

PROCEEDINGS OF SPIE

***Chemical, Biological,
Radiological, Nuclear, and
Explosives (CBRNE) Sensing XII***

**Augustus W. Fountain III
Patrick J. Gardner**
Editors

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Introduction – Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Sensing XII

This year we held our twelfth annual conference for the Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) sensing at the SPIE Defense, Security and Sensing (DSS) Symposium and the last in Orlando, Florida, USA. The topics being presented at the conference clearly show the convergence of multiple detection modalities for sensing CBRNE threats to National Security. The SPIE DSS symposium remains an unprecedented international forum for authors from government, industry, and academia to gather and address a wide variety of sensing issues and technologies. In particular, the authors in these conference proceedings represent nearly an equal one-third partition among those groups, and are leaders in each of their respective fields.

This year we accepted the largest number of papers and posters ever to be presented at the CBRNE Sensing Conference. For Biological Sensing, we held a special topical session to address the continuing challenges of biological aerosol detection. We also saw continued growth in areas of research supporting proximity detection of chemical threats on surfaces. Explosives sensing remains one of our strongest areas in the conference, and there are a number of outstanding papers published here. The presentations within the radiological and nuclear threat detection topical section addressed a number of threats important to homeland security, and rounded out the entire conference.

We want to take this time to particularly thank the members of the program committee for helping us plan, organize, and orchestrate this year's conference. They each work behind scenes all year long to make this conference not only possible, but truly a first-rate affair. Whether they come from government laboratories, agencies, industry or academia, they bring a tremendous amount of energy and professionalism to help run this conference and make it successful.

We hope that each of you will find value in the proceedings from this year's conference, and we look forward to seeing everyone in 2012 at the thirteenth conference (XIII) – the first time to be held in Baltimore, Maryland, USA.

Augustus W. Fountain III
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