# B 057EC 2014

## 7<sup>TH</sup> INTERNATIONAL JOINT CONFERENCE ON BIOMEDICAL ENGINEERING SYSTEMS AND TECHNOLOGIES

3 - 6 MARCH, 2014 . ESEO, ANGERS, LOIRE VALLEY, FRANCE



The purpose of **BIOSTEC** is to bring together researchers and practitioners, including engineers, biologists, health professionals and informatics/computer scientists, interested in both theoretical advances and applications of information systems, artificial intelligence, signal processing, electronics and other engineering tools in knowledge areas related to biology and medicine. BIOSTEC is composed of five co-located conferences.

### CALL FOR PARTICIPATION

## **BIODEVICES 2014**

7<sup>TH</sup> INTERNATIONAL CONFERENCE ON BIOMEDICAL ELECTRONICS AND DEVICES

www.biodevices.biostec.org

# **BIOIMAGING 2014**

1ST INTERNATIONAL CONFERENCE ON BIOIMAGING www.bioimaging.biostec.org

### **BIOINFORMATICS 2014**

5<sup>TH</sup> INTERNATIONAL CONFERENCE ON BIOINFORMATICS MODELS, METHODS AND ALGORITHMS www.bioinformatics.biostec.org

### **BIOSIGNALS 2014**

7<sup>TH</sup> INTERNATIONAL CONFERENCE ON BIO-INSPIRED SYSTEMS AND SIGNAL PROCESSING www.biosignals.biostec.org

### **HEALTHINF 2014**

7TH INTERNATIONAL CONFERENCE ON HEALTH INFORMATICS

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# BIODEVICES 2014

#### 7<sup>TH</sup> INTERNATIONAL CONFERENCE ON BIOMEDICAL ELECTRONICS AND DEVICES

The purpose of the International Conference on Biomedical Electronics and Devices is to bring together researchers and practitioners from electronics and mechanical engineering, interested in studying and using models, equipments and materials inspired from biological systems and/or addressing biological requirements. Monitoring devices, instrumentation sensors and systems, biorobotics, micro-nanotechnologies and biomaterials are some of the technologies addressed at this conference.

# BIOIMAGING 2014

#### 1ST INTERNATIONAL CONFERENCE ON BIOIMAGING

Bioimaging is a term that collectively refers to tools used to create structural or functional images of living objects or systems. Examples are many, including: PET and HRRT PET, MRI and fMRI, MEG, SPECT and so on. Medical imaging is an important case of bioimaging referring to the technique and process used to create images of the human body, anatomical areas, tissue, and so on, down to the molecular level, for clinical purposes, seeking to reveal, diagnose, or examine diseases, or medical science, including the study of normal anatomy and physiology. Another field closely related to bioimaging is structural biology, a branch of molecular biology, biochemistry, and biophysics concerned with the spatial and temporal arrangement of biological macromolecules.

# BIOINFORMATICS 2014

#### 5<sup>TH</sup> INTERNATIONAL CONFERENCE ON BIOINFORMATICS MODELS, METHODS AND ALGORITHMS

The purpose of the International Conference on Bioinformatics Models, Methods and Algorithms is to bring together researchers and practitioners interested in the application of computational systems and information technologies to the field of molecular biology, including for example the use of statistics and algorithms to understanding biological processes and systems, with a focus on new developments in genome bioinformatics and computational biology. Areas of interest for this community include sequence analysis, biostatistics, image analysis, scientific data management and data mining, machine learning, pattern recognition, computational evolutionary biology, computational genomics and other related fields.

# BIOSIGNALS 2014

### 7<sup>TH</sup> INTERNATIONAL CONFERENCE ON BIO-INSPIRED SYSTEMS AND SIGNAL PROCESSING

The purpose of the International Conference on Bio-inspired Systems and Signal Processing is to bring together researchers and practitioners from multiple areas of knowledge, including biology, medicine, engineering and other physical sciences, interested in studying and using models and techniques inspired from or applied to biological systems.

A diversity of signal types can be found in this area, including image, audio and other biological sources of information. The analysis and use of these signals is a multidisciplinary area including signal processing, pattern recognition and computational intelligence techniques, amongst others.

# **HEALTHINF 2014**

### 7<sup>TH</sup> INTERNATIONAL CONFERENCE ON HEALTH INFORMATICS

The purpose of the International Conference on Health Informatics is to bring together researchers and practitioners interested in the application of information and communication technologies (ICT) to healthcare and medicine in general and to the specialized support to persons with special needs in particular. Databases, networking, graphical interfaces, intelligent decision support systems and specialized programming languages are just a few of the technologies currently used in medical informatics. Mobility and ubiquity in healthcare systems, standardization of technologies and procedures, certification, privacy are some of the issues that medical informatics professionals and the ICT industry in general need to address in order to further promote ICT in healthcare. In the case of medical rehabilitation and assistive technology the use of ICT has had important results in the enhancement of the quality of life, contributing to a full integration of all citizens in the societies they are also part of.