## **Program of Plasma Bio Tutorial**

23rd June. 2024 (Sunday), #310, 80 <sup>th</sup> Anniv. Hall, KWU		
13:00 ~ 13:10	Welcome School Lecture Remarks Prof. Eun Ha Choi Chairman of ISPB14	
13:10 ~ 14:10	Tutorial 1 Plasma bioscience and application(TBD) Prof. Eun Ha Choi (Kwangoon University)	
14:10 ~ 14:20	Tea break	
14:20 ~ 15:20	Tutorial 2 Agricultural and Food application using nonthermal plasma(TBD) Prof. Alexander Fridman (Nyheim Chair Professor, MEM, Drexel University)	
15:20 ~ 15:30	Tea break	
15:30 ~ 16:30	Tutorial 3 Generation of Nitrogen Atoms and their Application to Methane Dissociation Prof. Han Sup Uhm(KwangWoon University)	
16:30 ~ 16:40	Tea break	
16:40 ~ 17:40	Tutorial 4 Plasma application to food industry (TBD) Prof. Gyungsoon Park (Kwangwoon University)	
17:40 ~ 17:50	Closing remarks	
17:50 ~	Welcome Reception (2F, Lobby)	

## **Program of ISPB14**

24th June. 2024 (Monday), #310, 80 <sup>th</sup> Anniv. Hall, KWU		
09:00 ~ 09:10	Registration	
00.10 00.20	Welcome ISPB14 remark	
09:10 ~ 09:30	Eun Ha Choi	
Mo1	Session 1	
Mo1	(Chairman : Eun Ha Choi)	
	Plenary Talk 1	
09:30 ~ 10:10	Biological interactions of plasma-activated solutions	
	Prof.Hiromasa Tanaka (Nagoya University, Japan)	
10:10 ~ 10:30	Tea Break	
	(Invited Talk1)	
10:30 ~ 11:00	Evaluation of cold atmospheric-pressure plasma induced short- and long-lived	
10.00	reactive oxygen and nitrogen species	
	Jun-Seok Oh (Osaka Metropolitan University, Japan)	
11 00 11 10	(Invited Talk2)	
11:00 ~ 11:30	Hydroxyl radical distribution in the Ar plasma jet by laser induced florescence	
	Jun Sup Lim (Kwangwoon University, Korea)	
11:30 ~ 13:00	Lunch Time	
Mo2	Session 2	
	(Invited Talk3)	
13:00 ~ 13:30	The roles of aqueous biofilms in pathogen inactivation by atmospheric pressure	
	cold plasmas	
	Dongping Liu (Dalian University, China)	
13:30 ~ 14:00	(Invited Talk4) Research on Environmental Application of Plasma Technology in KFE-IPT	
15:50 ~ 14:00	Yong Sup Choi (KFE-IPT, Korea)	
14:00 ~ 14:20	Tea Break	
11100 11120	(Invited Talk5)	
14.20 14.50	Understanding Nitrous and Nitric acids Formation in Plasma-Treated Water:	
14:20 ~ 14:50	Decisive Role of Nitrogen Oxides (NOx=1-3)	
	Sanghoo Park (KAIST, Korea)	
	(Invited Talk6)	
14:50 ~ 15:20	Plasma-Activated Media for Wet-Soft Surface Treatments of Metal Oxide	
	Semiconductor Films in Atmospheric Conditions for Biosensors	
15:20 ~ 15:40	Byoungchoo Park (Kwangwoon University, Korea)  Tea Break	
Mo3	Session 3	
IVIUS	(Invited Talk7)	
	Immunoassay using optical techniques for high-performance point-of-care	
15:40 ~ 16:10	testing	
	Kihyeun Kim (GIST, Korea)	
	(Invited Talk8)	
16:10 ~ 16:40	Plasma-based Technology for Modern Farming	
	Neha Kaushik (The University of Suwon, Korea)	
16:40 ~ 17:40	ISPB special talk	

