

TOPICAL WORKSHOPS

Plasma Agriculture and Bio Technology

Date & Time 10:20 – 16:00, November 3 (Monday)
Place Chuan Chom, Courtyard by Marriott Phuket Town (3F)

Low temperature plasma has been successfully applied in a broad scope of industrial sectors including semiconductors, digital electronics, machinery, nano and bio medicine industries. The plasma generation is well developed in various conditions of low pressure vacuum, atmospheric pressure and even in solution.

These variety of plasma generation capability has recently been emerging as new potential of application in agriculture, foods and bio related industry for sustainable and eco-friendly technology. Agriculture industry is moving forwards to increase crop yields, inactivation of pathogens such as fungi and bacteria without chemicals, and even control of healthcare nutrition contents.

The scientific research has been progressed and proved that plasma is effective to improve in various aspects for seeds treatment, fertilization, cultivation in laboratory to actual harvesting in farming land and also inhouse vertical smart farming.

This workshop is organized for open forum on research progress status of plasma technology in agriculture, effects of various plasma processes, understanding of biological change of agricultural cells by plasma, and actual application status etc. as well as future agenda. by invitation of all experts in Asia and Europe.

Invited speakers

Name	Affiliation	Nationality	Presentaion title
Ana Sobota	TU Eindhoven	Netherlands	Plasma-water interaction: evolution over time and other added complexities of liquid targets
Feng Huang	China Agriculture University	China	Plasma agriculture in China
Ihn Han	Kwangwoon University	Korea	Biological Application of Plasma NO water for plant cells and Cancer cell
Kazunori Koga	Kyushu University	Japan	Plasma Enhanced Sustainable Agriculture
Khanit MATRA	Srinakharinwirot University	Thailand	Plasma effect for microgreen and bioactive compiunds
Narimisa Mehrnoush	Universiteit Gent	Belgium	Plasma-Assisted Surface Engineering of Electrospun Nanofibers for Superior Bio-Responsiveness
NEVENA PUAČ	Institute of Physics	Serbia	Plasma Chemistry for plant cells
Seungil PARK	Korea Institute of Fusion Energy	Korea	Plasma application in agriculture and food
Toshiro Kaneko	Tohoku University	Japan	Application of Air Plasma-Synthesized Dinitrogen Pentoxide to Plant Function Control
Sa-nguansak Thanapornpoonpong	Chiang Mai University	Thailand	Design Concept For Atmospheric Plasma Systems For Effective Seed Treatment
Norrapon Vichiansan	Chiang Mai University	Thailand	Plasma As A Key Driver Of Thai Biomedical Innovation