

**ESS-HPT 2021 "The European Summer School in High Pressure Technology"**

**Online Course**

**14.9. - 28.10.2021**

	16:00 - 17:30		17:45 - 19:15		19:30 - 21:00
Tuesday, 14 September 2021	<b>Opening</b> <b>Short Introduction of each Participant</b>		HP Phase Equilibria - Fundamentals (Bren, Maribor/SI)		
Thursday, 16 September 2021	HP Phase Equilibria - Experimental Methods (Knez-Marevci, Maribor/SI)		HP Phase Equilibria - Modelling (Martin, Valladolid/ES)		
Tuesday, 21 September 2021	Biorefinery by Sub/Supercritical Water (Cocero, Valladolid/ES)		Clean Energy from Wastes by SCWO (Cocero, Valladolid/ES)		
Thursday, 23 September 2021	Countercurrent SCF Extraction - Comparison and Pros to Conventional Processes (Zetzl, Hamburg/DE)		Innovative Supercritical Separation Processes for Energy and Resource Reduction (Zetzl, Hamburg/DE)		
Tuesday, 28 September 2021	Processing of Aerogels by Supercritical Fluid Technology and their Applications (Gurikov, Hamburg/DE)		SSI, Integrated SFE-SSI, and SSI Coupled with Chemical Reaction in Materials Design (Zizovic, Wroclaw/PL)		
Thursday, 30 September 2021	Supercritical Fluids in the Oil and Gas Industry (Székely, Budapest/HU)		Thermodynamic Aspects of Supercritical Fluid Chromatography (Gurikov, Hamburg/DE)		
Tuesday, 5 October 2021	Supercritical Fluids in Process and Product Design – From Bench Scale to Pilot Plants (Petermann, Bochum/DE)		Extrusion Foaming of Polymers (Sauceau, Albi/FR)		
Thursday, 7 October 2021	SCF Extraction of Solid Materials - Advantages in Energy and Resource Consumption to Conventional Processes (Gamse, Graz/AT)		Tutorials in HP Separation Processes for Process Intensivation (Gamse, Graz/AT)		
Tuesday, 12 October 2021	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)		
Thursday, 14 October 2021	Food Under Pressure (Schaschke, Glasgow/UK)		Viscosity Measurement of Fluids at High Pressure (Schaschke, Glasgow/UK)		
Tuesday, 19 October 2021	HP Particle Generation - Pros and Cons to Conventional Processes (Knez, Maribor/SI)		HP Enzymatic Processes - Advantages to Organic Solvents (Knez, Maribor/SI)		Application of CO <sub>2</sub> -Extracts in Food and Cosmetic Industry (Grüner-Lempart, Freising/DE)
Thursday, 21 October 2021	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)		<b>Delivery and Discussion</b> <b>of Final Exams</b>
Tuesday, 26 October 2021	Selective Chemical Conversions with Hydrogen (Müller, Bochum/DE)		Mass Transfer Limitations in Multiphase Reactions (Müller, Bochum/DE)		
Thursday, 28 October 2021	How to Design High Pressure Equipment (Schlücker, Erlangen/DE)		How to Design High Pressure Equipment (Schlücker, Erlangen/DE)		How to Design High Pressure Equipment (Schlücker, Erlangen/DE)