ognjanović, B. Dojčinović, Ž. Prijović, B. Antić</b><br>SYNTHESIS, CHARACTERISATION AND APPLICATION OF Fe <sub>3</sub> O <sub>4</sub> NANOFLOWERS/REDUCED GRAPHENE OXIDE COMPOSITE FOR ENHANCED REMOVAL OF REACTIVE BLUE 52 |
| 18 <sup>00</sup> -19 <sup>00</sup> | <b>POSTER SESSION I</b>   |

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## FRIDAY, 22 June

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| 9 <sup>30</sup> -10 <sup>15</sup>  | <b>INVITED LECTURE</b><br>Chairperson: Goran Bogdanović<br><b>Christoph Janiak</b><br>SPECIAL PROBLEMS IN METAL-ORGANIC FRAMEWORK CRYSTALLOGRAPHY   |
| 10 <sup>15</sup> -11 <sup>00</sup> | <b>ORAL PRESENTATIONS</b><br>Chairperson: Tamara Todorović  |
| 10 <sup>15</sup> -10 <sup>30</sup> | <b>M. M. Radanović, V. G. Bujčić, Lj. S. Vojinović-Ješić, M. V. Rodić, V. M. Leovac, Ž. K. Jaćimović</b><br>STRUCTURES OF Cd(II) COMPLEXES WITH 2-ACETILPYRIDINE-AMINOGUANIDINE AND PSEUDOHALOGENIDE BRIDGING LIGANDS |
| 10 <sup>30</sup> -10 <sup>45</sup> | <b>D. Ž. Veljković, A. Đurđević, D. Kretić, S. D. Zarić</b><br>EVIDENCE OF STRONG METAL-HYDROGEN INTERACTIONS IN CRYSTAL STRUCTURES OF TRANSITION METAL COMPLEXES   |
| 10 <sup>45</sup> -11 <sup>00</sup> | <b>M. M. Milovanović, J. M. Andrić, V. B. Medaković, J.-P. Djukic, S. D. Zarić</b><br>ARE PHOSPHINE-BORANE PAIRS CLASSICAL OR FRUSTRATED? ANALYSIS OF CAMBRIDGE STRUCTURAL DATABASE.                                  |
| 11 <sup>00</sup> -11 <sup>30</sup> | <b>COFFEE BREAK</b>   |
| 11 <sup>30</sup> -12 <sup>15</sup> | <b>INVITED LECTURE</b><br>Chairperson: Sladjana Novaković<br><b>Z. Zhang, J-F Audibert, R. Pansu, A. Spasojevic - de Biré</b><br>NON-PHOTOCHEMICAL LASER-INDUCED NUCLEATION IN MICROFLUIDICS DEVICE                   |
| 12 <sup>15</sup> -13 <sup>00</sup> | <b>GOLDEN SPONSOR PROMOTION</b>   |
| 13 <sup>00</sup> -14 <sup>30</sup> | <b>LUNCH BREAK</b>  |

