



Summer school on enzymatic production of prebiotics and analysis of prebiotic activity

September 17-20, 2024

Faculty of Technology and Metallurgy, Karnegijeva 4, Belgrade

Event organized by project

TwinPrebioEnz



CSIC
Spanish Council of Research

Radboudumc

Prior registration is required by sending an electronic application to the address dbez@tmf.bg.ac.rs with the subject: Application for the summer school.

	TOPIC	Time (CET)	Speaker
TUESDAY 17.09.2024.			
	Opening and introduction	9:30 - 9:40	D. Bezbradica (FTM)
1	Intensified processing of food industry by-products.	9:40 - 10:40	D. Bezbradica, N. Nikačević (FTM)
	Coffee break	10:40 - 11:00	
2	Application of genetic and chemical modification in production of artificial metalloenzymes.	11:00 - 12:00	J.M. Palomo and C. Mateo (CSIC-ICP), B. de las Rivas and R. Munoz (CSIC-ICTAN)
	Lunch	12:00 - 13:00	
Lab activities			
3	<ul style="list-style-type: none">Simultaneous synthesis and purification of FOS in nanofiltration membrane module.Preparation of artificial metalloenzyme with laccase activity using genetically modified lipase as scaffold.	13:00 - 18:00	
WEDNESDAY 18.09. 2024.			
1	State of the art and controversies in oligosaccharide digestibility and availability in large intestine.	9:30 - 10:15	O. Hernandez-Hernandez (CSIC-CIAL)
	Coffee break	10:15 - 10:30	



The projects are funded by the European Union Framework Program for Research and Innovation Horizon Europe (contract no. 101060130) and Science Fund of the Republic of Serbia (program Ideas, project number 7750109).



Lab activities			
2	<ul style="list-style-type: none">• Rat intestinal extract analysis of availability in large intestine.• Microbiological test of prebiotic activity.	10:30 - 12:30	
	Lunch	12:30 - 13:15	
3	Instrumental analysis of monosaccharide composition of food industry by-products.	13:15 - 13:45	P. Lopez-Reventa (CSIC-CIAL)
4	Analysis of skin microbiota.	13:45 - 14:15	P. Zeuween (Radboudumc)
Lab activities			
5	<ul style="list-style-type: none">• HPLC analysis of monosaccharide composition (pectin from rapeseed meal and tomato) and estimation of polysaccharide composition.• Analysis of skin microbiota composition of participants taken after application of gel with and without incorporated blackcurrant extract – swabbing and plating.	14:15 - 18:00	
THURSDAY 19.09.2024.			
1	Skin prebiotics in cosmetic industry.	9:30 - 10:15	R. Pjanović (FTM)
Lab activities			
2	<ul style="list-style-type: none">• RP-HPLC analysis of extract.• Analysis of skin microbiota composition of participants taken after application of gel with and without incorporated blackcurrant extract - counting of aerobic microorganisms.	10:30 - 13:00	
	Lunch	13:00 - 14:00	
3	Defining group presentation topics for participants. Consultations with project committee about calculation, organization and presentation of lab results.	14:00 - 16:00	
FRIDAY 20.09.2024.			
Lab activities			
1	Analysis of skin microbiota composition of participants taken after application of gel with and without incorporated blackcurrant extract - counting of anaerobic microorganisms and coagulase negative and coagulase positive <i>Staphylococci</i> .	09:30 - 11:00	
2	Participants' presentations and discussion with project committee.	11:00 - 14:00	



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