

## CIRP BioManufacturing Conference 2019

### Preface

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This Procedia CIRP volume contains the Proceedings of the 4th CIRP Conference on BioManufacturing (CIRP-BioM 2019). The Conference came to a successful close in Guangzhou from 12th to 15th December 2019. The Conference was co-organized by The Hong Kong Polytechnic University and Guangdong University of Technology.

As the global biomanufacturing market keeps growing and evolving, the industry is under stress to enhance the efficacy, quality, cost, and compliance of life-saving products. The CIRP-BioManufacturing conference (CIRP-BioM) is designed to be an international forum to discuss progress and future directions in biomanufacturing, and to facilitate the exchange of information on bio-inspired design, bio-fabrication, and bio-mechatronics. This conference was preceded by the 1st CIRP-BioM in Tokyo (2013), the 2nd in Manchester (2015) and the 3rd in Chicago (2017).

CIRP-BioM 2019 included plenary speeches, oral presentations and posters from more than 100 fellow delegates from 13 different countries including China, United States, United Kingdom, Germany, Italy, Spain, Japan, Singapore, Australia, Mexico, South Africa, Ecuador and Malaysia. More than 60 oral presentations and posters were made to present their latest research progress in the fields of biomechanics, biofabrication, biological additive manufacturing, biological manufacturing process and equipment, implantation/intervention/cutting instrument design and manufacturing, nanopore biosensor manufacturing, and bio-inspired design and assembly.

We would like to express our deep gratitude to all participants, plenary speakers, the Conference committees, session chairs, academic sponsors, industrial sponsors and every helper for their support for the organization of the Conference.

Sandy To  
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Conference Chair of CIRP-BioM 2019

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