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GORDON RESEARCH CONFERENCES *frontiers of science*

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Nancy Ryan Gray, Ph.D.
Director

2012 GORDON RESEARCH CONFERENCE
on RADIATION CHEMISTRY

FINAL PROGRESS REPORT
DEPARTMENT OF ENERGY
GRANT NO. DE-SC0006537

The Gordon Research Conference on RADIATION CHEMISTRY was held at Proctor Academy Andover, New Hampshire, July 29-August 3, 2012. The Conference was well-attended with 123 participants (attendees list attached). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both U.S. and foreign scientists, senior researchers, young investigators, and students. Of the 123 attendees, 36 voluntarily responded to a general inquiry regarding ethnicity which appears on our registration forms. Of the 36 respondents, 12% were Minorities – 0% Hispanic, 6% Asian and 6% African American. Approximately 31% of the participants at the 2012 meeting were women.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. Attached is a copy of the formal schedule and speaker program and the poster program. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field.

Thank you for your support of this Conference. As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings. If you wish any further details, please feel free to contact me. Thank you.

Sincerely,
William A. Bernhard, Conference Chairperson
UNIVERSITY OF ROCHESTER

Radiation Chemistry
Radiation Driven Processes in Physics, Chemistry, Biology and Industry
July 29 - August 3, 2012
Proctor Academy
Andover, NH
Chair:
William A. Bernhard

Vice Chair:
Jay A. Laverne

Related Meeting Information

The Radiation Chemistry Gordon Research Conference was held in conjunction with the **Radiation Chemistry Gordon-Kenan Research Seminar**. Please refer to the Radiation Chemistry GKRS web page for more information.

The Gordon Research Seminar (GRS) and Gordon Research Conference (GRC) on Radiation Chemistry: Radiation Driven Processes in Physics, Chemistry, Biology, and Industry, is the premier small-format meeting focused on the chemical and physical science of ionizing radiation since 1953.

The overarching objective of this conference is to catalyze the interchange of new ideas and recent discoveries within the basic radiation sciences of physics, chemistry, and biology, and to facilitate translating this knowledge to applications in medicine and industry. Bridging knowledge between scientific disciplines and translating that knowledge to key areas of applied radiation science is a challenge that is excellently met by the GRC on Radiation Chemistry.

Capitalizing on its traditional interdisciplinary platform, a major goal of this GRS/GRC is to both educate and promote the next generation of scientists interested in radiation-driven processes. A new approach to meeting this goal is sponsorship of the GRS, which provides an opportunity for graduate students and postdoctoral fellows to independently organize a meeting that will foster interactions between the young investigators. The GRS, thereby, establishes a camaraderie that extends into the GRC and increases opportunities for young investigators to interact with leaders in all of the radiation science fields. To promote this interaction, the GRC features a "Young Investigators Session" that is designed to showcase early career scientists by giving them an opportunity to present and discuss their work with a diverse audience populated with leaders in fields that span all of the radiation sciences.

The GRS, which is organized, run, and attended, only by graduate students and postdoctoral fellows, is held 1 day prior to the GRC. There will be 4 sessions encompassing a minimum of 4 topics selected to complement and augment the topics presented during the GRC. The GRC is organized, and run by established scientists, but attended by both the established and young scientists. The 9 topics for the GRC are: "From Energy Absorption to Disease", "Biodosimetry after a Radiological Incident," "Track Structure and Low Energy Electrons," "Free Radical Processes in DNA and Proteins," "Irradiated Polymers for Industrial/ Medical Applications," "Space Radiation Chemistry/Biology," "Nuclear Power and Waste Management," "Nanoparticles and Surface Interfaces", and the "Young Investigator" session.

Contributors



SUNDAY

2:00 pm - 9:00 pm	Arrival and Check-in (Office Closed 6:00 pm - 7:00 pm)
6:00 pm	Dinner
7:30 pm - 7:40 pm	Welcome / Introductory Comments by GRC Site Staff
7:40 pm - 9:30 pm	From Energy Absorption to Disease
	Chair and Discussion Leader: Marianne Sowa (Pacific Northwest National Lab, USA)
7:40 pm - 8:20 pm	Keynote Speaker: Nigel Mason (Open University, UK) "Low Energy Electron Interactions with DNA"
8:20 pm - 8:35 pm	Discussion
	Chair and Discussion Leader: Jamie Milligan (University of California at San Diego, USA)
8:35 pm - 9:15 pm	Keynote Speaker: William Morgan (Pacific Northwest National Lab, USA) "Low Dose and Low Dose Rate Effects"
9:15 pm - 9:30 pm	Discussion

MONDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	Track Structure and Low Energy Electrons

	Discussion Leader: Jorge Kohanoff (Queen's University Belfast, UK)
9:00 am - 9:05 am	Chair: Simon Pimblott (University of Manchester, UK)
9:05 am - 9:45 am	Michael Dingfelder (East Carolina University) "Advances in Cross Section Calculation: from Gamma Rays to Fast Charged Particles"
9:45 am - 10:05 am	Discussion
10:05 am	Coffee Break
10:35 am - 11:15 am	Leon Sanche (University Of Sherbrook) "Low energy electron driven processes in physics, chemistry, biology, and their applications"
11:15 am - 11:35 am	Discussion
11:35 am - 12:15 pm	Uwe Hergenhahn (Max-Planck Institute for Plasmaphysics, Germany) "Production of low energy electrons by autoionization"
12:15 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	<u>Poster Session</u>
6:00 pm	Dinner
7:30 pm - 9:30 pm	Young Investigator Presentations
	Discussion Leader: Sylwia Ptasinska (Notre Dame, USA)
7:30 pm - 7:35 pm	Chair: Jim Wishart (Brookhaven National Laboratory, USA)
7:35 pm - 7:50 pm	Elahe Alizadeh (Université de Sherbrooke, Canada) "Measurements of G-values for DNA Damage Induced by Low Energy Electrons"
7:50 pm - 7:54 pm	Discussion
7:54 pm - 8:09 pm	Thomas Cullen (California State University Long Beach, USA) "Radiolytic Stability of Solvent Extraction Ligands"
8:09 pm - 8:13 pm	Discussion
8:13 pm - 8:28 pm	Anna Michaelidesová (Academy of Sciences of the Czech Republic, Czech Republic) "Restriction Enzyme Activity Changes After Gamma Irradiation"
8:28 pm - 8:32 pm	Discussion
8:32 pm - 8:47 pm	Florence Taupin (ESRF/CEA Grenoble, France) "The Role of Gadolinium Nanoparticles in Tumoral Cells' Radiosensitization"
8:47 pm - 8:51 pm	Discussion
8:51 pm - 9:06 pm	Tomohiro Toigawa (Osaka University, Japan) "Solvation Kinetics of Electrons in Neat Alcohols by Femtosecond Radiolysis"

9:06 pm - 9:10 pm Discussion

9:10 pm - 9:25 pm **Frank Uhlig** (Academy of Sciences of the Czech Republic, Czech Republic)
"From a Localized H₃O Radical to a Delocalized H₃O⁺ --- e⁻ Solvent-Separated Pair by Sequential Hydration"

9:25 pm - 9:30 pm Discussion

TUESDAY

7:30 am - 8:30 am Breakfast

8:30 am Group Photo

9:00 am - 12:30 pm **DNA and Proteins**
Discussion Leader: **Amanda Bryant-Friedrich** (University Of Toledo, USA)

9:00 am - 9:05 am Chair: **Maria Davidkova** (Nuclear Physics Institute AS, Czech Republic)

9:05 am - 9:45 am **Elsbeth Garman** (Oxford University, UK)
"Radiation chemistry during macromolecular crystallography"

9:45 am - 10:05 am Discussion

10:05 am Coffee Break

10:35 am - 11:15 am **Jean-Luc Ravanat** (Laboratoire des Lésions des Acides Nucléiques, France)
"Recent aspects of radiation-induced formation of complex DNA lesions"

11:15 am - 11:35 am Discussion

11:35 am - 12:15 pm **Tetsuro Majima** (Osaka University, Japan)
"Hole and Excess Electron Transfer in DNA"

12:15 pm - 12:30 pm Discussion

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm Dinner

7:30 pm - 9:30 pm **Irradiated Polymers for Industrial/Medical Applications**
Discussion Leader: **Mohamad Al-Sheikhly** (University of Maryland, USA)

7:30 pm - 7:35 pm Chair: **Erzsébet Takács** (Institute of Isotopes HAS, Hungary)

