

## VI INTERNATIONAL SCIENTIFIC-PROFESSIONAL SYMPOSIUM

## ENVIRONMENTAL RESOURCES, SUSTAINABLE DEVELOPMENT AND FOOD PRODUCTION OPORPH 2019

14 – 15 November 2019 Tuzla, Bosnia and Hercegovina







Symposium programme - OPORPH 2019		
'1	Thursday 14 <sup>th</sup> November, 2019	
9.00 – 12.00	Registration of participants	
10.00 – 11.45	Ceremony Academy	
11.45 – 13.00	Lunch in the lobby of the Faculty	
13.00 – 14.20	Opening of the Symposium OPORPH 2019	
	Plenary session	
	Moderators: Amra Odobašić	
	Vahida Selimbašić	
	Gordan Avdić	
13.00 - 13.20	Solubility of bioactive components in	
	supercritical $CO_2$ - Artificial neural network	
	modelling	
	Kiril Lisichkov	
	Institute of Chemical and Control	
	Engineering	
	Faculty of Technology and Metallurgy	
	Ss. Cyril and Methodius University in	
	Skopje, N. Macedonia	
13.20 – 13.40	Water-Energy Nexus: Innovative water	
13.20 – 13.40	management concept for sustainable	
	development	
	Hyunook Kim	
	Department of Environmental Engineering	
	University of Seoul, South Korea	
13.40 - 14.00	Today's innovability challenges in corrosion	
	engineering	
	Sanja Martinez	
	Faculty of Chemical Engineering and	
	Technology	
14.00 – 14.20	University of Zagreb, Croatia  Trends in design and development of	
14.00 – 14.20	trenas in aesign ana aevelopment of catalysts	
	Ante Jukić	
	Faculty of Chemical Engineering and	
	Technology	
	University of Zagreb, <i>Croatia</i>	
	Coffee break and presentation of poster	
14.20 – 15.00	section	
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15.00 – 16.25	Oral presentations
13.00 10.23	Moderators: Elvis Ahmetović
	Zoran Iličković
	Jasmin Suljagić
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15.00 – 15.10	Engineering ethics
	Azra Jaganjac
15.10 – 15.20	Corrosion coupon testing of commercial
	inhibitor in simulated cooling water
15.20 15.20	Tijana Đuričić
15.20 – 15.30	Isolation of bacterial cultures for effective
	composting of biowaste
15.30 – 15.40	Monika Šabić Runjavec
15.30 - 15.40	Comminution kinetics of dolomite in a
	laboratory ball mill Samira Hotić
15.40 – 15.50	Efficient and green extraction of phenolic
13.40 - 13.30	compounds from dried aronia using natural
	deep eutectic solvents
	Milena Ivanović
15.50 – 16.00	Effect of quality of purified brine and
13.30 - 10.00	mother liquor on the yield of NaCl in salt
	production
	Amira Brkić
16.00 – 16.10	Presence of heavy metals in the soil of
10.00	urban area of Lukavac and Kalesija and
	diseases prevalence
	Sanja Brekalo
16.10 – 16.25	Discussion
19.30	Gala dinner at the Mellain Hotel
	Friday 15 <sup>th</sup> November, 2019
9.00 - 9.30	Registration of participants
9.30 - 10.30	Plenary session
	Moderators: Ivan Petric
	Milica Vilušić
	Amra Bratovčić
9.30 - 9.50	Modernization of food safety system as a
	prerequisite for protection of consumers'
	health and free trade in food
	Boris Antunović
	Faculty of Agrobiotechnical Sciences
	Josip Juraj Strossmayer University of
0.50 10.10	Osijek, <i>Croatia</i>
9.50 – 10.10	Biomass fractionation and catalytic
	functionalization: A concept of biorefinery
	Miha Grilc
	Department of Catalysis and Chemical
	Reaction Engineering National Institute of Chemistry, Ljubljana,
	Slovenia

10.10 - 10.30	Sustainable process systems engineering –
10.10 10.00	Accomplishments and future challenges
	Zdravko Kravanja
	Faculty of Chemistry and Chemical
	Technology
	University of Maribor, Slovenia
10.30 – 11.00	Break
	Dieak
11.00 – 12.05	Oral presentations
	Moderators: Dijana Miličević
	Besim Salkić
	Vedran Stuhli
11.00 – 11.10	Reproductive incompatibility of cherry
	Zlatko Čmelik
11.10 – 11.20	The linear model for predicting zinc
	availability in soils of eastern Croatia
	Hrvoje Hefer
11.20 – 11.30	Physical-chemical analyzes of the fruits of
	standard pear cultivars grown in Turkey
	with varieties that were domesticated in our
	country but originate from Turkey
11.30 – 11.40	Besim Salkić
11.30 – 11.40	Estimating biomass resources and bioenergy potential: A review of
	methodologies and challenges
	Ahmet Alp Şenocak
11.40 – 11.50	Modeling of suspension flows in the context
111.10	of sustainable technologies
	Stefan Radl
11.50 – 12.05	Discussion
12.05 – 13.10	Break and presentation of poster section
12.03 - 13.10	break and presentation of poster section
13.10 – 14.25	Onel massactations
13.10 - 14.25	Oral presentations
	Moderators: Sabina Begić Zahida Ademović
	Edisa Papraéanin
13.10 – 13.20	Hydrodynamic fractionation of cellulose
	fibers using a mini-channel
13.20 – 13.30	Thomas Schmid  Conceptual design of a green Power-to-Jet
15.20 - 15.50	process under varying energy inputs
	Mahmoud Mostafa
13.30 – 13.40	Reducing greenhouse gas emissions by
	using alternative fuels in the cement
	industry
	Nedim Salihović

13.40 – 13.50	Waste gypsum recycling Filip Brleković	
13.50 - 14.00	Removal of textile dye from aqueous	
	solutions by using hydroxyapatite-	
	magnetite nanocomposite materials	
	Ramazan Koca	
14.00 – 14.10	Coarsening kinetics analysis of	
	nanocrystalline copper doped cerium(IV)	
	oxide	
	Katarina Mužina	
14.10 – 14.25	Discussion	
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14.25 – 14.45	Break	
11120 11110	5.5m.	
14.45 – 16.05	Student session	
	Moderators: Antonio Zahirović	
	Emina Razić	
	Una Šerak	
	Merisa Ljevaković	
14.45 – 14.55	Impact of raw materials and alternative	
	fuels on the movement of alkali and sulfates	
	in the production of cement	
	Adisa Hasanbašić	
14.55 – 15.05	Application of Aspen Energy Analyzer	
	software in solving heat integration	
	problems	
	Amra Rizvanović	
15.05 – 15.15	A Review: Characterization of natural fiber	
	reinforced polymer composites	
	Emina Tučić	
15.15 – 15.25	Biosorption of heavy metal ions and	
	synthetic dyes from aquaeous solutions	
	using lignocellulosic materials	
	Amila Dubravac	
15.25 – 15.35	Copper(II) sulfate pentahydrate as	
	agrochemical	
	Mirza Muratović	
15.35 – 15.45	Determination of caffeine and sugar content	
	in energy drinks	
	Sulejman Halilović	
15.45 – 15.55	Application of Aspen Plus software for	
	solving chemical engineering problems	
	Aida Skejić	
15.55 – 16.05	Quality evaluation of bread with additions	
	Aldin Karić	
16.05 – 16.20	Discussion	
Closing the Symposium		

