2022 Spring

TIGP Sustainable Chemical Science and Technology Program			
Introduction to Sustainable Chemical Science and Technology			
	Period:	**2022/Feb. - 2022/June**	
	Classroom:	**B105, IoC, AS**	
	Time:	**AM9:10-12:00**	
Goals:	1. Know the backgrounds and chemistry of sustainability-related issues. 2. Learn the spirit of green chemistry and the challenges/opportunities in the real world. 3. Get exposed to important research directions.		
Theme			
4	**Energy Related Technologies**		
	4.1 Applied electrochemistry for energy related technologies (including electrode kinetics)	Ho, Kuo-Chuan	2022/2/16
	4.2 Solar and thermoelectric energy conversion	Chen, Kuei-Hsien	2022/2/23
	4.3 Energy Storage (Lithium ion battery, Flow battery) and Energy Saving Technologies (Photochromic, Electrochromic, Thermochromic)	Yen, Hung-Ju	2022/3/2
5	**Greener Materials**		
	5.1 Chemicals from Different Feedstocks		
	5.1.2 CO_2 and Natural Gas	Yu, Steve Sheng-Fa	2022/3/9
	5.1.2 Biomass	Chung, Cedric Po-Wen	2022/3/16
	5.2 Degradable Polymers	Yu, Jia-Shing	2022/3/23
	5.3 From Waste to Wealth (CO_2; E-waste; food waste; plastic waste…)	Yu, Steve Sheng-Fa	2022/3/30
	***** Mid-Term Exam Week*****	**No Class**	2022/4/6
	6.2 Peptide and probe chemistry in Diseases	Huang, Joseph Jen-Tse	2022/4/13
	5.5 Green Hydrogen from Sunlight	Wu, Chi-Sheng	2022/4/20
	5.6 Modern theoretical computation applied to energy science	Wu, David Tai-Wei	2022/4/27
6	**Sustainable Health - Tackle Disease by Chemistry**		
	6.1 Disease Detection and Diagnosis	Chen, Yu-Ju	2022/5/4
	5.4 Bio-Synthesis	Wang, Cheng-Chung	2022/5/11
	6.3 Drug Development	Li, Wen-Shan	2022/5/25
	6.4 Emergent nanomedicine & diagnostic platforms	Tu, Hsiung-Lin	2022/5/18
7	**Information Sharing**	Hung, Chen-Hsiung	2022/6/1