

2011

COUNCIL ON IONIZING RADIATION MEASUREMENTS AND STANDARDS

OCTOBER
17-20

LOCATION National Institute of Standards and Technology

Gaithersburg, Maryland

www.cirms.org

**REGISTER
TODAY!**

20th Annual CIRMS Meeting 2011

Public Perception
of Radiation



20th Annual Meeting Council on Ionizing Radiation Measurements and Standards 2011

Public Perception of Radiation

OCTOBER 17-20, 2011

President's Letter



On behalf of the Executive Committee, it is my honor to invite you to attend the 20th Annual Conference of the Council on Ionizing Radiation Measurements and Standards (CIRMS) to be held October 17-20, 2011 at the National Institute of Standards and Technology (NIST) in Gaithersburg, MD. With CIRMS celebrating 20 years of service this year, the Executive Committee chose the meeting's theme as "Public Perception of Radiation." This topic was chosen well before the tragic events in Japan, but puts this "Public Perception" issue in the spotlight. The Conference program is being developed to bring together internationally-recognized experts from academia, industry, and government on radiation protection, industrial applications and radiation effects, medical applications, homeland security, and other related areas. The timing could not be better for all of us to meet together and discuss the dynamic and diverse aspects of the importance of measurements and standards with regards to radiation and its understanding. I invite you to visit our website, www.cirms.org, for updates on the evolving program.

CIRMS is an organization made up of leaders from the academic, government, and industrial sectors who are dedicated to identifying the needs for new measurement technologies and the development of new standards in the field of ionizing radiation. This meeting provides a unique and excellent opportunity to the entire ionizing radiation user community to meet and discuss developments and new trends related to the fundamental aspects associated with various radiation sources. In addition to the general plenary sessions, there will be working group sessions devoted to aspects of radiation sources in radiation therapy (medical), industrial applications, radiation protection, and homeland security. In every working group session, the needs for measurement standards in these areas will be explored by discussing the current "CIRMS Needs Report," modifying the Needs as necessary. The final conclusions from these sessions will be presented in a joint plenary session at the end of the meeting. In addition, I encourage you to submit an abstract of work to be presented during one of the working group sessions, or as a poster.

Since its beginning, CIRMS has strongly encouraged and supported the participation of students in presenting their research, in the working groups or as posters, at the annual meetings. Additionally, CIRMS proudly continues its tradition of support through the Student Travel Grant program awards, through which selected students will be reimbursed for their expenses to attend the meeting and make an oral presentation at the plenary session (for further information, refer to the CIRMS website). As always, CIRMS 2011 sponsors are invited to present posters that enable the attendees to better learn about the wide variety of organizations and corporations that support CIRMS; limited space for table top displays will also be available.

I look forward to seeing all of you at the 20th annual CIRMS Conference, and your active participation in the exciting and dynamic discussions to be held on the evolving visions of measurements and standards in the radiation arena.

Chip Starns, President, CIRMS



Save the Date! Plan to Attend!

OCTOBER 17-20, 2011

NIST
GREEN AUDITORIUM
GAITHERSBURG, MD

WHY ATTEND?

The meeting provides a unique opportunity for experts from government, academia and industry to meet and learn of developments in related disciplines. In addition to general plenary sessions, the meeting devotes significant time to three parallel working group sessions where needs in radiation measurements and standards are debated and discussed in greater detail.

Place the CIRMS meeting on your calendar and plan to participate in the important work of the Council. Few meetings emphasize the networking and dialog that give CIRMS its unique status.

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CIRMS STUDENT TRAVEL GRANT AWARDS

The Council on Ionizing Radiation Measurements and Standards (CIRMS) is pleased to announce its 2011 Student Travel Grant program for graduate students.

Travel grants will be awarded to numerous students to defray their expenses in order to attend the 20th annual CIRMS meeting.

Awardees are expected to present a poster paper and deliver a brief oral presentation on their research efforts. These presentations will be included in the meeting summary as posted on the CIRMS web site. Winners will also receive one year's complimentary membership in CIRMS.

The **grant application** is available at
http://www.cirms.org/grant_application.asp.

The deadline for application submittal is **Friday, September 9, 2011**. The CIRMS Executive Committee and CIRMS Caswell Award winners will review the applications and the winners will be announced by **Monday, September 19, 2011**.

