

**RADIATION PROTECTION & CONSEQUENCE MANAGEMENT
MONDAY APRIL 8, 2019 (AFTERNOON)**

**1:45 PM – 3:15 PM
LECTURE ROOM B**

Session Title: Radiological Reference Materials for Consequence Management of Nuclear Emergencies
Session Chair: Dr. Stephanie Healey, Food and Drug Administration

Dr. Robert Jones, Center for Disease Control
CDC'S Rapid Radionuclide Bioassay Screen – Updates, New Methods, and Plans for the Future

Dr. Evgeny Taskaev, Eckert & Ziegler Analytics
What is Reference Material for Radioactivity Measurements in Consequence Management

Dr. Bill Cunningham, Food and Drug Administration
The Role of Reference Materials in Risk Analysis for Radionuclides in Food

Dr. Stephanie Healey, Food and Drug Administration
Development of Radiological Performance Testing Program for Food Emergency Response Network (FERN) Method Development and Laboratory Competence Evaluation

Zhichao Lin, Food and Drug Administration
Considerations and Approaches in Development of Food-Based Reference Materials

**3:15 PM – 3:45 PM
Coffee Break**

**3:45 PM – 5:15 PM
RED AUDITORIUM**

Joint Sessions: Medical Applications, Radiation Protection & Industrial Applications

Session Title: Chemistry and Biology of the DNA Damage and its Modification
Session Chair: Dr. Amitava Adhikary, Department of Chemistry, Oakland University

Dr. Michael Dingfelder, East Carolina University
Track Structure: Simulating the Physics and Chemistry Basis of Radiation Damage

Dr. David Becker, Oakland University
A Radiation Chemistry Track Structure Model in 3D for Ion-beam Irradiated DNA

Dr. Shubhankar Suman, Georgetown University
Role of Persistent DNA Damage Response in Heavy-Ion Space Radiation-Induced Carcinogenesis

Dr. Sudipta Seal, University of Central Florida
Understanding the Rare Earth Nanomaterials in Mitigation Radiation in Biological Environment

Dr. Jeffrey Buchsbaum, Radiation Research Program, National Institute of Health
DNA Damage and High LET Radiation and the Clinic – Biologic Dosimetry is the Goal

**RADIATION PROTECTION & CONSEQUENCE MANAGEMENT
TUESDAY APRIL 9, 2019 (AFTERNOON)
LECTURE ROOM B**

**1:45 PM – 3:15 PM
LECTURE ROOM B**

Joint Sessions: Industrial Applications & Radiation Protection

Session Title: Cesium-137 Irradiators

Session Chair: Dr. Spencer Mickum, Hopewell Designs Inc.

Dr. Spencer Mickum – Hopewell Designs Inc.

Impact from the Potential Shortage of Cs-137 Supply

Dr. Jacob Kamen - Mount Sinai Hospital

Successful Migration from Radioactive Irradiators to X-Ray Irradiators in One of the Largest Medical Centers in the U.S.A.

Lance Garrison, National Nuclear Security Administration

Development and Certification of Type B Containers for self-shielded irradiators

Dr. Ronnie Minniti, National Institute of Standards and Technology

Air Kerma Calibrations at NIST using Cesium-137

Dan Aitkenhead, Best Medical

Challenges Selling both Gamma and X-ray Blood Irradiators

**3:15 PM – 3:45 PM
Coffee Break**

**3:45 PM – 5:15 PM
LECTURE ROOM B**

Session Name: Homeland Security and Radiation Protection

Session Chair: Dr. Stephanie Healey, Food and Drug Administration

Dr. Jack Glover, National Institute of Standards and Technology

Proposals to Improve the Accuracy of Calculating Reference Effective Dose in ANSI N43.17 (Security Screening of Persons)

Robert B. Hayes, North Carolina State University

Novel Nuclear Forensics and Emergency Response Technologies