

**Agenda of the 16th IPSSC**

**Day 1 (29th May)**

Time	Activity	Presenting	Title
8.00-9.15			Registration
9.15-10.00			Welcome speech + Prof. Dr. Milena Horvat
10.00-11.00	Presentation session 1	1 Victor Regis 2 Megha Manikandan 3 Meryem Lachhab 4 Marcela Hrušková 5 Ana Kraš 6 Katarina Tomić 7 Mark Zver	Lead magnesium niobate-based multilayered thick-film composites Investigating Lithium metal dendrite growth by Magnetic resonance imaging Crystallographic defects in cold-sintered ferroelectric ceramics Behavior of nucleic acids at electrode surfaces: effects of structure and chemical modification Assessing Feasibility of Corrosion Resistance Evaluation Techniques for Zirconium Conversion Coatings on Zinc Neuropeptide receptor Y as potential target for specific cancer treatment Key role of OH radicals for inactivation of viruses in water
11.00-11.30			Poster session with a coffee break
11.30-12.15	Presentation session 1	8 Maja Caf 9 Ivana Goričan 10 Layton José da Silva 11 Vinko Sršan 12 Lea Gašparič 13 Blaž Velkavrh 14 Erik Uran	The effect of functionalized gold nanoparticles on cell membrane electroporation Pb(Fe <sub>0.5</sub> Nb <sub>0.5</sub> )O <sub>3</sub> -BiFeO <sub>3</sub> ceramics and thick films for energy storage applications In-situ Electrochemical Liquid Cell TEM study of copper electrodeposition and electro-dissolution during potential cycling High resolution imaging of boron atomic columns in Nd <sub>2</sub> Fe <sub>14</sub> B permanent magnet using electron ptychography Structure-Activity Relationship of Ruthenium Catalysts for Hydrogen Evolution Reaction Dielectric thick films for use in digital microfluidic thermal switches Cyanogen adduct of [XeF][AsF <sub>6</sub> ] and products thereof
12.15-13.30			Lunch
13.30 - 14.15			Talk: "Nanomedicine"- Assist. Prof. Dr. Nina Kostevšek, JSI
14.15-15.00	Presentation session 1	15 Ana Koblar 16 Martina Zabbčić 17 Blaž Jaklič 18 Klara Laura Konda 19 Žan Gostenčnik 20 Erik Gregori	Copper patina as a form of corrosion protection A new generation of contact-based antimicrobial biomaterials Unraveling anisotropic behavior of LiNi <sub>1</sub> /3Mn <sub>1</sub> /3Co <sub>1</sub> /3O <sub>2</sub> through controlled epitaxial thin film growth via pulsed laser deposition The influence of process conditions on ZnO nanorods formation and their photocatalytic caffeine degradation efficiency Using a novel approach to design a versatile lab-scale magnetron-sputtering deposition system Adsorption of thiazoles on Cu(111) promoted by chemisorbed O: a DFT study
15.00-15.45			Free time
15.45-18.00			Boat trip
18.00-20.00			Dinner + Free time
20.00-			Social activities