Don't Miss This Opportunity



MEETING FOCUS

The 20th Annual Meeting of the Council on Ionizing Radiation Measurements and Standards will focus on public perception of ionizing radiation. For the past twenty years, CIRMS has played an important role in serving as a public forum for discussion of radiation measurements and standards issues for industry, academia and government. The technical program this year will consist of oral and poster presentations and three parallel working groups that address measurement and standards needs for the following topics:

- Medical Applications [diagnostic and therapeutic radiology, nuclear medicine]
- Radiation Protection [radiochemistry, waste analysis, personnel dosimetry, electronic dosimeters, bioassay and internal dosimetry environmental dosimetry]
- Industrial Applications and Materials Effects [dosimetry for radiation processing, radiobiology, safety at radiation facilities, food irradiation]

As issues in homeland security, and for first responders, can be found in each field - medicine, protection, and industry - these will be addressed in each workshop as appropriate.

PLENARY SESSIONS

The plenary sessions of this year's meeting will include talks on the public perception of radiation. Breakout sessions will provide updates on topics related to this year's general topic, and on other on-going efforts in the community.

CONCURRENT WORKING GROUP SESSIONS

As is traditional with the CIRMS Annual Meeting, afternoons will be devoted to parallel breakout sessions in medical applications, radiological protection/ homeland security, and industrial applications and materials effects. Anyone wishing to make an oral presentation at a breakout session, or present a poster, is asked to submit an abstract to Katy Nardi by July 22, 2011. E-mail: knardi@cirms.org.

STUDENT AWARDS

As in previous years, there will be a competition for student grants to defray the expenses for several students to attend this 20th anniversary CIRMS meeting. This year's CIRMS annual meeting will focus on informing the public perception of ionizing radiation, and Awardees are expected to present a poster paper and deliver a brief oral presentation on their research efforts. The deadline for application submittal is Friday, September 9; further information can be found at <http://www.cirms.org> and click on "Student Travel Grant Information & Application".

POSTER SESSIONS

Two locations will be allocated to poster viewing and discussion. Activities of CIRMS' sponsoring organizations will be presented in the Employees' Lounge during all coffee breaks. Proffered posters on a variety of technical topics, including the research activities of the winners of the Student Travel Grants, will be presented along the Hall of Flags, just outside the primary meeting venue.

CONTACTS

Technical Program Chairs:

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CIRMS President
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Lisa Karam
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Katy Nardi
Executive Secretary, CIRMS
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Registration Contact
Teresa Vicente
301-975-3883
teresa.vicente@nist.gov

Electronic registration: https://www.fbcinc.com/nist_cirms

Preliminary Agenda

OCTOBER 17-20, 2011

20th ANNUAL CIRMS MEETING

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PUBLIC PERCEPTION OF RADIATION

MONDAY, OCTOBER 17

- 8:30 am Continental breakfast
- 9:00 am President's Welcome
Chip Starns, President, CIRMS

Welcome to NIST
- 9:20 am Keynote Presentation: Public Perception of Radiation
W. Ralph Basham, Command Consulting Group; former Commissioner of the US Customs and Border Protection, former Director of the US Secret Service
- 10:00 am Q & A
- 10:15 am Radionuclide Concentrations in Food and the Environment
Kathryn Higley, Oregon State University
- 10:45 am Break; Coffee and Discussion; Poster Review
- 11:15 am Medical Risks for Diagnostic Exams
William Hendee, Medical College of Wisconsin
- 11:45 am Improving Public Perception of Radiation Processing by Involving Students
Mark Driscoll, State University of New York, College of Environmental Science and Forestry
- 12:15 pm History of CIRMS on its 20th Anniversary
Randall Caswell, NIST, retired
- 12:45 pm Lunch
- 1:45 pm Concurrent Working Group Sessions

In addition to the CIRMS meeting plenary sessions, each of the three subcommittees of the CIRMS Science and Technology Committee will hold five Working Group sessions. These sessions will go into greater detail on specific topics of interest to CIRMS membership and include a review of a draft of the forthcoming CIRMS fifth "Needs Report" and a prioritization of the needs in ionizing radiation.