7:35 pm - 8:10 pm **Walter Voit** (University of Texas, USA)
"On the Interaction of Ionizing Radiation and New Polymer Chemistries to Tune Nanoscale Morphologies within Bulk Industrial Processes"

8:10 pm - 8:30 pm Discussion

8:30 pm - 9:10 pm **Piotr Ulański** (Technical Institute of Lodz, Poland)
"Radiation chemistry of polymers - some basic and practical aspects"

9:10 pm - 9:30 pm Discussion

WEDNESDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm **Space Radiation Chemistry/Biology**

Discussion Leader: **Susanna Widicus Weaver** (Emory University, USA)

9:00 am - 9:05 am Chair: **Thom Orlando** (Georgia Institute of Technology, USA)

9:05 am - 9:45 am **Naoki Watanabe** (Hokkaido University, Japan)

"Grain surface processes at very low temperatures: hydrogen diffusion and tunneling reactions"

9:45 am - 10:05 am Discussion

10:05 am Coffee Break

10:35 am - 11:15 am **Ralf Kaiser** (University of Hawaii, USA)

"The Kuiper Belt - The Cradle of Life?"

11:15 am - 11:35 am Discussion

11:35 am - 12:15 pm **Reggie Hudson** (NASA Goddard Space Center, USA)

"Molecular Evolution in Extraterrestrial Environments - A Radiation Chemistry Approach"

12:15 pm - 12:30 pm Discussion

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm Dinner

7:00 pm - 7:30 pm Business Meeting

Nominations for the next Vice Chair; Fill out Conference Evaluation Forms; Discuss future Site & Scheduling preferences; Election of the next Vice Chair

7:30 pm - 9:30 pm **Dosimetry Following a Radiological Incident**

Discussion Leader: **Tulsi Mukherjee** (Bhabha Atomic Research Centre, India)

7:30 pm - 7:35 pm Chair: **Vladimir Feldman** (Moscow State Univ., Russia)

7:35 pm - 8:00 pm **Harold Swartz** (Dartmouth University)

"Retrospective Dosimetry Based on Long Lived Free Radicals"

8:00 pm - 8:15 pm Discussion

8:15 pm - 8:40 pm **Francois Trompier** (Inst. for Radiological Protection & Nuclear Safety, France)

"Developments and new trends for radiation accident dosimetry"

8:40 pm - 8:55 pm Discussion

8:55 pm - 9:20 pm **Steve Swarts** (Univ. of Florida, USA)

"The radiation chemistry/biology underlying biodosimetry"

9:20 pm - 9:30 pm Discussion

THURSDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm **Nanoparticles and Surface Interfaces**

Discussion Leader: **Kenji Takahashi** (Kanazawa University, Japan)

9:00 am - 9:05 am Chair: **Mats Jonsson** (Division of Nuclear Engineering, Sweden)

9:05 am - 9:45 am **Jean Philippe Renault** (CEA, IRAMIS, SCM, France)
"Confinement effects in radiation chemistry"

9:45 am - 10:05 am Discussion

10:05 am Coffee Break

10:35 am - 11:00 am **Nikolay Petrik** (PNNL, USA)
"Photon- and Electron-Stimulated Reactions of Simple Molecules on TiO₂(110) Surface"

11:00 am - 11:15 am Discussion

11:15 am - 11:40 am **Xavier Coqueret** (Université de Reims Champagne Ardenne, France)
"Nanostructural features of polymer networks prepared by radiation-initiated crosslinking polymerization"

11:40 am - 11:55 am Discussion

11:55 am - 12:20 pm **Clelia Dispenza** (Università degli Studi di Palermo, Italy)
"Minimalism in radiation sculptured therapeutic nanogels"

12:20 pm - 12:30 pm Discussion

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

6:00 pm Dinner

7:30 pm - 9:30 pm **Nuclear Power and Waste Management**

Discussion Leader: **Andrzej Chmielewski** (Institute of Nuclear Chemistry and Technology, Poland)

7:30 pm - 7:35 pm Chair: **Craig Stuart** (Atomic Energy of Canada Limite)

7:35 pm - 8:15 pm **Stephen Mezyk** (California State University Long Beach, USA)
"Recycling Spent Nuclear Fuel to Reduce Waste: Radiation Effects on Solvent Extraction Ligands"

8:15 pm - 8:35 pm Discussion

8:35 pm - 9:15 pm **Clara Wren** (University of Western Ontario, Canada)
"Radiation-Assisted Corrosion - Materials Performance in Nuclear Applications"