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| 14 <sup>30</sup> -15 <sup>15</sup> | <b>INVITED LECTURE</b><br>Chairperson: Predrag Vulić<br><b>C. Theppitak, F. Kielar, K. Chainok</b><br>CRYSTAL ENGINEERING OF LANTHANIDE COORDINATION POLYMERS WITH HYDRAZIDE LIGANDS   |
| 15 <sup>15</sup> -15 <sup>45</sup> | <b>ORAL PRESENTATIONS</b>  |
| 15 <sup>15</sup> -15 <sup>30</sup> | <b><u>N. Jović Orsini</u>, M. M. Milić, T. E. Torres, G. F. Goya</b><br>MICROSTRUCTURE ANALYSIS OF PURE AND SUBSTITUTED MAGNETITE NANOPARTICLES WITH IMPROVED MAGNETIC HYPERTHERMIA EFFICIENCY   |
| 15 <sup>30</sup> -15 <sup>45</sup> | <b><u>I. M. Bradarić</u>, V. M. Matić, Ilija Savić</b><br>SYNTHESIS, CRYSTAL STRUCTURE, AND MAGNETIC PROPERTIES OF CaRu <sub>1-x</sub> Ti <sub>x</sub> O <sub>3</sub> (x=0; 0.03)  |
| 15 <sup>45</sup> -16 <sup>15</sup> | <b>COFFEE BREAK</b>  |
| 16 <sup>15</sup> -17 <sup>00</sup> | <b>ORAL PRESENTATIONS</b><br>Chairperson: Aleksandra Dapčević  |
| 16 <sup>15</sup> -16 <sup>30</sup> | <b><u>V. N. Nikolić</u><sup>a</sup>, M. M. Milić</b><br>EVOLUTION OF CuFe <sub>2</sub> O <sub>4</sub> AND α-Fe <sub>2</sub> O <sub>3</sub> STRUCTURAL PROPERTIES INITIATED BY THERMAL TREATMENT  |
| 16 <sup>30</sup> -16 <sup>45</sup> | <b><u>M. Milović</u><sup>a</sup>, D. Jugović<sup>a</sup>, M. Mitrić<sup>b</sup>, D. Uskoković</b><br>Li <sub>2</sub> FeSiO <sub>4</sub> AS CATHODE MATERIAL FOR LITHIUM-ION BATTERIES: SYNTHESIS, STRUCTURAL AND ELECTROCHEMICAL CHARACTERISTICS |
| 16 <sup>45</sup> -17 <sup>00</sup> | <b><u>N. Nikolić</u><sup>a</sup>, S. Kovač<sup>b</sup>, P. Dabić</b><br>THE OCCURENCE OF OPALINE MATTER IN HYDROTHERMALLY ALTERED DIABASE, DEBELO BRDO, POVLEN MOUNTAIN AREA   |
| 17 <sup>00</sup> -18 <sup>00</sup> | <b>POSTER SESSION II</b>   |
| 18 <sup>00</sup> -19 <sup>30</sup> | <b>ORAL AND POSTER PRESENTATION AWARDS</b>   |
|                                    | <b>HONORARY MEMBERSHIP AWARD OF THE SERBIAN CRYSTALLOGRAPHIC SOCIETY TO PROFESSOR ANNE SPASOJEVIC - de BIRÉ</b>  |
|                                    | <b>ANNUAL ASSEMBLY OF THE SCS</b>  |
| 20 <sup>30</sup>                   | <b>CONFERENCE DINNER</b><br>Sponsored by GOLDEN SPONSOR ROFA   |

