

Call for Papers Special Issue on Reactive Sensor Networks

Scope

A common assumption in Wireless Sensor Networks is that they comprise resource-constrained static nodes which sense their environment and then send their measurements to a central base station through multihop routing. Soon, it was realized that this network organization leads to rapid energy exhaustion of sensors around the base station since these nodes should relay all the traffic destined for the base station. In addition, the passive nature of static sensors which can only sense and are unable to move is not always helpful in target-tracking scenarios or in cases where real-time action is necessary for handling emergency situations. Apparently, a reactive (dynamic) behavior from these networks would be effective for dealing with a number of changing operational conditions (e.g. node failures, energy exhaustion in some nodes) or with real-time events.

This Special Issue will focus on all forms of reactive behavior that can be incorporated in the functionality of a Wireless Sensor Network and will also identify new possibilities, opportunities and challenges deriving from this new paradigm. Topics of interest include but are not limited to:

- Sink mobility in Wireless Sensor Networks
- Wireless Sensor Actuator Networks
- Wireless Sensor Networks with mobile sensors
- Re-tasking in Wireless Sensor Networks
- Mobile agent based solutions in Wireless Sensor Networks
- Node redeployment techniques in Wireless Sensor Networks for improved connectivity and/or coverage
- Re-clustering techniques in Wireless Sensor Networks
- Dynamic MAC and routing protocols in Wireless Sensor Networks for increased network lifetime
- Reactive methods in Underwater Wireless Sensor Networks
- Reactive methods for target tracking in Wireless Sensor Networks
- Dynamic techniques for data aggregation/fusion in Wireless Sensor Networks
- Security, trust and privacy in Reactive Sensor Networks

Tentative Schedule

Manuscript submission deadline: November 30, 2011

First Notification: March 10, 2012

Submission of revised paper: April 20, 2012

Notification of acceptance: May 31, 2012

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Instructions for submission:

The submission website for this journal is located at <http://ees.elsevier.com/comcom>. To ensure that all manuscripts are correctly identified for inclusion into the Special Issue, the authors have to select "**Special Issue: Reactive WSN**" when they reach the "Article Type" step in the submission process.