9:15 pm - 9:30 pm Discussion

FRIDAY

7:30 am - 8:30 am Breakfast

9:00 am

Departure

Funding for this conference was made possible [in part] by 1 R13 AI098264-01 from the National Institute of Allergy and Infectious Diseases. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

Funding for this conference was made possible (in part) by Grant Number: 1R13CA165268-01 from the National Cancer Institute. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention by trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

Radiation Chemistry (2012)

Name	Organization	Participation	Status
ACKERMAN, NICOLE L	STANFORD UNIVERSITY	Poster Presenter	Registered
ADHIKARY, AMITAVA	OAKLAND UNIVERSITY	Poster Presenter	Registered
AL-SHEIKLY, MOHAMAD	UNIVERSITY OF MARYLAND	Discussion Leader	Registered
ALREHAILY, LEENA	WESTERN UNIVERSITY	Poster Presenter	Registered
AMATO, NICHOLAS J	UNIVERSITY OF TOLEDO	Poster Presenter	Registered
ANDERSON, ROBERT F	THE UNIVERSITY OF AUCKLAND	Poster Presenter	Registered
ATTIA, AHMED M	ALEXANDRIA UNIVERSITY	Poster Presenter	Registered
BADET, HUGUES	CEA SACLAY	Poster Presenter	Registered
BALCERZYK, ANNA	CEA SACLAY, UMR3299 CEA-CNRS SIS2M,	Poster Presenter	Registered
BARR, LOGAN D	UNIVERSITY OF MANCHESTER	Poster Presenter	Registered
BARTELS, DAVID M	NOTRE DAME RADIATION LABORATORY	Attendee	Registered
BEDI, FERNAND M	THE UNIVERSITY OF TOLEDO	Poster Presenter	Registered
BELMOUADDINE, HAKIM H.B.	F.M.S.S. UNIVERSITÉ DE SHERBROOKE	Poster Presenter	Registered
BERLIN, YURI A	NORTHWESTERN UNIVERSITY	Poster Presenter	Registered
BJORKBACKA, ASA	KTH ROYAL INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
BLACK, PAUL J	UNIVERSITY OF ROCHESTER	Poster Presenter	Registered
BRYANT-FRIEDRICH, AMANDA	UNIVERSITY OF TOLEDO	Discussion Leader	Registered
CARMICHAEL, IAN	UNIVERSITY OF NOTRE DAME	Attendee	Registered
CAUSEY, PATRICK W	ATOMIC ENERGY OF CANADA LTD	Poster Presenter	Registered
CHELNOKOV, EVGENY	COMMISSARIAT A L'ENERGIE ATOMIQUE	Poster Presenter	Registered
CHIPMAN, DANIEL M	NOTRE DAME RADIATION LABORATORY	Attendee	Registered
CHMIELEWSKI, ANDRZEJ	INSTITUTE OF NUCLEAR CHEMISTRY & TECHNOLOGY	Discussion Leader	Registered
CLOSE, DAVID M	EAST TENNESSEE STATE UNIVERSITY	Poster Presenter	Registered
COQUERET, XAVIER	UNIVERSITÉ DE REIMS CHAMPAGNE ARDENNE	Speaker	Registered
CORBEL, CATHERINE M	CEA LABORATOIRE DES SOLIDES IRRADIES	Poster Presenter	Registered
CULLEN, THOMAS	DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY	Poster Presenter	Registered
DAVIDKOVA, MARIA	NUCLEAR PHYSICS INSTITUTE ASCR	Discussion Leader	Registered
DELORME, RACHEL	CEA	Poster Presenter	Registered
DHIMAN, SURAJ DEV PRAKASH B	UNIVERSITY OF NOTRE DAME	Poster Presenter	Registered
DINGFELDER, MICHAEL	EAST CAROLINA UNIVERSITY	Speaker	Registered
DISPENZA, CLELIA	UNIVERSITA DEGLI STUDI DI PALERMO	Speaker	Registered
FELDMAN, VLADIMIR I	MOSCOW STATE UNIVERSITY	Discussion Leader	Registered
GARMAN, ELSPETH F	UNIVERSITY OF OXFORD	Speaker	Registered
GOHDO, MASAO	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
GRILLS, DAVID C	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
GRIMALDI, NATASCIA	UNIVERSITÀ DI PALERMO	Poster Presenter	Registered
HAMA, TETSUYA	HOKKAIDO UNIVERSITY	Poster Presenter	Registered
HAN, XU	UNIVERSITY OF NOTRE DAME	Poster Presenter	Registered