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SATURDAY, 23 June

10<sup>00</sup>

EXCURSION

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## Poster Presentations

- P01** A. Cvetkovski, G. Petruševski, Lj. Pejov, M. Stojanovska, S. Ugarkovic, P. Makreski  
SOLID-STATE CHARACTERIZATION OF THE NEW MOLECULAR SALTS OF PYRIDOXINE
- P02** B. Čobeljić, M. Milenković, A. Pevec, D. Darmanović, I. Turel, K. Anđelković  
SYNTHESIS AND CHARACTERIZATION OF ISOTHIOCYANATO/THIOCYANATO Cd(II) COMPLEX WITH THE CONDENSATION PRODUCT OF 2-ACETILPYRIDINE AND GIRARD'S T-REAGENT
- P03** D. Radanović, A. Pevec, I. Turel, B. Čobeljić, M. Milenković, T. Keškić, K. Anđelković  
SYNTHESIS AND CRYSTAL STRUCTURES OF Co(III) COMPLEXES WITH THE HYDRAZONE AND THIOSEMICARBAZONE LIGANDS
- P04** E. H. Avdović, V. V. Jevtić, M. P. Kasalović, D. Lj. Stojković, S. Jovičić, N. Vuković, Z. Marković, I. Potočňák, S. R. Trifunović  
SYNTHESIS AND CRYSTAL STRUCTURE OF 3-(1-*m*-TOLUIDINO-ETHYLIDENE)-CHROMANE-2,4-DIONE
- P05** M. Đukić, O. Klisurić, Z. Matović  
SYNTHESIS, CHARACTERIZATION AND CRYSTAL STRUCTURE OF COMPLEX [Ru( $\eta^6$ -*p*-cymene)Cl<sub>2</sub>(5-PhAPyCN-ITZ)]
- P06** M. Vukić, N. Vuković, V. Tešević, G. Krstić, P. Vulić  
SYNTHESIS AND CHARACTERIZATION OF INCLUSION COMPLEX OF ACETYL SHIKONIN AND  $\beta$ -CYCLODEXTRIN
- P07** O. R. Klisurić, S. Armaković, S. J. Armaković, S. Lj. Vrbaški, I. Kuzminac, D. S. Jakimov, S. S. Jovanović Šanta  
X-RAY CRYSTALLOGRAPHIC AND COMPUTATIONAL STUDY OF BIOLOGICALLY ACTIVE ANDROST-5-ENE DERIVATIVES
- P08** Z. D. Tomić, M. Mirković  
TETRANUCLEAR COPPER COMPLEX WITH OXIMATE BRIDGES
- P09** T.R. Todorović, G. Janjić, P. Ristić, M.V. Rodić, N.R. Filipović  
MOLECULAR AND CRYSTAL STRUCTURES OF Pd(II) AND Pt(II) COMPLEXES WITH THIOMORPHOLINE-4-CARBONITRILE
- P10** M.V. Rodić, S. Belošević, M.M. Radanović, V.M. Leovac  
SYNTHESIS AND CRYSTAL STRUCTURE OF  $\{[Cu(\mu\text{-}H_2L)(NCS)]_2\}(NCS)_2 \cdot 2MeOH$   
(H<sub>2</sub>L = PYRIDOXAL 5-METHYLISOTHIOSEMICARBAZONE)

- P11** I. R. Marjanović, O. R. Klisurić, S. Armaković, S. J. Armaković, N. R. Filipović, T. R. Todorović  
ONE-DIMENSIONAL SILVER(I)-5-SULFOSALICYLATE TERNARY COORDINATION POLYMER
- P12** N. R. Filipović, O. R. Klisurić, G. V. Janjić, T. R. Todorović  
CRYSTAL STRUCTURES OF Ag(I) COORDINATION POLYMERS WITH 2-THIOCYANATOPYRIDINE
- P13** A. Rakić, Lj. Suručić, Z. Sandić, B. Ekmešćić, A. Nastasović, G. Janjić  
CRYSTALLOGRAPHIC AND QUANTUM-CHEMICAL STUDY OF METAL SORPTION ON COPOLYMER FUNCTIONALIZED WITH TRIETHYLENETETRAAMINE (*TETA*)
- P14** I. S. Antonijević, D. Ž. Veljković, G. Sarić, K. Katančević, S. D. Zarić  
CRYSTALLOGRAPHIC AND QUANTUM-CHEMICAL STUDY OF INTERACTIONS BETWEEN SULFUR AND DISULFIDE BOND
- P15** I. M. Stanković, J. P. Blagojević Filipović, S. D. Zarić  
INTERACTIONS BETWEEN CARBOHYDRATES AND AROMATIC AMINO ACIDS: A CRYSTALLOGRAPHIC SURVEY
- P16** M. Sarvan, M. Petković Benazzouz, A. Rakić, G. Janjić  
ACCEPTOR ABILITY OF COORDINATED OXYGEN ATOM. CRYSTALLOGRAPHIC AND QUANTUM-CHEMICAL STUDY
- P17** J. P. Blagojević Filipović, S. D. Zarić  
STACKING INTERACTIONS OF RESONANCE-ASSISTED HYDROGEN-BRIDGED RINGS
- P18** M. Petković Benazzouz, I. Đorđević, G. Janjić  
STATISTICAL ANALYSIS OF NON-COVALENT INTERACTIONS OF SELENIUM IN CRYSTAL STRUCTURES OF SMALL MOLECULES
- P19** I. S. Antonijević, D. P. Malenoy, S. D. Zarić  
STRONG STACKING INTERACTIONS BETWEEN TETRATHIAFULVALENE FRAGMENTS: CRYSTALLOGRAPHIC AND QUANTUM CHEMICAL STUDY
- P20** J. J. Plavša, P. Režáčova, Jiří Brynda, A. Čelić, E. T. Petri, J. Škerlova  
EFFECT OF MODIFIED *IN SITU* PROTEOLYSIS ON DIFFRACTION QUALITY OF PROTEIN AKR1C3 CRYSTALS
- P21** N. Bošnjaković-Pavlović, S. Novaković, B. Clair, A. Ikni, W. Li, P. Gemeiner, J-F Audibert, R. Pansu, A. Spasojevic - de Biré  
NON-PHOTOCHEMICAL LASER-INDUCED NUCLEATION OF GLYCINE
- P22** A. José F. M. L. Mariano, B. Bratislav Antić  
DEVELOPMENT OF A ZERO-FIELD NUCLEAR MAGNETIC RESONANCE SPECTROMETER FOR THE STUDY OF FERROMAGNETIC MATERIALS
- P23** M. M. Milić, V. N. Nikolić, N. Dj. Lazarov  
THERMALLY INDUCED STRUCTURAL TRANSFORMATIONS OF Fe<sub>2</sub>O<sub>3</sub> NANOPARTICLES EMBEDDED IN A SILICA MATRIX

