

15th International Workshop on Biomaterials in Interface Science

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Keywords: international workshop, biomaterials, interface science, bioengineering, oral health

The international joint symposium 2020 was held online on December 14-15, 2020, which was co-sponsored by the Institute of Biomaterials and Bioengineering (IBB) at Tokyo Medical and Dental University, the Institute for Materials Research (IMR), Graduate School of Dentistry, Graduate School of Biomedical Engineering and Medical Science, and the IDEA at Tohoku University, as well as the Laboratory for Future Interdisciplinary Research of Science and Technology (FIRST) at Tokyo Institute of Technology. The symposium contains six sessions, including the Oral Health Care, Innovative Dental-Engineering Alliance, Biomaterials, Industry-academia-government collaboration, Young innovators' session, Bioengineering. During the symposium, 25 oral presentations including 6 invited lectures and other 19 oral talks were given by the researchers from Korea, Japan, New Zealand, China, Taiwan. Interdisciplinary discussions and state-of-the-art research presentations on various types of materials were progressed by international researchers and students from wide research fields such as material science, dentistry, and medical engineering, which contributes significantly to the progress of researches among both domestic and overseas researchers.

1. 概要

生体材料研究を中心とした研究発表の場として毎年開催しているワークショップである。今年度は東北大学歯学研究科と東京工業大学の科学技術創成研究院 未来産業技術研究所とで行われている東北大学-東京工業大学 歯工連携イノベーション機構(IDEA)連携シンポジウムと合同で開催された。開催形式はオンラインで開催され、ニュージーランド、韓国、中国からも参加があった。研究内容としては研究テーマごとに6セッションにわけて行われ、招待講演、口頭発表からなる共同ワークショップとなった。

2. 内容

生体材料研究を中心として2020年12月14日-15日、International Joint Symposium 2020 (共催)The 15th International Workshop on Biomaterials in Interface Science

The 11th Symposium on Innovative Dental-Engineering Alliance (IDEA) International Joint Symposium 2020 としてオンラインで開催された。組織メンバーは、東北大学（大学院医学研究科、大学院工学研究科マテリアル、大学院歯学研究科、金属材料研究所）、東京医科歯科大学（生体材料工学研究所）、歯工連携イノベーション機構 IDEA（東京工業大学：科学技術創成研究院 未来産業技術研究所）であった。セッションテーマとしては、① Oral Health Care、② Innovative Dental-Engineering Alliance、③ Biomaterials、④ Industry-academia-government collaboration、⑤ Young innovators' session、⑥ Bioengineering の 6 テーマとなり、招待講演者 6 名、口頭発表 19 名であった。特に、今回は Young innovators' session を設け、座長を含め進行も若手研究者で取り組むなど新しい試みが行われた。海外講演者の招待講演としては Sei Kwang Hahn 先生より、「Multifunctional Biomaterials for Smart Wearable Healthcare Devices」というタイトルで、Frédérique Vanholsbeeck 先生より、「Birefringence as a proxy for viscoelastic properties of cartilage using polarisation sensitive optical coherence tomography」というタイトルで、Guangyin Yuan 先生より、「Viewpoints on R&D of innovative biodegradable Mg alloys from the aspect of accelerating clinical transformation」というタイトルで、Ming-Long Yeh 先生より、「Gallic-acids Loaded PLGA Coating on Biodegradable ZK60」というタイトルでそれぞれ講演が行われた。

オンラインでの開催ではあったが、国内外からの参加者は約 100 名となり有意義な会であった。



International Joint Symposium 2020
 The 15th International Workshop on Biomaterials in Interface Science
 The 11th Symposium on Innovative Dental-Engineering Alliance (IDEA)

Date and Time
 Dec. 14, 2020 (Mon.) 9:00 - 17:00
 Dec. 15, 2020 (Tue.) 9:00 - 12:00
 Online meeting (held at Webinar)

Topics
 ① Oral Health Care
 ② Bioengineering
 ③ Biomaterials
 ④ Industry-academia-government collaboration

Online registration
 Please register by Dec. 10, 2020 (Thursday), Japan standard time.

※We will send the URL for participating in the seminar to all the applicants by the date of the seminar.

URL <https://forms.gle/176caXhevY4h17Z87>

Liaison Center for Innovative Dentistry, Tohoku University
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Schedule at a Glance

14 Dec. 2020			
Start	Time	No.	Speaker
Opening Session			
9:00	0:05	Opening address	Nobuhiro TAKAHASHI
Session I: Oral Health Care			
9:05	0:30	I-01 Invited Lecture	Chair: Hiroshi EGUSA Sei Kwang Hahn
9:35	0:20	O-01 Oral talk	Kyosuke Ueda
9:55	0:20	O-02 Oral talk	Haruki Otsu
10:15	0:20	O-03 Oral talk	Fumitoshi Ohori
10:35	0:15	Break	
Session II: IDEA			
10:50	0:30	I-02 Invited Lecture	Chair: Hideki HOSODA Frédérique Vanholsbeeck
11:20	0:20	O-04 Oral talk	Shoichi Hasegawa
11:40	0:20	O-05 Oral talk	Ryo Hamai
12:00	0:20	O-06 Oral talk	Takashi Obi
12:20	1:00	Break	
Session III: Biomaterials			
13:20	0:30	I-03 Invited Lecture	Chair: Osamu SUZUKI & Masakazu KAWASHITA Masato Ueda
13:50	0:20	O-07 Oral talk	Peng Chen
14:10	0:20	O-08 Oral talk	Jiang Jing
14:30	0:20	O-09 Oral talk	Weidong Zhang
14:50	0:20	O-10 Oral talk	Yingchen Wang
15:10	0:15	Break	
Session IV: Industry-academia-government collaboration			
15:25	0:30	I-04 Invited Lecture	Chair: Keiichi SASAKI Shpei Sato
15:55	0:20	O-11 Oral talk	Weiwei Zhou
16:15	0:20	O-12 Oral talk	Shokouh Attarlar
16:35	0:20	O-13 Oral talk	Nobuyuki Morimoto
15 Dec. 2020			
Start	Time	No.	Speaker
Session V: Young innovators' session			
9:00	0:30	I-05 Invited Lecture	Chair: Junpei WASHIO & Wan-Ting CHIU Guangyin Yuan
9:30	0:20	O-14 Oral talk	Naohiro Sugita
9:50	0:20	O-15 Oral talk	Wan-Ting Chiu
10:10	0:20	O-16 Oral talk	Hiroki Chigama
10:30	0:15	Break	
Session VI: Bioengineering			
10:45	0:30	I-06 Invited Lecture	Chair: Ryoichi NAGATOMI Ming-Long Yeh
11:15	0:20	O-17 Oral talk	Ryo Shirata
11:35	0:20	O-18 Oral talk	Daixu Wei
11:55	0:20	O-19 Oral talk	Ariunbuyan Sukhbaatar
Closing Session			
12:15	0:05	Closing	Takao HANAWA