HAYS, BRIAN M	EMORY UNIVERSITY	Poster Presenter	Registered
HE, XIAOMING X	DARTMOUTH COLLEGE	Poster Presenter	Registered
HERGENHAHN, UWE	MAX-PLANCK INSTITUTE FOR PLASMA PHYSICS	Speaker	Registered
HONG, BO	NIH CENTER FOR SCIENTIFIC REVIEW	Attendee	Registered
HOWETT, SUSAN	UNIVERSITY OF WESTERN ONTARIO	Poster Presenter	Registered
HUDSON, REGGIE	NASA GODDARD SPACE FLIGHT CENTER	Speaker	Registered
IGNASIAK, MARTA	ADAM MICKIEWICZ UNIVERSITY	Poster Presenter	Registered
JACOB, JASMINE ANNAJOTHI	UNIVERSITY OF NOTRE DAME	Poster Presenter	Registered
JANIK, IRENEUSZ	UNIVERSITY OF NOTRE DAME	Poster Presenter	Registered
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KAISER, RALF	UNIVERSITY OF HAWAII AT MANOA	Speaker	Registered
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KESZENMAN, DEBORAH	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
KHANDAL, DHRITI	INSTITUT CHIMIE MOLECULAIRE DE REIMS	Poster Presenter	Registered
KIM, BYUNGNAM	KOREA ATOMIC ENERGY RESEARCH INSTITUTE	Poster Presenter	Registered
KLETT, CHARLES	LABORATOIRE DE RADIOLYSE CEA	Attendee	Registered
KOHANOFF , JORGE	QUEEN'S UNIVERSITY BELFAST	Discussion Leader	Registered
KONDOH, TAKAFUMI	OSAKA UNIVERSITY	Poster Presenter	Registered
LAAS, JACOB C	EMORY UNIVERSITY	Poster Presenter	Registered
LAVERNE, JAY A	UNIVERSITY OF NOTRE DAME	Vice Chair	Registered
LOUSADA PATRICIO, CLÁUDIO M	KTH - ROYAL INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
MADDEN, KEITH P	IVY TECH COMMUNITY COLLEGE OF INDIANA (REGION 2)	Poster Presenter	Registered
MAJIMA, TETSURO	OSAKA UNIVERSITY	Speaker	Registered
MARIN, TIMOTHY W	BENEDICTINE UNIVERSITY	Poster Presenter	Registered
MARSH, STEPHEN	UNIVERSITY OF FLORIDA	Poster Presenter	Registered
MASON, NIGEL	OPEN UNIVERSITY	Speaker	Registered
MCBRIDE, EMMET J	QUEEN'S UNIVERSITY BELFAST	Poster Presenter	Registered
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MORGAN, WILLIAM F	PACIFIC NORTHWEST NATIONAL LABORATORY	Speaker	Registered
MUKHERJEE, TULSI	BHABHA ATOMIC RESEARCH CENTRE	Discussion Leader	Registered
NISHIDA, MAASA	KANAZAWA UNIVERSITY	Poster Presenter	Registered
NUZHDIN, KIRILL B	UNIVERSITY OF NOTRE DAME	Poster Presenter	Registered
NYGA, MALGORZATA M	INSTITUTE OF NUCLEAR CHEMISTRY AND TECHNOLOGY	Poster Presenter	Registered
OBA, YASUHIRO	HOKKAIDO UNIVERSITY	Poster Presenter	Registered

