

## **Special Issue on**

## **Bio-inspired Sensors and Sensor Networks**

## **Call for Papers**

Today, engineered **sensors** are pervasive but lack the intelligence, parallelism, sophistication and versatility of natural biological **sensors**. Bio-inspired or biomimetic sensors are a class of sensors that utilize natural or synthetic materials to recreate systems or functions found in nature (e.g. flight and sight of insects, self-cleaning of lotus leaves and social behavior of ants), thereby trying to mimic their selectivity, sensitivity and efficiency. With growing demand in healthcare informatics, smart bio-inspired sensors will be integrated in massively interconnected networks to rapidly screen, identify and monitor our health parameters at real-time. As **bio-inspired sensors** play an important role in chemical and biological detection, they would be of great interest to specialists in this area.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring **bio-inspired sensors and sensor networks**. Potential topics include, but are not limited to:

- Biomimetics, biomimicry, biomotors and biomanufacturing
- Self-assembly, micro/nanofabrication and sensor integration
- Wearable, disposable and self-destructing sensors
- Wireless, distributed sensors and sensor networks
- Embedded systems, control theory, bio-inspired computing
- Characterization, imaging and testing techniques
- Health informatics and real-time health monitoring
- Algorithms, modeling, signal processing and simulation
- Novel substrates and applications

Authors should read over the journal's <u>Authors' Guidelines</u> carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's <u>Paper Submission System</u>.

Please kindly notice that the "Special Issue" under your manuscript title is supposed to be specified and the research field "Special Issue - *Bio-inspired Sensors and Sensor Networks*" should be chosen during your submission.



According to the following timetable:

Submission Deadline	November 18th, 2014
Publication Date	January 2015

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For further questions or inquiries Please contact Editorial Assistant at jbise@scirp.org