CALL FOR PAPERS

3rd International Symposium on Applied Sciences in Biomedical and Communication Technologies

:: ISABEL 2010
Sustainable Communication and Biomedical Technologies
November 07-10, 2010, Rome, Italy

:: Scope
The inter-disciplinary approach is becoming an increasing need in scientific and industrial communities. The most evident example of such a need is represented by the strong interconnection between biomedical and communication engineering. On the one hand, ICT can provide new tools for making healthcare systems more efficient and responsive in order to supply in-the-home and mobile healthcare solutions. On the other hand, many of the most recent advances in communication technologies - from algorithms to the electronics and materials - are “bio-inspired”. Moreover, it is increasing the awareness of the great potentials offered by the synergistic combination of many disciplines (e.g., mathematics and physics, biology and chemistry) in both biomedical and communication engineering.

This conference aims at creating a stage where researchers, scientists and business people can discuss and share ideas at the frontiers of life sciences, pure sciences and engineering.

The global interest towards a sustainable Planet is forcing the industrial and scientific worlds to seek for “sustainable” engineering solutions in order to preserve the natural environment and efficiently exploit the energy, which is a limited resource. Hence, from 2010 onward, ISABEL will also look upon the application of sciences in biomedical and communication engineering so as to develop novel technologies and solutions that can make our lives “greener”.

:: Topics of Interest (but NOT limited to)

Track 1: ICT for Life (Healthcare and Energy)
Emergency Communications
ICT for Intelligent Transport Systems
ICT Impact on Climate Changes

Track 2: Devices, Materials and Electronics
Bio-Nanotechnologies
Biosensors, Biomaterials and Tissues
Electromagnetic Impact on Human Body
Safer and Sustainable Chemical Materials
Wireless Implantable Devices

Track 3: Acquisition, Analysis, Processing and Recognition

Track 4: Maths, Physics and Biology for ICT
Advances in Information Theory
Bio-Inspired Algorithms for ICT
Cryptography and Quantum Cryptography
Learning-Capable Techniques for ICT Quantum Communications Optimization Techniques for ICT Self-Organizing Networks and Advances in Network Theory

Track 5: Maths, Physics and Biology for Medicine
Biological Information Theory
Computational Molecular Biology
Human Sensorimotor Control
Mathematical Modelling and Design of Medical Diagnostic Tools
Mathematics of the Brain
Physiological Fluid Dynamics
Physics of Diagnostic and Therapeutic Systems

:: Submission Guidelines

Submitted papers must represent original material that is not currently under review in any other conference or journal, and has not been previously published. Prospective authors are encouraged to submit a 5-pages full paper or a 2-pages extended abstract including results in the IEEE conference style. All accepted papers will be granted either an oral presentation or a poster presentation. Please find detailed information for submission at: http://www.isabel2010.it

:: Dissemination
All accepted papers will be published in IEEE Xplore. Selected authors will be invited to submit extended versions of their papers for publication in well-reputed journals.

:: Important Dates

| Symposium/Workshop/Special Session proposals | March 15, 2010 |
|Tutorial proposals | March 15, 2010 |
|Regular paper submission | June 15, 2010 |
|Demo/Prototype proposals | July 15, 2010 |
|Review completion deadline | September 05, 2010 |
|Invited paper submission | September 15, 2010 |
|Notification of acceptance | September 15, 2010 |
|Camera-ready submission | September 30, 2010 |
|Video submission | September 30, 2010 |
|Early registration | September 30, 2010 |

:: Organizing Committee

Dr. Ernestina Cianca (General-Chair)
Dept. of Electronics Engineering, University of Rome “Tor Vergata”

Dr. Mauro De Sanctis (TPC Co-Chair)
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Dr. Giovanni Saggio (TPC Co-Chair)
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Dr. Mirko Antonini (General Manager)
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Dr. Simone Frattasi (Co-Founder and Strategic Consultant)
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