

**2014 International Conference on Life System Modeling and Simulation &
2014 International Conference on Intelligent Computing for Sustainable Energy and Environment****SPONSORS**

Chinese Association for System Simulation (CASS)
IEEE Systems, Man & Cybernetics Society Systems
Biology Technical Committee

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CALL FOR PAPERS**Shanghai, China, September 20-23, 2014**

The 2014 International Conference on Life System Modeling and Simulation (LSMS2014) and 2014 International Conference on Intelligent Computing for Sustainable Energy and Environment (ICSEE2014) 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 from across the world. These events are built upon the success of previous LSMS conferences held in Shanghai and Wuxi in 2004, 2007 and 2010, and ICSEE conferences held in Shanghai and Wuxi in 2010 and 2012 respectively, and are based on large-scale UK-China collaboration projects on sustainable energy. Besides, the third International Conference on Computational Biomedicine will be jointly held with LSMS2014 and ICSEE2014. At LSMS2014 and ICSEE2014, technical exchanges within the research community will take in 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. In conjunction with LSMS2014 and ICSEE2014, two international workshops will be held on Sep. 21, 2014, including the International Workshop on Integration of Electric Vehicles with Smart Grid and International Workshop on Communication & Control for Distributed Networked Systems. The conference in particular welcomes proposals of special sessions related to the key themes of the conferences and the workshops.

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 mostly welcomed. Papers submitted for special sessions will be peer-reviewed with the same criteria for the normal contributed papers. A special session proposal should include the session title, a brief description, names, contact details and bio-sketch of the organizers.

The conference proceedings are scheduled to be published by Springer in their Communications in **Computer and Information Science Series (CCIS)** which will be submitted for indexing by **EI Compendex and ISTP** (final approval is pending). In addition, selected authors are recommended to submit their papers for possible publication in SCI indexed international journals, such as **Information Sciences, Neurocomputing** etc.

IMPORTANT DATES

Paper submission----- **April 1, 2014**
Acceptance----- **June 1, 2014**
Final paper submission----- **June 20, 2014**

WEBSITE AND EMAIL

<http://www.lsms-icsee-2014.org>

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PROGRAM TOPICS

A. COMPUTATIONAL METHODS AND INTELLIGENCE IN LIFE LIFE SYSTEM MODELLING AND SIMULATION

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

B. INTELLIGENT COMPUTING AND APPLICATIONS, INCLUDING SUSTAINABLE ENERGY AND ENVIRONMENT

- B1 Advanced neural network theory and algorithms
- B2 Advanced evolutionary computing theory and algorithms, such as particle swarm optimization, differential evolution, ant colonies, artificial life, artificial immune systems and genetic algorithm
- B3 Advanced theory and methodology in fuzzy systems and soft computing
- B4 Autonomy-oriented computing and intelligent agents
- B5 Fuzzy, neural, and fuzzy-neuro hybrids
- B6 Intelligent modelling, monitoring, and control of complex nonlinear systems
- B7 Computational intelligence in utilization of clean and renewable energy resources, including fuel cell, hydrogen, solar and wind power, marine and biomass
- B8 Intelligent modelling, control and supervision for energy saving and pollution reduction
- B9 Intelligent methods in developing electric vehicles, engines and equipment
- B10 Intelligent methods in power and energy infrastructure development
- B11 Intelligent computing and control in distributed power generation systems
- B12 Intelligent modeling, simulation and control of power electronics and power networks
- B13 Intelligent road management and electricity marketing strategies
- B14 Intelligent construction and energy saving techniques for sustainable and green built environment
- B15 Intelligent modeling and simulation of climate change
- B16 Intelligent water treatment and waste management technologies
- B17 Innovative education for sustainable energy and environment

C. COMPUTATIONAL BIOMEDICINE

- C1 Biological and Brain Networks
- C2 Data Analysis and Data Mining of Biosignals
- C3 Biomarker Discovery
- C4 Feature selection
- C5 Computational Neuroscience
- C6 Robust Optimization and Data Analysis
- C7 Genome Data Analysis
- C8 Molecular conformation and protein folding
- C9 Biocomputing

Workshops

★ Workshop on Integration of Electric Vehicles with Smart Grid

This workshop aims to promote international collaborative research on electric vehicle charging/discharging and its integration with the grid for decarbonizing the whole energy system.

★ Workshop on Communication & Control for Distributed Networked Systems

This workshop is to investigate the communication and control for distributed networked systems in automatic control and industrial electronics areas.

