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Development and Applications of Bioelectrochemical Systems

Guest Editors:

Prof. Dr. Young-Chae Song

Department of Environmental Engineering, Korea Maritime and Ocean University, 727, Taejongro, Yeongdo-gu, Busan 49112, Republic of Korea

Dr. Younggy Kim

Department of Civil Engineering, McMaster University, Hamilton, ON, Canada

Prof. Dr. Yongtae Ahn

Department of Energy Engineering, Gyeongnam National University of Science and Technology, Dongjin-ro 33, Jinju, Gyeongnam 52725, Republic of Korea

Deadline for manuscript submissions:

closed (31 December 2020)

Message from the Guest Editors

This Special Issue aims to present up-to-date information on the recent scientific advances in the fundamental and diverse applications of BES. Authors are invited to submit papers relating to, but not limited to, the following topics: electroactive microorganisms, mechanisms of direct/indirect interspecies electron transfer. the bioelectrochemical reaction (redox potential shift. thermodynamics, and kinetics), electrodes (materials, catalysts, shapes, and arrangements), electrode potential and electrostatic field, BES platforms (MFCs, MDCs, MECs, and other new platforms), modeling and optimization of BES, applications of BES (methane and hydrogen production, biogas upgrading, nitrogen removal, tertiary treatment of wastewater, etc.), and BES design and operation.

Kewords:

- electroactive microorganisms
- direct interspecies electron transfer
- bioelectrochemical reaction
- electrode materials and catalyst
- BES platforms
- microbial electrosynthesis
- modeling and optimization of the BES platform
- applications of BES
- design and operation of BES platforms



Specialsue







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Editor-in-Chief

Prof. Dr. Giancarlo CravottoDepartment of Drug Science and

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

Message from the Editor-in-Chief

Processes (ISSN 2227-9717) provides an advanced forum for process/system-related research in chemistry, biology, material, energy, environment, food, pharmaceutical, manufacturing and allied engineering fields. The journal publishes regular research papers, communications, letters, short notes and reviews. Our aim is to encourage researchers to publish their experimental, theoretical and computational results in as much detail as necessary. There is no restriction on paper length or number of figures and tables.

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