ORLANDO, THOMAS M	GEORGIA INSTITUTE OF TECHNOLOGY	Discussion Leader	Registered
PETRIK, NIKOLAY G	PACIFIC NORTHWEST NATIONAL LABORATORY	Speaker	Registered
PIMBLOTT, SIMON M	UNIVERSITY OF MANCHESTER	Poster Presenter	Registered
POMOGAEVA, ANNA V	UNIVERSITY OF NOTRE DAME	Attendee	Registered
PTASINSKA, SYLWIA	UNIVERSITY OF NOTRE DAME	Discussion Leader	Registered
RANOUX, GUILLAUME	UNIVERSITÉ DE REIMS CHAMPAGNE ARDENNE	Poster Presenter	Registered
RAVANAT, JEAN-LUC	CEA GRENOBLE	Speaker	Registered
REIFF, SARAH C	UNIVERSITY OF NOTRE DAME	Poster Presenter	Registered
RENAULT, JEAN PHILIPPE	CEA	Speaker	Registered
RIMMER, DALE	BROOHAVEN NATIONAL LAB	Poster Presenter	Registered
ROJDEV, KRISTINA	NASA-JOHNSON SPACE CENTER	Poster Presenter	Registered
SAENKO, ELIZAVETA	MOSCOW STATE UNIVERSITY	Poster Presenter	Registered
SAKAR, FIRAT	HACETTEPE UNIVERSITY	Poster Presenter	Registered
SALAZAR, GEORGINA T	UNIVERSITY OF TSUKUBA	Poster Presenter	Registered
SANCHE, LEON	UNIVERSITY OF SHERBROOKE	Speaker	Registered
SEVILLA, MICHAEL D	OAKLAND UNIVERSITY	Poster Presenter	Registered
SHAIK, RAZIYA	UNIVERSITY OF TOLEDO	Poster Presenter	Registered
SIDOROV, ANTON N	GEORGIA INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
SMYTH, MAEVE C	QUEEN'S UNIVERSITY BELFAST	Poster Presenter	Registered
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SOWA, MARIANNE B	PACIFIC NORTHWEST NATIONAL LAB	Discussion Leader	Registered
STUART, CRAIG R	ATOMIC ENERGY OF CANADA LIMITED	Poster Presenter	Registered
SUTHERLAND, THOMAS I	WESTERN UNIVERSITY	Poster Presenter	Registered
SWARTS, STEVEN G	UNIVERSITY OF FLORIDA	Speaker	Registered
SWARTZ, HAROLD M.	DARTMOUTH MEDICAL SCHOOL	Speaker	Registered
SYMONDS, JOSHUA M	GEORGIA INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
TAGAWA, SEIICHI	OSAKA UNIVERSITY	Attendee	Registered
TAKÁCS, ERZSÉBET	INSTITUTE OF ISOTOPES, CER, HAS	Discussion Leader	Registered
TAKAHASHI, KENJI	KANAZAWA UNIVERSITY	Poster Presenter	Registered
TANG, FUH-WEI	ABBOTT VASCULAR	Poster Presenter	Registered
TAUPIN, FLORENCE	INSERM / CEA	Poster Presenter	Registered
TOIGAWA, TOMOHIRO	OSAKA UNIVERSITY	Poster Presenter	Registered
TOLBATOV, IOGANN	UNIVERSITY OF NOTRE DAME	Poster Presenter	Registered
TROMPIER, FRANCOIS	INSTITUTE FOR RADIOLOGICAL PROTECTION AND NUCLEAR	Speaker	Registered
UHLIG, FRANK	ACADEMY OF SCIENCES OF THE CZECH REPUBLIC	Poster Presenter	Registered
ULANSKI, PIOTR	TECHNICAL UNIVERSITY OF LODZ	Speaker	Registered
VOIT, WALTER	UNIVERSITY OF TEXAS AT DALLAS	Speaker	Registered
VYSIN, LUDEK	INSTITUTE OF PHYSICS AS CR	Poster Presenter	Registered
VYUSHKOVA, MARIYA	NOTRE DAME RADIATION LABORATORY	Attendee	Registered
WATANABE, NAOKI	HOKKAIDO UNIVERISTY	Speaker	Registered

WATSON, RICHARD M	UNIVERSITY OF ROCHESTER	Poster Presenter	Registered
WEGKAMP, DANIEL	FRITZ-HABER-INSTITUTE OF THE MAX-PLANCK-SOCIETY	Poster Presenter	Registered
WIDICUS WEAVER, SUSANNA	EMORY UNIVERSITY	Discussion Leader	Registered
WISHART, JAMES F	BROOKHAVEN NATIONAL LABORATORY	Discussion Leader	Registered
WREN, CLARA	UNIVERSITY OF WESTERN ONTARIO	Speaker	Registered
YAKABUSKIE, PAMELA A	UNIVERSITY OF WESTERN ONTARIO	Poster Presenter	Registered
YOSHIDA, YOICHI	OSAKA UNIVERSITY	Poster Presenter	Registered
123 Attendees			