Preliminary Agenda

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

- 3:15 pm Break
- 3:45 pm Concurrent Working Group Sessions (continued)
- 5:20 pm Adjourn

TUESDAY, OCTOBER 18

- 8:30 am Continental Breakfast
- 8:55 am President's Welcome Back
- 9:00 am Applying Product Stewardship Principles to Radiation Protection / Lessons from EPA's Alternative Technology Initiative
Madeleine Nawar, USEPA/OAR and Scott Cassel, Product Stewardship Institute
- 9:30 am Patient Risk in Medical Therapeutic Treatment
Michael Herman, Mayo Clinic
- 10:00 am Radiation: Its Societal Benefits
Alan Waltar, Former President, American Nuclear Society
- 10:30 am Q & A
- 11:00 am Break; Coffee and Discussion
- 11:45 am Food Irradiation: A Global Perspective and Future Prospects
Ron Eustice, Minnesota Beef Council
- 12:15 pm Public Perception of Irradiation of Food
Christine Bruhn, University of California - Davis
- 12:45 pm Lunch

Preliminary Agenda

TUESDAY, OCTOBER 18 (continued)

- 1:45 pm Grants Workshop
- 3:15 pm Break; Coffee and Discussion
- 3:45 pm Concurrent Working Group Sessions
 IAME: Industrial Applications and Materials Effects
 Medical Applications
 RP - HS: Radiation Protection / Homeland Security
- 5:20 pm Adjourn
- 6:15 pm Bus from Hilton to Smokey Glen Farms
- 6:30 pm Dinner at Smokey Glen Farms

WEDNESDAY, OCTOBER 19

- 8:30 am Continental Breakfast
- 8:55 am President's Welcome Back
- 9:00 am Student Travel Grant Awards
- 10:00 am Why No One Believes Us: Cognitive Neuroscience and
 Radiation Risk
R.E. Toohey, President-Elect Health Physics Society
- 10:30 am From Heat Shrink to Shape Memory to Flexible
 Bioelectronics: Why All Radiation Doesn't Deserve a Bad
 Wrap
*Walter Voit, Syzygy Memory Plastics,
 University of Texas - Dallas*
- 11:00 am Awards for Posters
 Break; Coffee and Discussion
- 11:45 am Radiation Security
Jill Segraves, Transportation Safety Administration



Preliminary Agenda

- 12:15 pm Randall S. Caswell Award for Distinguished Achievement
in the Field of Ionizing Radiation Measurements and
Standards
- Presented to Kenneth G.W. Inn, National Institute of
Standards and Technology
- 12:45 Lunch
- 1:45 pm Concurrent Working Group Sessions
- IAME: Industrial Applications and Materials Effects
Medical Applications
RP - HS: Radiation Protection / Homeland Security
- 3:15 pm Break; Coffee and Discussion
- 3:45 pm Concurrent Working Group Sessions, continued
- 5:20 pm Adjourn

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THURSDAY, OCTOBER 20

- 8:30 am Continental Breakfast
- 8:55 am President's Welcome Back
- 9:00 am Working Group Summaries
- 10:00 am Discussion of the CIRMS Fifth Report on Needs in Ionizing
Radiation
- 11:30 am Presentation of New Officers
- 12:00 pm Adjourn; Lunch

Registration Information



LOCATION

The National Institute of Standards and Technology (NIST), Administration Building (101), Green Auditorium, Gaithersburg, Maryland. Gaithersburg is conveniently located approximately 25 miles northwest of Washington, DC.

REGISTRATION

The registration fee is **\$409** and includes conference materials, a poster session, and refreshments during coffee breaks, lunches and a dinner. A registration form is enclosed and may be duplicated; a separate form must be forwarded for each attendee. All registrations must be received by **Monday, October 10, 2011**. Requests for cancellation and refund must be received in writing, by **September 27**. Registration can be made electronically at: <https://www.fbcinc.com/nist.cirms>

Due to increased security, all attendees must be pre-registered. There will be no on-site registration. Photo identification must be presented at the main gate to be admitted to the conference. Non-U.S. citizens must have a passport and complete a NIST-1260 form in advance. Attendees must wear their conference badge at all times while on the campus.