17:40 ~ 19:00	Eun Ha Choi  Poster session 1 (2F, Lobby)
	Progress report of IEC 60601-2-91, WG41, TC62D: Particular standard for basic safety and essential performance of plasma wound treatment ME

	25th June. 2024 (Tuesday), #310, 80 <sup>th</sup> Anniv. Hall, KWU		
Tu1	Session 4		
9:00 ~ 9:30	(Invited Talk9) Elucidating the Anti-Proliferative Mechanism of Cold Atmospheric Plasma: Involvement of Noncoding RNAs in Breast Cancer Cells Sun Jung Kim (Dongguk University, Korea)		
9:30 ~ 10:00	(Invited Talk10) Atmospheric pressure air plasma sources and their applications Xinpei Lu (HuaZhong University of Science and Technology, China)		
10:00 ~ 10:30	(Invited Talk11)  Quantification of RONS introduced into seeds by atmospheric pressure plasmas.  Kazunori Koga (Kyushu University, Japan)		
10:30 ~ 10:50	Tea Break		
10:50 ~ 11:20	(Invited Talk12) Plasma-Generated Nitric Oxide Water for Biological Applications: Pathogen Inactivation, Nano-biotechnology, and Cosmetic Innovations Nagendra Kaushik (Kwangwoon Univ.,Korea)		
11:20 ~ 11:50	(Invited Talk13) The Affected Of Non-thermal Plasma Jet at Atmospheric Pressure To Cytotoxicity Effect On Candida albicans Pradoong Suanpoot (Maejo University, Chiang Mai)		
11:50 ~ 13:00	Lunch Time		
13:00 ~ 17:00	Excursion		
17:00 ~	Banquet		

26th June. 2024 (Wednesday), #310, 80 <sup>th</sup> Anniv. Hall, KWU		
We1	Session 5	
9:30 ~ 10:10	Plenary Talk 2 Input of bactericidal and regenerative effects in wound healing upon non-thermal plasma treatments Prof. Svetlana Ermolaeva (Microbiology, Sechenov Medical University, Russia)	
10:10 ~ 10:40	(Invited Talk14) Plasma Promotion on Rice Growth and Multi-omics Analysis Feng Huang (China Agricultural University, China)	
10:40 ~ 10:50	Tea Break	
10:50 ~ 11:20	(Invited Talk15) Plasma application to soil microorganisms Gyungsoon Park (Kwangwoon Univ.,Korea)	
11:20 ~ 11:50	(Invited Talk16) Approach to study the effects of cold plasma in combination with biostimulants on faba bean (Vicia faba L.) Henrike Brust (INP, Germany)	
11:50 ~ 13:00	Lunch Time	
We2	Session 6	
13:00 ~ 14:00	Poster session 2 (2F, Lobby)	
14:00 ~ 14:30	(Invited Talk17)  Anti-cancer property of non-thermal plasma activated medium in lung cancer stem-like cell by targeting peroxiredoxin 5  Hu-Nan Sun (Heilongjiang Bayi Agricultural University, China)	
14:30 ~ 15:00	(Invited Talk18) Utilization of plasma technology in agriculture Mi Ja Lee (National Institute of Crop Science, Rural Development Administration, Korea)	
15:00 ~ 15:10	Tea break	
We3	Session 7	
15:10 ~ 15:40	(Invited Talk19) Effective Degradation of Pharmaceutical Compounds in Sequential DBD Plasma Using 3-Electrode Fenton Electrolysis Min Jang (Kwangwoon University, Korea)	
15:40 ~ 16:10	(Invited Talk20) Synergistic effect of cold plasma and sulfate radical advanced oxidation process in the efficient removal of dyes from aqueous solutions Jae-Kyu Yang (Kwangwoon University, Korea)	
16:10 ~ 16:30	Tea break	

## **ISPB 2024**

16:30 ~ 17:00	(Invited Talk21) Particular Standards of non-thermal plasma wound treatment equipment Jin Sung Choi (Kwangwoon Univ.,Korea)
17:00 ~ 17: 20	Break
17:20 ~ 18:00	Poster Award & Closing Declaration Eun Ha Choi, Chairman of ISPB14