- P24** L. Radovanović, P. Vulić, Z. Jagličić, Ž. Radovanović, I. Zeković, J. Rogan  
SYNTHESIS, STRUCTURE AND PROPERTIES OF Mn(II)/Zn(II) BIPHASIC MATERIAL
- P25** M. Ognjanović, D. Stanković, M. Mirković, M. Radović, T. Stanojković, B. Antić  
MAGNETITE NANOFLOWERS SYNTHESIZED BY A POLYOL-MEDIATED PROCESS FOR APPLICATION IN MEDICINE
- P26** J. Bijelić, C. Li, B. Smarsly, H. Over, I. Djerdj  
SHAPE-CONTROLLED SYNTHESIS OF CeO<sub>2</sub> NANOPARTICLES: EFFECTS OF DIFFERENT PRECURSORS ON THE FORMATION OF OXYGEN VACANCIES
- P27** B. Simović, A. Dapčević, J. Zdravković, G. Branković  
PHASE TRANSITION FROM NANOSTRUCTURED TITANIA TO LAYERED TITANATE
- P28** G. Janjić, D. Milojkov, D. Mutavdžić, V. Živković-Radovanović, K. Radotić, A. Radosavljević-Mihajlović, V. Stanić  
Ag-DOPED FLUORAPATITE NANOMATERIALS OBTAINED BY NEUTRALIZATION METHOD
- P29** V. N. Nikolić, M. M. Milić  
CuFe<sub>2</sub>O<sub>4</sub> NANOPARTICLES: HIGH-TEMPERATURE TETRAGONAL AND CUBIC PHASE
- P30** P. Dabić, S. Kovač, M. G. Nikolić, A. Kremenović  
PHOTOLUMINESCENCE, STRUCTURE AND POLYMORPHISM OF K<sub>3</sub>ErSi<sub>2</sub>O<sub>7</sub>
- P31** P. Dabić, V. Kahlenberg, S. Kovač, J. Blanuša, Lj. Karanović, A. Kremenović  
CRYSTAL STRUCTURE OF β-K<sub>3</sub>YbSi<sub>2</sub>O<sub>7</sub> AT 298 AND 100 K
- P32** M. Cvetinov, M. Stojanović  
PHASE ANALYSIS OF WASTE SLURRIES OBTAINED AFTER GLASS GRINDING AND POLISHING PROCESS
- P33** N. Danilović, LJ. Kuzmanović, M. Milošević, A. Janićijević, M. Bralović  
CRYSTALLIZATION BRIDGE