

CALL FOR PAPERS

Special Session on Biomedical Applications of Industrial Electronics



IECON 2018 - The 44th Annual Conference of the IEEE Industrial Electronics Society
October 21-23, 2018, Washington D.C, USA



TOPIC OF THE SPECIAL SESSION

Biomedical applications of industrial electronics have a major social and economic impact in our society, and contributes by improving and assisting individuals in a daily basis. Industrial electronics cover a wide spectrum of biomedical applications including diagnosis and treatment systems, prosthesis and implants, robotic and automated systems, and biological signal modeling and analysis. All these disciplines contribute to either prevent diseases, improve diagnosis and treatment using available techniques. To achieve these goals, significant technical challenges must be addressed following a multi-disciplinary approach.

Topics of the Session

- Diagnosis systems: X-ray, magnetic resonance, and others.
- Electric and magnetic stimulators.
- Prosthesis and implants.
- Power converters and control for biomedical applications.
- Automation and robotic systems for biomedical applications.
- Electrical modeling of biological systems and tissues.
- Electronic analysis and processing of biological data.
- Industrial electronics for innovative therapies and techniques: magnetic hyperthermia, electroporation, and others.
- Educational issues and activities.

IEEE IES Technical Committee Sponsoring the Special Session:

- Power Electronics
- Education in Engineering and Industrial Technologies

ORGANIZED AND CO-CHAIRED BY

Oscar Lucia
olucia@ieee.org

Elisabetta Sieni
elisabetta.sieni@unipd.it

Hector Sarnago
hsarnago@unizar.es

Author's schedule:

- Deadline for submission of special session papers
May 1st, 2018
- Notification of acceptance
July 15th, 2018
- Deadline for submission of final manuscripts
August 1st, 2018

For additional information please visit www.iecon2018.org