



TAIEX Regional Workshop on Biomedical Engineering: Biomedical Signals

organised in co-operation with

Ministry of Civil Affairs of Bosnia and Herzegovina

Venue:

Hotel Vidovic

Ivana Franje Jukića 11, 78000 Banja Luka

26 – 27 February 2018

Beneficiaries:

**Bosnia and Herzegovina, Kosovo, Serbia, the former Yugoslav Republic
of Macedonia**

ETT 65374

Aim of the workshop:

The aim of the workshop is to enhance local capacity for education, and research and innovation in the field of biomedical signal processing. The EU experts will present the current state-of-the-art technical expertise to participants from relevant regional public institutions; university departments offering study programmes related to biomedical signal processing; and representatives of professional associations related to biomedical engineering. Participants from all the Western Balkan countries are expected and this will provide an opportunity to strengthen the relationships between regional institutions and enable future co-operation.

Speakers:

- Ms Luminita Moraru, Professor, PhD, Dept. of Physics, Faculty of Sciences, Univ. "Dunarea de Jos", Galati, Romania
- Mr Pablo Laguna, Professor, Aragón Institute for Engineering Research (I3A), University of Zaragoza, and CIBER-BBN; Spain
- Ms Nataliya Kizilova, Professor, Warsaw University of Technology, Institute of Aeronautics and Applied Mechanics, Poland
- Mr Hugo Gamboa, Assistant Professor, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa, Portugal
- Mr Giovanni Saggio, Professor, PhD, University of Rome "Tor Vergata", Dept. of Electronic Engineering, Italy
- Ms Cristina Dobrota, Assoc. Professor PhD Habil., Director of the Institute of Technology, Babes-Bolyai University, Romania

Day 1: Monday 26 February 2018

Chair: Ms Zdenka Babić, Professor, PhD
Faculty of Electrical Engineering University of Banja Luka

09:30 – 10:00	Registration of participants and coffee
10:00 – 11:00	Welcome speech by: - Deputy Head of Delegation of the European Union Mr Khaldoun Sinno - Minister of Civil Affairs of Bosnia and Herzegovina, Mr Adil Osmanovic - President of Bosnia and Herzegovina Medical and Biological Engineering Society, Mr Almir Badnjevic
11:00 – 13:00	INTRODUCTION TO BIOMEDICAL SIGNALS The aim of this session is to introduce basic terms of biomedical signals and international requirements for acquiring, manipulating and storing biomedical signals. The latest research results regarding biomedical signals are to be presented. Ms Luminita Moraru
13:00 – 14:15	Lunch break
14:15 – 16:00	RECORDING, ACQUISITION AND PROCESSING OF BIOMEDICAL SIGNALS The aim of this session is to explain the latest advancements in biomedical signal acquisition and processing. Biomedical instrumentation for signal acquisition is to be explained with regard to international requirements regarding reliability of recorded data. Mr Hugo Gamboa
16:00 – 16:30	Coffee break
16:30 – 18:00	Electrocardiography (ECG) signal and acquisition The aim of this session is to provide overview of medical importance in recording ECG signal as well as to show the engineering aspect of biomedical instrumentation needed for signal recording. Mr Pablo Laguna

Day 2: Tuesday 27 February 2018

Chair: Mr Almir Badnjević, Professor, PhD
Director of Verlab Ltd and President of DMBIUBIH

09:00 – 10:30	Electroencephalography (EEG) SIGNAL The aim of this session is to provide overview of medical importance in recording EEG signal as well as to show the engineering aspect of biomedical instrumentation needed for signal recording. Safety and reliability of measurement should be covered. Ms Cristina Dobrota
10:30 – 11:00	Coffee break
11:00 – 12:30	Electromyography (EMG) SIGNAL The aim of this session is to provide overview of medical importance in recording EMG signal as well as to show the engineering aspect of biomedical instrumentation needed for signal recording. Safety and reliability of measurement should be covered. Mr Giovanni Saggio
12:30 – 14:45	Lunch break
14:45 – 15:30	BLOOD PRESSURE (BP) MEASUREMENT AND SIGNAL ACQUISITION The aim of this session is to provide overview of medical importance in recording blood pressure signal as well as to show the engineering aspect of biomedical instrumentation needed for signal recording. Safety and reliability of measurement should be covered. Ms Natalya Kizilova
15:30 – 16:00	Coffee break
16:00 – 17:00	Discussion and conclusion

This meeting is being organised by the
***Technical Assistance Information Exchange Instrument
of the European Commission***

<http://ec.europa.eu/taiox>



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