

The First Conference of Medical and Biological Engineering in Bosnia and Herzegovina (CMBEBiH) will be held 13 -15 March, 2015 in Sarajevo. The general message of CMBEBiH is "Expand your horizons through the biomedical engineering". The conference program will consist of plenary/keynote lectures, workshops, oral and poster sessions and exhibitions. CMBEBiH 2015 will be a great opportunity for an exchange of ideas and presentation of the latest developments in all areas within the field of biomedical engineering.

Conference themes

1. BIOMEDICAL SIGNAL PROCESSING

- 1.1. Physiological systems modeling
- 1.2. Time-frequency and time scale analysis
- 1.3. Nonlinear dynamic analysis
- 1.4. Adaptive and parametric filtering and estimation
- 1.5. Pattern recognition and soft computing techniques
- 1.6. Data mining and processing

2. BIOMEDICAL IMAGING AND IMAGE PROCESSING

- 2.1. Magnetic resonance imaging / Computed tomography / Mammography
- 2.2. Ultrasound imaging / Optical imaging and microscopy
- 2.3. PET and SPECT
- 2.4. Electrical and magnetic source imaging / Impedance imaging
- 2.5. Multimodality imaging / Novel imaging modalities
- 2.6. Image processing, analysis and classification

3. BIOSENSORS AND BIOINSTRUMENTATION

- 3.1. Physical sensors and sensor systems
- 3.2. Bioelectric, biological and chemical sensors and sensor systems
- 3.3. Physiological monitoring / Instrumentation / Integrated systems
- 3.4. Implantable technologies, sensors and systems
- 3.5. Wearable sensors / Body area and wireless sensor networks / Telemetric systems

4. BIO-MICRO/NANO TECHNOLOGIES

- 4.1. Internal, implanted and portable miniaturized systems
- 4.2. BioMEM / NEMS
- 4.3. Microfluidics / Lab-on-a-chip devices
- 4.4. Nano-biotechnology

5. BIOMATERIALS

- 5.1. Biomaterials for sensing and actuation
- 5.2. Biomimetics, bioinspired and patterned biomaterials
- 5.3. Biomaterials in cellular and tissue engineering

6. BIOMECHANICS, ROBOTICS AND MINIMALLY INVASIVE SURGERY

- 6.1. Musculoskeletal models and human movement analysis
- 6.2. Orthotic, prosthetic and rehabilitation robotics and biomechanics
- 6.3. Cardiovascular and respiratory fluid mechanics and biomechanics
- 6.4. Human-robot interaction / Robot-aided surgery
- 6.5. Biologically inspired robotics / Micro-biorobotics
- 6.6. Minimally invasive surgery

7. CARDIOVASCULAR, RESPIRATORY AND ENDOCRINE SYSTEMS ENGINEERING

- 7.1. Cardiac and respiratory function and modeling
- 7.2. Cardiovascular and respiratory signal processing and modeling
- 7.3. Cardiovascular electrophysiology and regulation
- 7.4. Respiratory disease / Sleep disorder / Respiratory engineering
- 7.5. Endocrine systems, function, modeling and control

8. NEURAL AND REHABILITATION ENGINEERING

- 8.1. Brain physiology and modeling
- 8.2. Neural signal processing
- 8.3. Neural interfaces and regeneration

- 8.4. Motor and sensory neuroprostheses / Brain-machine interface
- 8.5. Rehabilitation and wearable technologies
- 8.6. Brain functional imaging / Neurological disorders

9. MOLECULAR, CELLULAR AND TISSUE ENGINEERING

- 9.1. Biomaterial-cell interactions
- 9.2. Cellular force transduction
- 9.3. Embryonic and stem cells in regenerative medicine
- 9.4. Electrical fields at the cell and protein scale
- 9.5. Electroporation
- 9.6. Tissue engineering / Scaffolds in tissue engineering

10. BIOINFORMATICS AND COMPUTATIONAL BIOLOGY

- 10.1. Bioinformatics and computational modeling of complex omic data
- 10.2. Systems biology / Systems medicine
- 10.3. Translational biomedical informatics for clinical applications
- 10.4. Modeling of molecular, cellular and organ pathways

11. CLINICAL ENGINEERING AND HEALTH TECHNOLOGY ASSESSMENT

- 11.1. Clinical engineering / Health technology management
- 11.2. Health technology policy, economics and ethics / Health technology assessment
- 11.3. Technology development, commercialization, assessment and management
- 11.4. Safety and human factors engineering for medical devices and systems
- 11.5. IT in medicine / Equipment interconnectivity and integration
- 11.6. Clinical engineering and disaster preparedness

12. HEALTH INFORMATICS, E-HEALTH AND TELEMEDICINE

- 12.1. Personal, pervasive, preventive, and participatory health systems
- 12.2. Ambient assisted living / Smart homes
- 12.3. Body area networks / Wireless technologies
- 12.4. mHealth / eHealth / Telemedicine
- 12.5. Health information management / Electronic health records
- 12.6. Decision support methods and systems

13. BIOMEDICAL ENGINEERING EDUCATION

- 13.1. Biomedical engineering education and curriculum development
- 13.2. Biomedical undergraduate and graduate student research projects
- 13.3. Career development in biomedical engineering

14. PHARMACEUTICAL ENGINEERING

- 14.1. Pharmaceutical Development in Industry
- 14.2. Bio-/Pharmaceutical Manufacturing
- 14.3. Pharmaceutical Devices
- 14.3. Pharmacokinetics

Important Dates:

