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Special issue on

Enhancement Algorithms, Methodologies & Technology for Spectral Sensing

The multispectral/hyperspectral science and technology base has clearly demonstrated the potential for providing near to mid-term solutions for many of the monitoring problems associated with chemical, biological, radiological & explosive (CBR&E) threats on the land, sea and in the air. However, the ultimate realization of such spectroscopic capabilities is expected to require the fusion of many types of spectral-sensing techniques and modalities along with the leveraging of advanced algorithmic strategies. In particular, the development of post-acquisition (software based) algorithmic or signal-processing based strategies to enhance and aid the functionality of spectral sensors are needed, as well as novel acquisition-phase architectures (hardware based) that enable extended functionality and greatly enhanced data processing capabilities. Therefore, the proposed special issue on “Enhancement Algorithms, Methodologies & Technology for Spectral Sensors” will seek to organize the very best pioneering works from the array of algorithms, methodologies and technology efforts around the world into a unique and invaluable spectroscopic sensors roadmap that will be useful for identifying the most promising integrated-technologies pathways to efficient and effective CBR&E detection and monitoring systems

This special issue seeks contributions from across the international community. Speakers from the annual IEEE SENSORS Conference and those from other specialty meetings such as the “International Symposium on Spectral Sensing Research (ISSSR),” to be held on the campus of Stevens Institute of Technology, June 23-27, 2008 (see www.issr.com) are especially encouraged to submit their work. All papers will undergo the standard IEEE Sensors Journal peer review process. For manuscript preparation and submission please follow the guidelines in the *Information for Authors* section at the IEEE Sensors Journal web page (<http://www.ieee.org/sensors/sj>). All manuscripts must be submitted on-line via the *IEEE Manuscript Central*TM process (<http://sensors-ieee.manuscriptcentral.com>). During this online submission process, seven screens of information must be completed by the submitting author. Please indicate your “Manuscript Type” as “Special Issue on Enhancement Algorithms, Methodologies & Technology for Spectral Sensing” using the pull-down menu on Screen 1. Authors are encouraged to **suggest names of potential reviewers** for their manuscripts in the space provided for this purpose on Screen 4.

Deadlines:

- Manuscript Submission: August 1, 2008
- Notification of Acceptance: January 1, 2008
- Final Manuscript due: February 1, 2009
- Tentative publication date: June, 2009

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