Call for Papers

The last decade has witnessed a rapid surge of interest in new sensing and monitoring devices for healthcare and the use of wearable/wireless devices and sensor networks for clinical applications. One key development in this area is implantable in vivo monitoring and intervention devices. While the problems of long-term stability and biocompatibility are being addressed, several promising prototypes are starting to emerge for managing patients with acute diabetes, for treatment of epilepsy and other debilitating neurological disorders and for monitoring of patients with chronic cardiac diseases. Despite the technological developments in sensing and monitoring devices, issues related to system integration, sensor miniaturization, low-power sensor interface circuitry design, wireless telemetric links and signal processing have still to be investigated. Moreover, issues related to quality of service, security, multi-sensor data fusion, and decision support are active research topics needed for deploying body sensor networks.

The aim of the workshop is to address general issues related to using wearable/wireless and implantable sensors and to bring together scientists from computing, electronics, bioengineering, medicine and industry in order to discuss the latest technological developments and clinical applications of body-sensor networks.

Areas of interest include (but are not limited to):
- Novel bioelectrical, biochemical, biophysical, and mechanical sensors
- Hardware considerations for body sensor networks: low power RF transceiver, energy scavenging, battery technology, miniaturisation, system integration, process and cost of manufacturing
- Biocompatibility and materials
- Context awareness and multi-sensor data fusion for BSN
- Quality of service and security issues for BSN
- Standards and light-weight communication protocols for BSN
- Links from the body to environment sensing, smart dwellings, home monitoring
- Wearable and implantable sensor integration and development platforms
- Wearable biomotion sensors for diagnosis, therapy, training, sports, etc.
- Applications of BSN

Important dates:
- 15th Nov 2005 – Paper submission deadline
- 15th Dec 2005 – Notification of acceptance
- 20th January 2006 – Camera ready copy due

For further information see: http://vip.doc.ic.ac.uk/bsn