

# THE JOURNAL OF ENGINEERING

IET Open Access Research

## SPECIAL SECTION:

### Biomedical Devices and Systems for Health Monitoring and Biological Investigations

During the past decade, we have witnessed tremendous applications of biomedical devices in healthcare and biological research. Advances in fabrication techniques and microelectronics combined with novel biomaterials have enabled biocompatible miniaturized sensors and systems with significant improvements in sensitivity, selectivity, longevity and reliability. Consequently, numerous wearable devices and medical implants have been developed, optimized and utilized, enhancing humans' life quality to a great extent. Cost and care efficiency, quality and efficacy in hospitals, as well as pharmacology and scientific discoveries have obtained great benefits from multidisciplinary research. In this context, we invite submissions to this Special Section of review articles, original research papers, and short communications covering the broad field of biosensors and systems, healthcare wearable devices and medical implants.

This Special Section aims to introduce innovative engineering approaches, novel devices and systems, as well as thorough reviews about current state-of-the-art technologies. It will provide a forum for academic researchers, biological and clinical scientists and even biotech entrepreneurs to present their latest efforts, raise discussions about the current challenges and issues, as well as potential future trends for healthcare and biological science. Manuscripts focusing on system perspectives, clinical or biological, are particularly welcome.

#### Topics of interest include, but are not limited to:

- Biosensors and bioelectronics
- Utilization of engineering tools for biological investigations, medical diagnoses and therapeutic applications
- Wearable devices and implants
- Point-of-care devices and systems
- The integration of electronics, communication, signal processing and data science for next-generation biomedical systems

All papers must be submitted through the journal's Manuscript Central system:  
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**Submission Deadline: 1 October 2017**

All papers will be published online once accepted and collected into a Special Section on the IET Digital Library

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