## Ways to hold Supergreen 2022

Supergreen 2022 will be held in a hybrid mode. All submitted oral and poster presentations will be shown in an asynchronous platform during the period from 10/24 to 10/27. The pre-recorded video and poster will be collected in this platform for discussion asynchronously. For the plenary and invited speeches from Taiwan, an on-site meeting at Gis Taipei Tech convention center will be held on 10/28, and line streamed using Cisco Webex. In addition, an on-site poster presentation will also be held at Gis Taipei Tech convention center on 10/28. The lectures given by the overseas plenary and invited speakers will turn fully online, and an online meeting on 10/29 will be held using Cisco Webex. Please see the following table for summary of Supergreen 2022 presentation way.

Type of presenting author	Presentation way	Presentation time
Plenary and invited speaker from Taiwan	On-site and live streamed	10/28
Overseas plenary and invited speaker	Online	10/29
Submitted oral presentation	Asynchronous webinar	10/24-10/27
Submitted poster presentation	Asynchronous webinar	10/24-10/27
	On-site presentation	10/28

## Supergreen 2022 Program

2022/10/24-2022/10/27	

2022/10/28		
On-site meeting and live streamed using Cisco Webex		
For plenary and invited speeches from Taiwan		
Room: The Lecture Hall		
8:30-14:30	Registration	
9:15-9:30	Welcome Ceremony	
Session 1: Applications of SCF in Taiwan		
Chair: Prof. Yan-Ping Chen (National Taiwan University)		
	PL-1: Dr. Dar-Jen Hsieh (ACRO Biomedical Co.)	
9:30-10:00	Supercritical CO <sub>2</sub> , the ultimate solution for tissue engineering and regenerative medicine	
	IL-1-1: Prof. Shen-Kung Liao (Feng Chia University)	
10:00-10:25	Industrial application of supercritical dyeing in Taiwan	
	IL-1-2: Dr. Ming-Tsai Liang (JOPE Technology Co.)	
10:25-10:50	Industrial application of supercritical fluid simulated moving bed on the separation of	
	eicosapentaenoic acid ethyl ester from fish oil	
10:50-11:05	Short break	
Session 2: Applications of SCF in Taiwan		
Chair: Prof. Ming-Jer Lee (National Taiwan University of Science and Technology)		
	IL-2-1: Prof. Ping-Shan Lai (National Chung Hsing University)	
11:05-11:30	Pharmaceutical applications of supercritical fluid extraction with micro/nanoparticle	
	formulations	
	IL-2-2: Prof. Chie-Shaan Su (National Taipei University of Technology)	
11:30-11:55	Particle design of anticancer drug using supercritical fluid technology	
	IL-2-3: Prof. Shu-Kai Yeh (National Taiwan University of Science and Technology)	
11:55-12:20	Recent advances in supercritical fluid assisted polymer processing	
12:20-13:30	Lunch (The Lecture Hall)	
13:30-14:30	On-site poster presentation (Room 201)	
TSCFA annual member meeting		
(For TSCFA member only)		
14:30-17:30	TSCFA annual member meeting	
18:00-20:00	Banquet	

## 2022/10/29 **Online meeting using Cisco Webex** For overseas plenary and invited speeches Session 3: Reactions, material design and nanotechnology Chair: Prof. Jui-Yang Feng (National University of Kaohsiung) PL-2: Prof. Tadafumi Adschiri (Tohoku University) 9:00-9:30 Chemical reactions in supercritical water and their applications 9:30-9:55 IL-3-1: Prof. Jaehoon Kim (Sungkyunkwan University) The role of sub- and supercritical solvent in the biomass conversion 9:55-10:20 IL-3-2: Prof. Qun Xu (Zhengzhou University) Supercritical CO<sub>2</sub>-induced phase engineering for room-temperature ferromagnetism materials 10:20-10:45 IL-3-3: Prof. Masaru Watanabe (Tohoku University) Recycling of plastics and leaching of LIB cathode elements by hydrothermal technology 10:45-11:00 Short break Session 4: Processes intensification, CO<sub>2</sub> utilization and industrial applications Chair: Prof. Hsien-Tsung Wu (Ming Chi University of Technology) 11:00-11:30 PL-3: Prof. Youn-Woo Lee (Seoul National University) Super critical thinking for sustainable society IL-4-1: Prof. Huanda Zheng (Dalian Polytechnic University) 11:30-11:55 Research progress of supercritical CO<sub>2</sub> waterless dyeing and finishing 11:55-12:20 IL-4-2: Prof. Hirohisa Uchida (Kanazawa University) **TBD** 12:20-13:30 Lunch time Session 5: Physicochemical properties and thermodynamics Chair: Prof. Chieh-Ming Hsieh (National Central University) 13:30-14:00 PL-4: Prof. Buxing Han (Chinese Academy of Sciences) Properties of green solvents and their applications in green chemistry 14:00-14:25 IL-5-1: Prof. You Han (Tianjin University) ReaxFF force field development and application in supercritical water reaction 14:25-14:50 IL-5-2: Prof. Tae Jun Yoon (Chungnam National University) Zero-liquid discharge supercritical water desalination: from electrons to molecules to processes.

14:50-15:15

15:15-15:30

IL-5-3: Prof. Cyril Aymonier

Physico-chemistry in supercritical fluids for a circular economy

Short break

Session 6: Natural products, pharmaceutical and biomedical applications Chair: Prof. Ardila Hayu Tiwikrama (National Taipei University of Technology)		
15:30-16:00	PL-5: Prof. Motonobu Goto (Nagoya University)	
	Supercritical fluid technology for phytochemicals	
16:00-16:25	IL-6-1: Prof. Željko Knez (University of Maribor)	
	Use of high pressure technologies for design of product for pharma Industry	
16:25-16:50	IL-6-2: Prof. Yusuke Shimoyama (Tokyo Institute of Technology)	
	Pharmaceutical crystal engineering in supercritical CO <sub>2</sub>	
16:50-17:15	IL-6-3: Prof. Giovanna Della Porta (University of Salerno)	
	TBD	
17:15-17:30	Closing and award ceremony	