ACCOMMODATIONS

Conference registration does not include your hotel reservation. A block of rooms has been reserved at the Hilton Washington DC North/Gaithersburg, **(301) 977-8900**. The special room rate is **\$139**, single or double, plus 13% tax. To register for a room, please call the hotel or register online at http://www.hilton.com/en/hi/groups/personalize/gaighhf_nic/index.jhtml, no later than **Friday, October 7, 2011**. After that date, rooms will be available at the prevailing rates of the hotel. If you call in your reservation, please refer to the **"NIST/CIRMS Meeting"** Reservations may be cancelled up to 24 hours prior to check-in.



Registration Form

20th Annual CIRMS Meeting 2011
October 17-20, 2011

Name _____
 Title _____
 Organization _____
 Address _____
 Room or Mail Code _____
 City _____ State _____ Zip _____
 Country _____
 Phone _____ Fax _____
 Email _____
☐ Services _____

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Registration Fee: \$409

Are you a U.S. Citizen? ☐ Yes ☐ No

Form of Payment

☐ Check enclosed, payable to: Federal Business Council Inc.
 (Checks from outside the U.S. must be written on U.S. bank account.)

☐ MasterCard ☐ Visa ☐ Amex

Card # _____ Exp. Date _____

Authorized Signature _____

P.O. #/Training Form _____

Please enclose copy or provide one at registration.

Mail to: Federal Business Council, Inc.
 8975 Henkels Lane, Suite 700
 Annapolis Junction, MD 20701

Fax to: 301-206-2950

Directions

AREA AIRPORTS

Dulles Airport (IAD)

Driving Directions: Stay straight on the Dulles Airport Access Road. Merge onto VA-267 E toward I-495/Exit 18-19, merge onto I-495 via exit 18 toward Baltimore/Bethesda. Merge onto I-270 spur N via Exit 38 toward Rockville/Frederick. Take Exit 10, Route 117 West, Clopper Road. Bear right at the first light onto Clopper Road/West Diamond Avenue. At the next light, turn left onto the NIST grounds.

Reagan National Airport (DCA)

Driving Directions: Take George Washington Parkway to I-495 North. Merge onto I-270 and take Exit 10, Route 117 West, Clopper Road. Bear right at the first light onto Clopper Road/West Diamond Avenue. At the next light, turn left onto the NIST grounds.

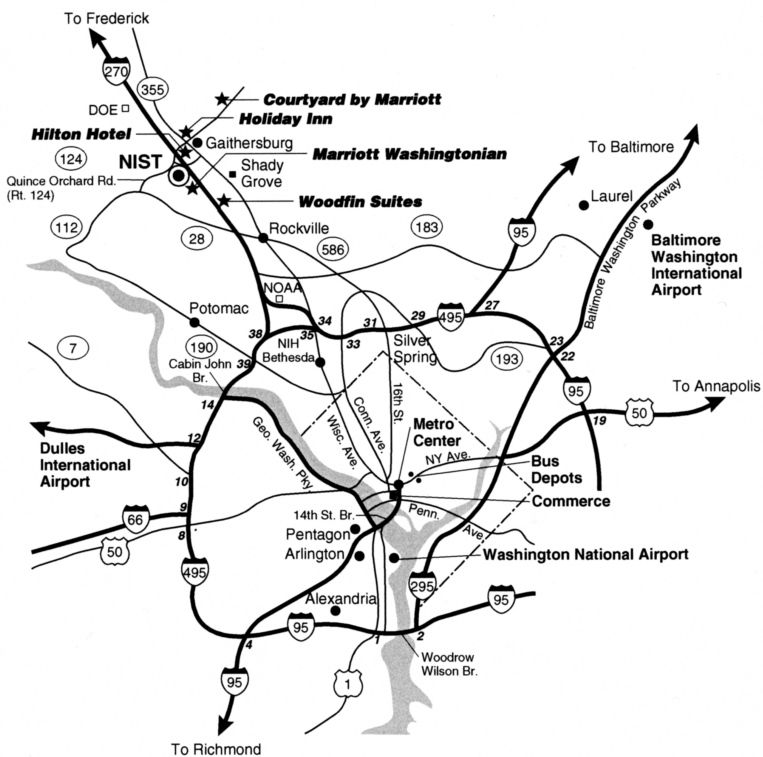
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HOTEL

Hilton Washington DC North/Gaithersburg

Traveling North on I-270: take Exit 11, Rt. 124 East, and Montgomery Village Avenue. At the second traffic light, veer right onto Rt. 355. Turn right at the first traffic light onto Perry Parkway. Proceed half way around the rotary and the hotel will be on your right.

