



INVITED SESSION SUMMARY

Title of Session:

Bioengineering Applications

Name, Title and Affiliation of Chair:

Dr Milan Simic RMIT University, STEM, School Engineering
Dr Maria Spichkova RMIT University, STEM, School of Computing Technologies

Details of Session (including aim and scope):

This session presents a comprehensive approach to the disciplines of Bioengineering and Biomedical Engineering. It covers combination of software engineering, computing, electronics, electrical, mechanical and chemical engineering, in the role of medical applications. Generally, applications of engineering principles to living structures are known as bioengineering, while biomedical engineering covers concepts and design of medical equipment. Research into the development and applications of eHealth for assessment and management of various conditions will be considered. This may include, use of smartphone sensors, applications for tracking health, applications for delivery of therapy and management of health data.

The list of topics for this session includes but is not limited to:

- Artificial hips, knees and other joints,
- Prosthesis,
- Physiotherapy treatments and equipment,
- Ultrasound,
- MRI and other medical imaging techniques, EKG/ECG,
- Clinical equipment,
- Micro-implants,
- Regenerative tissue growth,
- Pharmaceutical drugs,
- eHealth,
- Telemedicine,
- Health informatics.

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

RMIT University, (Science, Technology, Engineering, Mathematics) STEM, Melbourne, Australia

- Dr Milan Simic, RMIT University, STEM, School Engineering
- Dr Maria Spichkova, RMIT University, STEM, School of Computing Technologies

Website URL of Call for Papers (if any): TBA

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