

**CIRMS 2014 ANNUAL MEETING**  
**“ADVANCED MANUFACTURING AND TECHNOLOGY”**  
**MARCH 10 – 12, 2014**  
**AGENDA**

Monday, March 10

- 8:30 am Continental Breakfast
- 9:00 am **President’s Welcome**  
*Robert Rushton, President, CIRMS*
- Welcome to NIST**  
*James Olthoff, Deputy Director of the Physical Measurement Laboratory, National Institute of Standards and Technology*
- NEEDS Report**  
*Walter Voit, University of Texas at Dallas*
- 9:15 am **Keynote Address: “Advanced Manufacturing: Processing and Testing of Radioactive Materials”**  
*Dan Thoma, Los Alamos National Laboratory*
- 9:45 am **And Now for Something Completely Different: Alternative Sources of Medical Isotopes for the Canadian Public**  
*Raphael Galea, National Research Council Canada*
- 10:15 am **Advanced Technologies Used in the Manufacturing and Operation of New OSL Instrumentation**  
*Markku Koskelo, Aquila*
- 10:45 am Break
- 11:15 am **Investigation of PRESAGE as a 3D Dosimeter for Remote Auditing Applications**  
*Mitchell Carroll, UT MD Anderson Cancer Center*
- 11:30 am **Self-based Large-area Solid-state Neutron Detector with High Efficiency and Extremely Low Leakage Current**  
*Kuan-Chih Huang, Rensselaer Polytechnic Institute*
- 11:45 am **Investigation of Cherenkov Emission with Applications in Dosimetry, Image Guidance and Intensity Modulation in Radiation Therapy**  
*Yana Zlateva, McGill University*
- 12:00 pm **Poster Blitz**
- 12:45 pm Lunch
- 1:45 pm **Concurrent Working Group Sessions** - The subcommittees of the CIRMS Science and Technology Committee will hold various Working Group sessions. These sessions will go into greater detail on specific topics and include a review of the CIRMS “Fifth Report on Needs in Ionizing Radiation” and a prioritization of those needs.

IAME: Industrial Applications and Materials Effects  
Medical Applications  
RP/HS: Radiation Protection / Homeland Security

3:30 pm Break

3:45 pm **BIODOSIMETRY**

*Chairs: Dr. Kim M. Morehouse, FDA, and Dr. William F. Blakely, AFRRRI*

3:45 pm **Automation of Cytogenetic Assays using Artificial Intelligence and Neural Network Systems**

*Dr. Adarsh Ramakumar, Scientific Research Department, Armed Forces Radiobiology Research Institute (AFRRRI)*

4:10 pm **Comparative Assessment of DNA Damage Sensitivity and Repair Kinetics in PBMCs and Fibroblasts from Human and Swine Irradiated Ex Vivo**

*Dr. Maria Moroni, Scientific Research Department, Armed Forces Radiobiology Research Institute (AFRRRI)*

4:35 pm **The Development of Radiation Injury Estimation Algorithms using Blood Parameters from a Nonhuman Primate Model: A Pilot Study**

*Dr. David Bolduc, Scientific Research Department, Armed Forces Radiobiology Research Institute (AFRRRI)*

5:00 pm **Biomarker-Based Radiation Dosimetry Diagnostics**

*Dr. George Sigal, Meso Scale Diagnostics (MSD)*

5:30 pm Adjourn

## Tuesday, March 11

8:30 am Continental Breakfast

9:00 am **Design of High-Performance X-Ray Irradiation Systems**

*Frederic Stichelbaut, IBA Group*

9:30 am **Advanced Radiation Detection for the Modern Warfighter**

*Stanley Mavrogianis, Radiation Technology Group, Naval Surface Warfare Center, Carderock Division*

10:00 am **Advanced Manufacturing at the Institute for Sustainable Materials and Manufacturing, SUNY College of Environmental Science and Forestry**

*Mark Driscoll, State University of New York ESF*

10:30 am **Poster Session; Break**

11:30 am **Concurrent Working Group Sessions** - The subcommittees of the CIRMS Science and Technology Committee will continue their Working Group sessions.

IAME: Industrial Applications and Materials Effects  
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- 12:45 pm Lunch
- 1:45 pm **Concurrent Working Group Sessions (continued)**
- 3:30 pm Break
- 3:45 pm **Randall S. Caswell Award for Distinguished Achievement in the Field of Ionizing Radiation Measurements and Standards**  
  
*Stephen M. Seltzer, National Institute of Standards and Technology*
- 5:15 pm Adjourn
- 6:15 pm Bus from Hilton Hotel to the Holiday Inn in Germantown
- 6:30 pm Dinner at the Holiday Inn in Germantown

Wednesday, March 12

- 8:30 am Continental Breakfast
- 9:00 am **Concurrent Working Group Sessions** - The subcommittees of the CIRMS Science and Technology Committee will continue their Working Group sessions.  
  
IAME: Industrial Applications and Materials Effects  
Medical Applications  
RP/HS: Radiation Protection / Homeland Security
- 10:30 am **Poster Session; Break**
- 11:00 am **Concurrent Working Group Sessions, continued**
- 12:00 pm **Fundamental Radiation Effects in Aromatic Compounds**  
*Jay LaVerne, Notre Dame*
- 12:45 pm Lunch
- 1:45 pm **Report on Needs in Ionizing Radiation**
- 3:45 pm Adjourn