## 2nd International Workshop on Bioelectrochemistry (2nd BES Workshop)

Hiroshima, Japan | September 24-26, 2025

2nd International Workshop on Bioelectrochemistry (2nd BES Workshop) was held from 24 to 26 September 2025 at the Hiroshima International Conference Center, Hiroshima, Japan, with a welcome event on 23 September.

The workshop was organized by The Bioelectrochemical Society (BES) and supported by the Bioengineering Research Group of the Electrochemical Society of Japan (ECSJ).

Information about the conference is available on the workshop website:

http://workshop2025.bioelectrochemical-soc.org/

The event received partial support from Divisions 1 and 2 of the International Society of Electrochemistry (ISE), which greatly contributed to ensuring broad participation and high academic quality.

### Scope and Objectives

The workshop covered a broad spectrum of bioelectrochemical research, encompassing both fundamental studies and emerging applications within the highly interdisciplinary fields of Bioelectrochemistry and Bioenergetics.

The workshop was organized under the theme "Bioelectrochemistry for a Peaceful and Sustainable Future." The concept of a "peaceful" future in this context extends beyond social stability and also includes material, physiological, and mental well-being, all of which contribute to a sustainable society.

The objectives of the workshop were to promote international scientific exchange, share cutting-edge developments in bioelectrochemistry, support young researchers and students, and foster new global collaborations toward sustainable and socially beneficial technologies.

#### **Topics**

The presentations covered a wide range of bioelectrochemical fields, including:

- Biosensors
- Bioelectroanalysis
- Microbial electrochemistry including bioelectrochemical systems and microbial fuel cells
- Bio-solar cells
- Enzymatic electrochemistry including electrosynthesis and biofuel cells
- Living cellular and neuro-electrochemistry
- Wearable and implantable bioelectronics

This comprehensive scope enabled deep interdisciplinary discussions and highlighted emerging global trends.

### **Participation**

A total of 120 participants from 15 countries/regions attended the workshop, ensuring a highly international and interdisciplinary atmosphere. Participants particularly appreciated the warm, collegial, and internationally vibrant atmosphere, which encouraged open discussion and meaningful scientific exchange.

### **Scientific Program**

The scientific program comprised 4 Plenary Lectures, 3 Keynote Lectures, 8 Invited Lectures, 45 oral presentations (including student sessions), and 50 poster presentations. Discussions were active and continued beyond sessions, contributing to the creation of new research links.

### Plenary Lectures

- Prof. Man Bock Gu, Korea University, Korea
- Prof. Chenzhong Li, The Chinese University of Hong Kong, China
- Prof. Uwe Schröder, Universität Greifswald, Germany
- Prof. Hitoshi Shiku, Tohoku University, Japan

# **Keynote Lectures**

- Prof. Huangxian Ju, Nanjing University, China
- Prof. Hye Jin Lee, Kyungpook National University, Korea
- Prof. Koji Sode, University of North Carolina at Chapel Hill, USA

### **Invited Lectures**

- Prof. Yan-Yu (Anna) Chen, National Chung Hsing University, Taiwan
- Prof. Min-Chieh Chuang, Tunghai University, Taiwan
- Prof. Ariel Furst, Massachusetts Institute of Technology, USA
- Prof. Parastoo Hashemi, Imperial College London, UK
- Prof. Seong Jung Kwon, Konkuk University, Korea
- Prof. Ching-Chou Wu, National Chung Hsing University, Taiwan
- Prof. Haesik Yang, Pusan National University, Korea
- Prof. Abdelkader Zebda, Université Grenoble Alpes, France

## **Awards and Support for Young Researchers**

To promote the development of early-career scientists, the workshop provided several awards.

#### Travel Award

- Chloe Aymard
- Taiki Adachi
- Shenghan Gu
- Keke Hu
- Shuxin Li
- Pablo Prieto Roca
- Rajesh Kumar Raghav\*
- Conrad Schumann
- Haruta Togashi
- Yuhao Xie

\*Raghav received the award but could not travel to Japan due to the typhoon; therefore, financial support was not provided.

#### Student Oral Presentation Award

Sunday Olakunle Oguntomi

## Student Poster Awards

- Xinyu Cui
- Luma Clarindo Lopes
- Sho Sugimoto
- Honoka Yasuda

# Best Presentation Awards (Young Researchers)

- Princess R. Cabotaje
- Joshua Lawrence
- Mark Sullivan

These awards were highly competitive, and the overall quality of student and young researcher presentations was praised as one of the strongest aspects of the workshop.

#### **Outcomes and Impact**

The workshop successfully achieved its intended objectives, including strengthening global networks in bioelectrochemistry, fostering new collaborations across Asia, Europe, and the United States, and providing young researchers with valuable opportunities for presentation and feedback.

Overall, the workshop made a significant contribution to advancing international cooperation and innovation in bioelectrochemistry and received highly positive evaluations from participants worldwide.

## **Organizing Committee**

### Chair

Hisakage Funabashi

### Vice-Chair

Seiya Tsujimura

#### **Members**

- Kyoko Fujita
- Petra Hellwig
- Habil. F. Lisdat
- Elisabeth Lojou
- Kuniaki Nagamine
- Shuji Nakanishi
- Matsuhiko Nishizawa
- Nicolas Plumeré
- Isao Shitanda
- Keisei Sowa
- Eiichi Tamiya

# **Acknowledgment**

On behalf of the Organizing Committee, we sincerely thank the International Society of Electrochemistry (ISE) for its generous support, which was instrumental in the success of the workshop.

Hisakage Funabashi

Chair, 2nd BES Workshop

Visabage Finabash

Seiya Tsujimura

Vice-Chair, 2nd BES Workshop

Seiga Tsujimura