



2020 International Conference on Life System Modeling and Simulation & 2020 International Conference on Intelligent Computing for Sustainable Energy and Environment

#### SPONSORS

China Simulation Federation (CSF) China Instrument and Control Society (CIS) Chinese Association for Artificial Intelligence (CAAI) IEEE Systems, Man & Cybernetics Society Technical Committee on Systems Biology IEEE CC Ireland Chapter

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## CALL FOR PAPERS

## Hangzhou, China, October 9-11, 2020

The 2020 International Conference on Life System Modeling and Simulation (LSMS2020) and 2020 International Conference on Intelligent Computing for Sustainable Energy and Environment (ICSEE2020) aim to bring together researchers and practitioners in the field of life system modeling and simulation as well as intelligent computing theory and methodology with applications to sustainable energy and environment across the world. These events build on the success of previous LSMS conferences held in Shanghai, Wuxi and Nanjing in 2004, 2007, 2010, 2014 and 2017, and ICSEE conferences held in Wuxi, Shanghai and Nanjing in 2010, 2014 and 2017 respectively, and are based on large-scale UK-China collaboration projects on sustainable energy. At LSMS2020 and ICSEE2020, technical exchanges within the research community will take the form of keynote speeches, panel discussions, special sessions, as well as oral and poster presentations. Participants will be treated to a series of social functions, receptions and networking sessions, which will serve to establish new connections, foster friendships, and forge collaborations. The conference in particular welcomes proposals for special sessions related to the key themes of the conferences.

## PAPER SUBMISSION

Prospective authors are invited to submit full-length papers before the submission deadline through the online submission system. Further, proposals for special sessions within the technical scopes of the conference are most welcome. Papers submitted for special sessions will be peer-reviewed with the same criteria as used with regular papers. A special session proposal should include the session title, a brief description, and the names, contact details and bio-sketch of the organizers.

Accepted papers will be published in the Springer Communications in Computer and Information Science (CCIS) proceedings (EI Compendex). Some high-quality papers will be recommended for possible publication in SCI indexed international journals after expansion and further review, such as Journal of Modern Power Systems and Clean Energy (MPCE), Transactions of the Institute of Measurement and Control (TIMC), Enterprise information system (EIS), Energies, Cognitive Computation, Journal of Control and Decision, Advances in Manufacturing (AIM), etc.

## IMPORTANT DATES

Paper submission	-TBD
Acceptance	TBD
Final paper submission	TBD

## Submission page

https://easychair.org/conferences/?conf=lsms2020icsee2020

WEBSITE AND EMAIL

http://www.lsms-icsee.org

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PROGRAM TOPICS

#### **COMPUTATIONAL METHODS AND INTELLIGENCE IN** Δ. LIFE SYSTEM MODELLING AND SIMULATION

- Biological and biomedical data integration, mining and visualization A1
- Biomedical signal processing, imaging, and visualization A2
  - A3 Biorobotics, surgical robotics and surgical planning
  - Brain stimulation, neural dynamics and neural Interfacing A4
  - Computational intelligence in bioinformatics and biometrics A5
  - Computational methods and intelligence in modelling genetic A6 and chemical networks and regulation
  - Computational methods and intelligence in modelling molecular, A7 cellular and multi-cellular behaviour and dynamics
    - Computational methods and intelligence in organism modeling
  - **A8** Computational methods and intelligence in ontology and taxonomy study and A9 drug design
  - Computational methods and intelligence in modelling and design of synthetic A10 biological systems
  - Computational methods and intelligence in biomechanical systems, tissue engineering and clinical bioengineering A11
  - High performance bio-computing A12
  - Modelling software and makeup language in systems biology A13
- Intelligent medical apparatus and clinical applications A14
- Intelligent design of biochips, bioinstrumentations A15
- Modelling and simulation of societies and collective behaviour A16
- A17 Innovative education in systems modeling and simulation

#### INTELLIGENT COMPUTING AND APPLICATIONS, INCLUDING Β. SUSTAINABLE ENERGY AND ENVIROMENT

- Advanced neural network theory and algorithms **B1**
- Advanced evolutionary computing theory and algorithms, such as particle swarm optimization, differential evolution, ant colonies, artificial life, artificial immune systems and genetic algorithm **B2**
- Advanced theory and methodology in fuzzy systems and soft computing **B**3
- Autonomy-oriented computing and intelligent agents **B4**
- Fuzzy, neural, and fuzzy-neuro hybrids **B5**
- Intelligent modelling, monitoring, and control of complex nonlinear systems **B6** Computational intelligence in utilization of clean and renewable energy **B7** 
  - resources, including fuel cell, hydrogen, solar and winder power, marine and biomass
- Intelligent modelling, control and supervision for energy saving and pollution **B8** reduction
- Intelligent methods in developing electric vehicles, engines and equipment **B**9
- **B10** Intelligent methods in power and energy infrastructure development
- Intelligent computing and control in distributed power generation systems B11
  - Intelligent modeling, simulation and control of power electronics and power **B12** networks
  - Intelligent road management and electricity marketing strategies B13
- Intelligent construction and energy saving techniques for sustainable and **B14** green built environment
- Intelligent modeling and simulation of climate change **B15**
- Intelligent water treatment and waste management technologies **B16**
- Innovative education for sustainable energy and environment **B17**
- Intelligent manufacturing, autonomous systems, intelligent robotic systems **B18**

## C. COMPUTATIONAL BIOMEDICINE

- C1 Biological and brain networks
- C2 Data analysis and data mining of biosignals
- C3 C4 Biomarker discovery
- Feature selection
- Č5 Computational neuroscience
- C6 Robust optimization and data analysis
- C7 Genome data analysis
- **C8** Molecular conformation and protein folding
- **C**9 Biocomputing

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