**Day 2 (30th May)**

Time	Activity	Presenting	Title
8.00-9.00			Breakfast
9.00-9.15			Gathering of participants
9.15-10.00	Presentation session 2	21 Katja Drobež 22 Mihaela Rebernik 23 Rebeka Strah 24 Andrii Hultiaiev 25 Nina Kovač 26 Kity Požek 27 Jošt Oblak 28 Jošt Tručil	Influence of the functionalisation with catechols on the chemical stability of barium hexaferrite nanoplatelets Optimizing Recycled Nd-Fe-B Magnets via Single Grain Boundary Engineering Regenerating single cells of grapevine cv. Zweiglet into whole plants Systematic investigation of the copper (I) chloride - HCl - triethylenediamine system in composition space diagram Corrosion protection of AZ31 magnesium alloy using sol-gel coating Structural insights into Vaa-snaclec-3/2 antiplatelet activity Manufacturing of complex ceramic parts by light patterning of photoactive resin Colloidal stability of the ricinoleic-acid functionalized magnetic nanoplatelets in apolar solvents
10.00-10.30			Poster session with a coffee break
10.30-11.30	Presentation session 2	29 Janko Stankić 30 Lara Ropič Bizjak 31 Maria Rubio 32 Abdur Rehman Anwar 33 Pia Pajk 34 Anže Tesovnik 35 Damjan Rajaković 36 Filip Džeroski	Using exposure load to examine the burden of multiple chemicals in men and lactating women Determination of contaminants of emerging concern in hair as a complimentary matrix for human biomonitoring The purpose of participatory research in urban health Edible lasers Removal of bisphenols from drinking and waste- water using hydrodynamic cavitation and photocatalysis Artificial Aggregates from Fly Ash for a Sustainable Build Environment Exploring ways of removing PFAS from wastewater: Application of Cold Atmospheric Plasma Cluster analysis of tert-butyl dimethyl silyl (TBDMS) derivatives dataset
11.30-12.15			Talk: "Infinite - From the scientific curiosity to new disruptive technology on the health-hazard assessment market" - Prof. Dr. Janez Strancar, Infinite, JSI
12.15-13.45			Lunch
13.45-14.30	Presentation session 2	37 Ivan Konjević 38 Joyal Johny 39 Anja Pavlovič 40 Blaž Bohinc 41 Juš Polanšek 42 Brina Pavlovič	Are Surface-Active Substances Influencing the Particle Dynamics? Low-cost catalysts for green hydrogen generation through water splitting Effects of Fluoride, Aluminium and Their Complexes on Macrophage Viability In Vitro Increasing Efficiency of Biophotocatalytic Processes by Structuring Biofilms of Aerobic Phototrophic Microorganisms Thrust force generated by surface dielectric barrier discharge Advancing Seafood Authentication: Integrated Isotope and Elemental Techniques for Origin and Production Method Verification
14.30-15.15			Round table with MPS Alumni club (Assist. Prof. Dr. Kristina Zagar Soderžnik, Dr. Blaž Fortuna, Dr. Jelena Isailović)
15.15-15.45			Poster session with a coffee break
15.45-16.45	Presentation session 2	43 Miha Struc 44 Tamara Kerševan 45 Ardita Kurtishaj Hamzaj 46 Olha Sanko 47 Tim Ravnjak 48 Tomaž Mržljak 49 Klemen Motaln	Enhancing Bioremediation Efficiency for Metal Recovery from WEEE Size-dependent bacterial distribution and correlation with mercury concentrations Hydrogen Separation with Membranes: Accounting for the Interference Effect in Quadrupole Mass Spectrometers A novel compound with Xe-N bond: [NCH <sub>2</sub> CN-Xe][AsF <sub>6</sub> ]HF Toxicity of Bisphenol A, its analogues Bisphenol AP and Bisphenol C and their binary mixtures Synthesis of inorganic compounds of some metals with XeF <sub>2</sub> and their characterization Evaluation of hydrostatic properties of selected halogenated fluids under high pressure
16.45-17.15			Talk: "Researcher Mental Health" - Mateja Erce Paoli, InnoRenew CoE, Mlada Akademija and Assist. Prof. Dr. Ana Slavec, InnoRenew CoE, UP, Mlada Akademija
17.15-20.00			Dinner + Free time
20.00-			Social activities

**Day 3 (31st May)**

Time	Activity	Presenting	Title
8.00-9.00			Breakfast
9.00-9.15			Gathering of participants
9.15-10.00	Presentation session 3	50 Boštjan Gec 51 Matic Rutnik 52 Sara Podgornik 53 Abhilash Krishnamurthy 54 Erik Calcina 55 Edoardo Donà 56 Sebastian Mežnar	Using equation discovery to analyze ToF-SIMS data in materials science for energy production Electric power supply of residential houses by renewable sources assisted by hydrogen storage Interaction of hypoxic confinement and (in)activity: The effects on sleep quality, mood, and cognition Evaluation of the influence of analog vs digital hardware for electrochemical measurements Large Language Models for Efficient Extraction of Relevant Information from Medical Records Design of experiment methodology to optimize dimethoate hydrolysis and improve fluorescence detection efficiency. Behaviour Guided Metric for Equation Discovery
10.00-10.30			Poster session with a coffee break
10.30-11.00			Talk: "Stumbling into Academia" - Dr. Rok Novak, JSI
11.00-12.00	Presentation session 3	57 Martin Perčinič 58 Nina Omež 59 Jack Fortune 60 Jason Fisher 61 Jan Šifer 62 Riccardo Sorrentino 63 Viktor Andonovikj	A variational autoencoder for n-ary trees Assessing time-resolved cortico-muscular coupling using dynamical Bayesian inference Resistive Vibration Exercise with Artificial Gravity: Energy Cost and Muscular Strain Regional Variation of the Vasomotor Zone in Different Postures The Challenge of Robot Accuracy – Exploiting Physical Contacts The effects of 2-weeks resistive vibration exercise with and without artificial gravity on muscle function Enhancing Model Interpretability through Variational Bayes: A Single-Tree Alternative to Tree Ensembles
12.00-12.30			Poster session with a coffee break
12.30-13.00			Prof. Dr. Aleksander Zidanšek
13.00-13.30			Closing ceremony & awards