Traveling South on I-270: take Exit 11, Rt. 124, Montgomery Village Avenue/Quince Orchard Rd. Turn left at the first light and stay in the right hand lane through the next light. At the following intersection, veer right onto Rt. 355. Turn right at the first traffic light onto Perry Parkway. Proceed halfway around the rotary and the hotel will be on your right.



General Information

OCTOBER 17-20, 2011

20th ANNUAL CIRMS MEETING

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PUBLIC PERCEPTION OF RADIATION

COFFEE BREAKS AND LUNCH

Refreshments will be provided during the morning, mid-morning and mid-afternoon breaks. Lunch will also be provided each day.

SOCIAL FUNCTIONS

In order to provide an opportunity for informal interaction, a dinner will be held on October 18 at Smokey Glen Farm. Round-trip transportation will be provided.

TRANSPORTATION

The hotel will provide roundtrip transportation between the hotel and NIST for all hotel guests.

Super Shuttle, **1-800-258-3826**, and Airport Direct **301-258-0072**, offer commercial van service from Dulles International, Ronald Reagan Washington National, and Baltimore-Washington International airports to Gaithersburg. Call for reservations.

The Washington Metro has subway service to Gaithersburg. Metro can be boarded at Ronald Reagan Washington National Airport. Take a Yellow Line train marked "Mount Vernon Square" to Gallery Place and transfer to a Red Line train marked "Shady Grove" to the Shady Grove station. Service is every 6 to 15 minutes, depending on the time of day. The travel time from Reagan National to Shady Grove is about 50 minutes. Taxis are available from the Shady Grove Metro station to area hotels.

A NIST shuttle van operates for official visitors from the Shady Grove metro station to NIST on weekdays. The van leaves the Shady Grove station on the quarter and three-quarter hour (e.g. 8:15, 8:45, 4:15, 4:45) from the east side parking lot. This shuttle also provides service from NIST to the Shady Grove metro station, departing the Administration Building (101) on the hour and half-hour.



CIRMS Sponsors

Best Medical International	Georgia Tech
Bruker BioSpin Corporation	Idaho State University
GE Healthcare	IRRSO - International Registry of Radiation Safety Officers
Hopewell Designs, Inc.	Kent State University
IBA Industrial, Inc.	Los Alamos National Laboratory
Landauer, Inc.	MD Anderson Cancer Center
Mirion Technologies Inc.,	National Institute of Standards and Technology
ScanTech	National Physical Laboratory (UK)
Szygy Memory Plastics	Pacific Northwest National Laboratory
Theragenics Corporation	Texas A&M University
Thermo Fisher Scientific	US Department of Homeland Security / NUSTL
Varian Medical Systems	US Nuclear Regulatory Commission
AAPM - American Association of Physicists in Medicine	University of Notre Dame
American College of Radiology	University of Texas at Dallas
BARDA - Biomedical Advanced Research Development Authority	University of Wisconsin
Center for Devices & Radiological Health	
Chapman University	

CIRMS Subcommittees



Science & Programs

Chair: Tony Berejka berejka@msn.com

Homeland Security

Co-chair: David Taylor david.taylor1@dhs.gov

Co-chair: Mike Unterweger michael.unterweger@nist.gov

Industrial Applications and Materials Effects (IAME)

Co-chair: Hans Wiegert hans.wiegert@sealedair.com

Co-chair: Jon Jansson jonathan.jansson@baxter.com

Medical Applications

Co-chair: Larry DeWerd ladewerd@wisc.edu

Co-chair: Geoff Ibbott gibbott@mdanderson.org

Radiation Protection

Chair: Ken Inn kenneth.inn@nist.gov

Student Representatives

Regina Kennedy rmkenedy@wisc.edu

Charlotte Rambo charlotte_rambo@tamu.edu