

## ***Preface***

We are pleased to announce that 2022 3rd ISC International Conference on Intelligent Systems and Control in Biomedical Engineering (ISC-BE 2022) has been held on July 28-30, 2022, Melbourne, Australia.

2018 2nd AASRI International Conference on Intelligent Systems and Control (ISC 2018) had been held in Lima, Peru, December 27-29, 2018. ISC 2018 is sponsored by American Applied Sciences Research Institute, USA. ISC 2018 is also technically co-sponsored by University of Wisconsin, USA, University of Gothenburg, Sweden and Aalto University, Finland. ISC 2018 Papers had been published by MATEC Web of Conferences (ISSN: 2261-236X), Volume 267, 2019, which had been archived in EDP Sciences Digital Library, been indexed by Ei Compendex and Scopus, and Conference Proceedings Citation Index (CPCI) successfully.

Melbourne, at the head of Port Phillip Bay, is Australia's second largest city and the capital of the south-eastern state of Victoria.

Serving as Australia's undisputed cultural capital, Melbourne is bursting with Victorian-era architecture, famed cafés, great bars and restaurants, extensive shopping, museums, galleries, theatres, and large parks and gardens. Its nearly 5-million residents are both multicultural and sports-mad, and the city has year-round festivals, sporting events and the best of Australian culture on display.

Melbourne is famous as the host city for a range of major international sporting events such as the Australian Open, Melbourne Cup Carnival and Formula 1 Grand Prix. It also features some of the world's most popular art galleries and museums (National Gallery of Victoria, Melbourne Museum) and internationally acclaimed festivals (Melbourne International Comedy Festival, Melbourne International Film Festival, Melbourne Fringe Festival). The city is also represented by its world-famous street art, coffee culture, pubs and live music... most of which can be found tucked away in a large number of iconic laneways. Frequently named as the World's Most Liveable City, Melbourne is close to and features many gardens, national parks and areas that are home to some of Australia's iconic wildlife (The Great Ocean Road, Grampians National Park, Phillip Island, Royal Botanic Gardens). Indigenous sites, museums and experiences (Koorie Heritage Trust, Birrarung Marr, Bunjilaka Aboriginal Cultural Centre) maintain a vital link to the people and culture of the First Nations.

Biomedical engineering (BME) or medical engineering is the application of engineering principles and design concepts to medicine and biology for healthcare purposes (e.g., diagnostic or therapeutic). BME is also traditionally known as "bioengineering", but this term has come to also refer to biological engineering.

ISC-BE 2022 will be the most comprehensive conference focused on the various aspects of Control and Automation, Communications and Information technology, Computer, Biomedical engineering.

The goal of this conference is to bring together the researchers from academia and industry as well as practitioners to share ideas, problems and solutions relating to the multifaceted aspects of Control and Automation, Communications and Information technology, Computer, Biomedical engineering.

ISC-BE 2022 is co-sponsored by American Applied Sciences Research Institute, USA, Universidad de Sevilla, North America of Alumni Association, USA.

ISC-BE 2022 is also Technically Co-sponsored by Ho Chi Minh City ACM Chapter, Vietnam.

ISC-BE 2022 received 186 submissions. All full submissions were peer reviewed and evaluated based on originality, technical and research content depth, correctness, relevance to conference, contributions, and readability. Submissions were chosen based on technical merit, interest, applicability, and how well they fitted a coherent and balanced technical program. Finally, only 57 best papers were selected as regular papers with the acceptance rate at about 30.65%. iThenticate software was also used for plagiarism detection to ensure the originality of ISC-BE 2022 proceedings.

The success of this truly international conference is attributed to the efforts of the organizing committee. We also want to thank all the invited speakers, oral and poster presenters, reviewers of manuscripts, and participants of the conference who have contributed to the success of this international conference.

We would like to express our deep appreciation and gratitude to all the people who review the submissions. Then we would also show our sincere thanks to all staff without whose help we can't carry out the important steps during the process of conference preparation. In addition, thanks for your support and participation.

Sincerely

ISC-BE 2022 Publication Co- chairs

Dr. Weitao Zheng, Ho Chi Minh City ACM Chapter, Vietnam

Dr. Wei David Deng, American Applied Sciences Research Institute, USA

Dr. Biao Harry Zhang, Universidad de Sevilla, North America of Alumni Association, USA

September 24, 2022