Deadline
for Abstract Submission
December 13, 2014

Notification of Abstract
Confirmation
December 30, 2014

Deadline for Full Paper
Submission
January 31, 2015

Notification of Full Paper
Confirmation
February 20, 2015

Final Camera-ready
February 28, 2015



CONFERENCE COMMITTEE

Conference Chair
Badnjević Almir, *Executive Director of DMBIUBIH, Director of Verlab d.o.o.*

Conference Co-chair
Omerhodžić Ibrahim, *Clinical Centre University of Sarajevo*

Honorary Chairs
Magjarević Ratko,
President of International Federation of Medical and Biological Engineering (IFMBE)

SCIENTIFIC COMMITTEE

Mujić Aljo, *University of Tuzla, Faculty of Electrical Engineering,
President of Scientific Committee*

Avdagić Zikrija, *University of Sarajevo, Faculty of electrical engineering*
Avdaković Samir, *University of Sarajevo, Faculty of electrical engineering*
Babić Zdenka, *University of Banja Luka, Faculty of electrical engineering*
Bečić Fahir, *University of Sarajevo, Faculty of Pharmacy*
Bišćević Mirza, *University of Sarajevo, Faculty of Medicine,*
Bošković Dušanka, *University of Sarajevo, Faculty of electrical engineering*
Božić Milorad, *University of Banja Luka, Faculty of electrical engineering*
Busuladžić Mustafa, *University of Sarajevo, Faculty of Medicine*
Čorić Jozo, *University of Zenica, Faculty of Health studies*
Hukić Mirsada, *Academy of sciences and arts of Bosnia and Herzegovina*
Huseinagić Haris, *University Clinical Center Tuzla*
Kozarić Amina, *International Burch University Sarajevo*
Kunosić Suad, *University of Tuzla, Faculty of science*
Marjanović Damir, *International Burch University Sarajevo*
Nurkić Midhat, *University of Tuzla, Faculty of Medicine,*
Omanović Enisa, *International Burch University Sarajevo*
Omerbašić Ago, *University of Sarajevo, Faculty of Medicine*
Pilav Ilijaz, *University of Sarajevo, Faculty of Medicine*
Solaković Nedim, *University of Bihac*
Subasi Abdulhamit, *International Burch University Sarajevo*
Suljanović Nermin, *University of Sarajevo, Faculty of electrical engineering*
Turan Yusuf, *International Burch University Sarajevo*
Vehabović Midhat, *Bosnalijek d.o.o. Sarajevo*
Zubčević Smail, *University of Sarajevo, Faculty of Medicine*

SET UP AND DISMANTLING TIMES:

A poster number display will be placed at the top corner of the board. Double sided tape will be supplied at each poster board.

Social Events

Social program will include a welcome reception, a conference dinner and a student party.

Sarajevo, the host city of the CMBEBiH, is the meeting point of four world's largest religions, the unique connection of East and West. It is the leading political, social and cultural center of BiH, a prominent center of Islamic culture in the Balkans and one of the most interesting tourist destinations in Europe due to its long and rich history of diversity and coexistence.

The CMBEBiH 2015 will take place at BURCH UNIVERSITY SARAJEVO (IBU). IBU is located in Ilidza, 8 km from centre and 2 km from airport. The mission of the IBU is to provide education, scientific research and training of highly qualified personnel to work in academic and professional fields through the development of modern curriculums and creating an environment to encourage the creative, objective and critical thinking and continuous learning.

We are looking forward to hosting you in Sarajevo, in March 2015.

International Burch University
Francuske revolucije bb, Ilidža
71210 Sarajevo
Bosnia and Herzegovina

Conference website

<http://www.cmbebih2015.dmbiubih.org>

Presenting authors instructions

Oral presentations

1. Please make your presence known to one of the chairmen 5 minutes before your session starts and be present during the entire session in which your presentation is scheduled. Time slot for plenary sessions is 60 minutes, including room switching time of 15 minutes
2. Time slots for oral sessions are 90 minutes. Number of papers in each session is up to 6 meaning that 15 minutes is allocated for each presentation. However, there are exceptions to this rule; therefore, please refer to the final program for actual duration of your presentation.
3. Authors and Speakers must report to the Speakers Area in order to preview and upload their presentations. Files must be handed-in a minimum of 2 hours prior to the start of their session (for morning sessions starting at 9.30h please upload it the day before). We recommend that you take advantage of the early file uploading opportunity.
4. All session rooms will be equipped with a data projector and a computer. You do not need to bring your own laptop to the lecture room. Please prepare your presentations for display with aspect ratio 4:3.
5. When building your presentation, use standard fonts (e.g., Times New Roman, Arial, etc.). Basic fonts are included on the session room PC computers, but if an unusual font is used it may not display well.
6. Even if you have submitted your presentation files in advance, please plan to bring the latest version of your presentation to the session on a Windows-readable USB flash Drive or CD-ROM.
7. Computers in conference rooms are equipped with Windows 7, Microsoft Office 2010 package. Apple Mac computers will not be provided in any of the session rooms. If you are using Mac, please check compatibility with Microsoft Office 2010 package or use your own Mac computer if your presentation is created in Apple's "Keynote" presentation application. Videos handed in as an independent file must be coded under standard codec. Users are recommended to preview them in standard universal software, such as VLC Player or Quicktime.

Posters

Poster sessions are a valuable method for authors to present papers and meet with interested attendees for in-depth technical discussions. Therefore, it is important that you display your results clearly to attract people who have an interest in your work and your paper. Your poster should cover the KEY POINTS of your work. The ideal poster is designed to: attract attention; provide a brief overview of your work; initiate discussion and questions. Use color to highlight and make your poster more attractive, by using pictures, diagrams, cartoons, figures, etc., rather than only text. wherever possible. There is however no specific template for the poster: font size and text are free.

Maximum outside dimensions of each poster, including the title, must not exceed 90 cm width x 120 cm height.

