







The 9th Joint Symposium between IBB/TMDU and Chulalongkorn University on "Biomedical Materials and Engineering"

Date: January 23, 2023 **Venue:** Room213, Bldg.3, Faculty of Engineering, Chulalongkorn University

P <u>rogram:</u>	
Time	Topic/Speaker
9:00 – 9:15	Opening Remarks
	Prof. Dr. Supot Teachavorasinskun
	Dean of Faculty of Engineering, Chulalongkorn University
9:15 – 9:30	Principle of biocompatibility of titanium from the viewpoint of its surface
	science
	Prof. Takao Hanawa, IBB, TMDU
9:30 – 9:45	A Custom-made 3D bioprinter : from education to biomaterial research
	Asst.Prof. Supansa Yodmuang, Fac. of Medicine, CU
9:45 – 10:00	Development of inorganic biomaterials for bone repair and cancer
	treatment
	Prof. Masakazu Kawashita, IBB, TMDU
10:00 – 10:15	Interpretation of Quartz Crystal Microbalance Behavior with Viscous Film
	Using a Mason Equivalent Circuit
	Dr. Sawit Na Songkhla, Fac. of Eng., CU
10:15 – 10:30	mRNA as a new drug modality
	Prof. Keiji Itaka, IBB, TMDU
10:30 – 10:45	Coffee break
10:45 – 11:00	Advanced cell culture technologies for drug development
	Asst. Prof. Takeshi Hori and Prof. Hirokazu Kaji, IBB, TMDU
11:00 – 11:15	ZnO Nanorods Coated Single-Mode-Multimode-Single-Mode Optical
	Fiber Sensor for VOC Biomarker Detection
	Asst. Prof. Charusluk Viphavakit, Fac. of Eng., CU
11:15 – 11:30	Precision biomedical engineering for mechano-biological treatment of
	infertility
	Prof. Masashi Ikeuchi, IBB, TMDU
11:30 – 11:45	Epigenetic modulation chitosan-based scaffold as an excellent candidate
	for alveolar ridge preservation in tooth extraction model
	Assoc. Prof. Ruchanee Ampornaramveth, DDS., PhD. Fac. of Dentistry, CU
11:45 – 12:00	Borono-lectin"-inspired bioengineering for bio-interactive precision
	medicine
	Assoc. Prof. Akira Matsumoto, IBB, TMDU
12:00 – 13:00	Lunch Break









13:00 – 13:15	Application of Iloprost as root modifier agent in replanted tooth in vivo
	Assoc. Prof. Chalida Limjeerajarus, DDS., PhD. Fac. of Dentistry, CU
13:15 – 13:30	Error analysis of a surgical navigation system
	Assoc. Prof. Shinya Onogi, IBB, TMDU
13:30 – 13:45	Functionalization of Chitin/Chitosan Approaching in Biomedical
	Applications
	Assoc. Prof. Wanpen Tachaboonyakiat, Fac. of Sci., CU
13:45 – 14:00	Real-time biosensors for assessing biochemical conditions of humans
	Asst. Prof. Kenta litani, IBB, TMDU
14:00 – 14:15	Towards the development of bio-inspired implants using 3D printing and
	artificial intelligence
	Dr. Chedtha Puncreobutr, Fac. of Eng., CU
14:15 – 14:30	Coffee break
14:30 – 14:45	Biological self assembly and surface modification by bioorthogonal click
	chemistry for macromolecular delivery
	Assoc. Prof. Jittima LuckanagulFac. of Pharmaceutical, CU
14:45 – 15:00	Peptide-lead medicinal chemistry: from AIDS to COVID-19
	Prof. Hirokazu Tamamura, IBB, TMDU
15:00 – 15:15	BioMedical Engineering Research Center (BMERC) MedTech innovation
	Dr.Saran Keeratihattayakorn, Fac. of Eng., CU
15:15 – 15:30	Medicinal chemistry for Ryanodine receptor modulators
	Asst. Prof. Ryosuke Ishida, IBB, TMDU
15:30 – 15:45	Research experience in TMDU
	Mr. Satit Rodphukdeekul, Fac. of Eng., CU and IBB, TMDU
15:45 – 16:15	Learning opportunities at TMDU
	and Closing address
	Prof. Hiroyuki Kagechika,
	Director of Institute of Biomaterials and Bioengineering (IBB), TMDU
17:00 – 20:00	Dinner