

## CALL FOR PAPERS

### Special Issue on

### SMART WEARABLE DEVICES FOR HUMAN HEALTH AND PROTECTION

Research and development of Smart Wearable Devices (SWD) for personalized services (particularly in Health and Civil Protection context) have been pursued extensively by governments and research agencies in all parts of the world over the past few years.

Wearable solutions are especially required in a health and medical treatment applications: the challenging focus is on reducing costs of National Health Services while maintaining a high quality of the supplied services, thus providing an easy access from various possible sites, at any time, and towards a large number of users. These devices possess the capability of extending health services over the classical and traditional applications of care, prevention and support. In fact, they can include caring of disaster victims and monitoring of emergency operators. In this context, the increasing fear caused by events such as the terrorist attacks to the Twin Towers and the earthquakes (tsunami) in South East Asia caused a boost of technological research in this field, as well as an increase in the Governments' funding in order to prevent and reply in an effective way to such types of disasters.

New interesting research subjects rely on the miniaturization of electronic circuits (computational tools, micro-sensors, transmission and signal processing devices), which allow the integration of many innovative smart features into textiles.

The benefit of this integration is clear because about 90% of human skin may be in contact with fabrics, which is clearly the most "natural" interface with the human body. Moreover, fabrics are flexible, they fit well on the human body, they are fairly cheap and, finally, they can be considered disposable devices.

The goal of this special issue is to present original and relevant contribution in the area of wearable devices applied to the health and civil protection domains. Authors are invited to submit paper contributions including (but not limited to) the following topics:

- Textile sensors for biomedicine
- Intelligent garments
- Textile electronics
- Wearable systems in emergency operators
- No-contact wearable sensors
- Vital signs parameters and signal processing
- Ubiquitous computing

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## **SUBMISSION OF MANUSCRIPTS**

Manuscripts must be prepared according to the format of the IEEE Transactions (<http://bme.ee.cuhk.edu.hk/TITB/instr4authors.html>) and electronically submitted through the web-based Manuscript Central (<http://embs-ieee.manuscriptcentral.com/>). When submitting, authors are requested to *choose “Smart Wearable Devices for Human Health and Protection” in the manuscript type* to indicate that the paper is intended for this special issue.

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