

## Special Issue on Pregnancy Monitoring

### Call for Papers

Pregnancy is a critical phase in the life of both a mother and her fetus, with important risks such as fetal distress and preterm delivery. Early assessment of these risks enables timely and effective intervention, which is essential to minimize perinatal mortality and long-term morbidity. Despite strong advances in sensing, patient monitoring, and image analysis techniques, their application in the area of pregnancy monitoring and diagnosis is still hampered by challenges such as movement artifacts, low signal-to-noise ratios, and complex signal interpretation.

There is therefore a strong need for new reliable methods to process and interpret biosignals and images that are measured noninvasively during pregnancy, aimed at enabling timely recognition and assessment of critical risks during pregnancy. This special issue focuses on such methods. Potential topics include, but are not limited to:

- Analysis of fetal and uterine biopotentials
- Ultrasound fetal imaging and Doppler analysis
- Robust signal analysis and feature extraction
- Analysis methods for distributed and/or multimodal sensing
- Computational methods for pathophysiological modeling
- Methods for feature selection and signal classification
- Clinical studies for validation and feasibility evaluation of the proposed methods

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Manuscript Due	Friday, 31 May 2013
First Round of Reviews	Friday, 23 August 2013
Publication Date	Friday, 18 October 2013

### Lead Guest Editor

**Massimo Mischi**, Signal Processing Systems, Electrical Engineering Department, Eindhoven University of Technology, 5612 AZ Eindhoven, The Netherlands; [m.mischi@tue.nl](mailto:m.mischi@tue.nl)

### Guest Editors

**Catherine Marque**, UMR CNRS 7338 Biomécanique et Bioingénierie, Département de Génie Biologique, Université de Technologie de Compiègne, BP20529, Compiègne Cedex, France; [catherine.marque@utc.fr](mailto:catherine.marque@utc.fr)

**Maria Gabriella Signorini**, Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB), Politecnico di Milano, Piazza Leonardo da Vinci 32, Milano, Italy; [mariagabriella.signorini@polimi.it](mailto:mariagabriella.signorini@polimi.it)

**Brynjar Karlsson**, School of Science and Engineering, Reykjavik University, Menntavegur 1, 101 Reykjavik, Iceland; [brynjar@ru.is](mailto:brynjar@ru.is)

**Mihaela Ungureanu**, Applied Electronics and Information Engineering Department, University Politehnica of Bucharest, Iuliu Maniu 1-3, 060042 Bucharest, Romania; [g.mihaela.ungureanu@upb.ro](mailto:g.mihaela.ungureanu@upb.ro)