

**ESS-HPT 2022 "The European Summer School in High Pressure Technology"**

**3.7. - 17.7.2022**

		MORNING				AFTERNOON						
		8:45 - 9:30	9:40 - 10:25	10:45 - 11:30	11:40 - 12:25	13:30 - 14:15	14:25-15:10	15:30-16:15	16:25 - 17:10	17:15 - 18:15		
Maribor	Sunday, 3 July 2022	<b>Arrival</b>								18:00 Registration	18:30 Welcome Dinner	
Maribor	Monday, 4 July 2022	<b>Opening Short Introduction of each Participant</b>		HP Phase Equilibria - Fundamentals (Bren, Maribor/SI)		HP Phase Equilibria - Experimental Methods (Knez-Marevci, Maribor/SI)		Oral Presentation Students (3)	Oral Presentation Students (3)	Oral Presentation Students (4)	20:00 Dinner	
Maribor	Tuesday, 5 July 2022	SSI, Integrated SFE-SSI, and SSI Coupled with Chemical Reaction in Materials Design (Zizovic, Wroclaw/PL)		Supercritical Fluids in Process and Product Design – From Bench Scale to Pilot Plants (Petermann, Bochum/DE)		HP Phase Equilibria - Modelling (Martin, Valladolid/ES)		<b>Exam 1 (Martin, Valladolid/ES)</b>		Oral Presentation Students (4)	20:00 Dinner	
Maribor	Wednesday, 6 July 2022	Biorefinery by Sub/Supercritical Water (Cocero, Valladolid/ES)	Coffee Break	Clean Energy from Wastes by SCWO (Cocero, Valladolid/ES)	Lunch Break	Extrusion Foaming of Polymers (Sauceau, Albi/FR)	Coffee Break	Oral Presentation Students (3)	Oral Presentation Students (3)	Oral Presentation Students (4)	20:00 Dinner	
Maribor	Thursday, 7 July 2022	Supercritical Fluid Extraction and Separation of Active Components from Medicinal Plants (Vagi, Budapest/HU)		Kinetics of SCF Extraction of Compounds from Plants and Microalgae (Sovova, Prague/CZ)		SCF Extraction of Solid Materials - Advantages in Energy and Resource Consumption to Conventional Processes (Gamse, Graz/AT)		Tutorials in HP Separation Processes for Process Intensification (Gamse, Graz/AT)		Oral Presentation Students (4)	20:00 Dinner	
Maribor	Friday, 8 July 2022	HP Particle Generation - Pros and Cons to Conventional Processes (Knez, Maribor/SI)		HP Enzymatic Processes - Advantages to Organic Solvents (Knez, Maribor/SI)		Kinetics of High Pressure Chemical Reactions including benefits (Busch, Darmstadt/DE)		Application of Pressure and SCF Technology in a World Scale Process (Busch, Darmstadt/DE)		Oral Presentation Students (4)	20:00 Dinner	
Maribor	Saturday, 9 July 2022	HPCO <sub>2</sub> Pasteurization and Drying of Food Products (Zambon, Padova/IT)		<b>GEHPT Delivery of Diploma and Closing Ceremony</b>		12:00 Guided Tour Maribor						
Maribor	Sunday, 10 July 2022	<b>Free Time</b>										
Graz	Monday, 11 July 2022	Transfer to NATEX Prozesstechnologie		Design and Layout of Closure Systems and Sealings for High Pressure Vessels (Lack)	Visit of NATEX Prozesstechnologie GmbH		Transfer to Graz		20:00 Welcome Dinner			
Graz	Tuesday, 12 July 2022	Supercritical Fluids in the Oil and Gas Industry (Székely, Budapest/HU)	Coffee Break	Countercurrent SCF Extraction - Comparison and Pros to Conventional Processes (Zetzl, Hamburg/DE)	Lunch Break	Innovative Supercritical Separation Processes for Energy and Resource Reduction (Zetzl, Hamburg/DE)	Coffee Break	16:30 guided tour Graz			20:00 Dinner	
Graz	Wednesday, 13 July 2022	Processing of Aerogels by Supercritical Fluid Technology and their Applications (Gurikov, Hamburg/DE)		Thermodynamic Aspects of Supercritical Fluid Chromatography (Gurikov, Hamburg/DE)		Selective Chemical Conversions with Hydrogen (Müller, Bochum/DE)		Mass Transfer Limitations in Multiphase Reactions (Müller, Bochum/DE)		Oral Presentation Students (4)	20:00 Dinner	
Graz	Thursday, 14 July 2022	How to Design High Pressure Equipment (Schlücker, Erlangen/DE)		How to Design High Pressure Equipment (Schlücker, Erlangen/DE)		<b>Exam 2</b>		Application of CO <sub>2</sub> -Extracts in Food and Cosmetic Industry (Grüner-Lempart, Freising/DE)			20:00 Dinner	
Graz	Friday, 15 July 2022	How to Design High Pressure Equipment (Schlücker, Erlangen/DE)		Hydrogen Production (Schlücker, Erlangen/DE)		<b>Preparation Final Exam</b>		<b>Preparation Final Exam</b>			20:00 Dinner	
Graz	Saturday, 16 July 2022	<b>Final Exam</b>		<b>Final Exam</b>		<b>Free Time</b>					Farewell Dinner	
Graz	Sunday, 17 July 2022	<b>ESS-HPT Delivery of Diploma, Closing Ceremony</b>	<b>Departure</b>									