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Session Organizers: Natesan Ramamoorthy (HBNI), James S. Welsh (NIU Inst for Neutron Therapy)
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ACCELERATOR-BASED PRODUCTION OF Mo-99

Session Organizers: Thomas Ruth (*TRIUMF*), George F. Vandergrift III (*ANL*)

Cochairs: Thomas Ruth (*TRIUMF*), Henri Bonet (*IRE*, retired)

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Kavita Murthy (*Canadian Nucl Safety Comm*)

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Cochairs: Buck Rogers (Washington Univ, St. Louis), Joanna Fowler (BNL, retired)

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S. Huclier-Markai (Univ of Nantes/Arronax GIP) C. Alliot (Arronax GIP/CRCNA), J. Rousseau, N. Chouin (AMAROC/ONIRIS), M. Mouglin-Degraef (CRCNA-Inserm), M. Fani (Univ Hospital of Basel), P. Bouziotis, T. Maina (NCSR Demokritos), C. S. Cutter (Univ of Missouri, Columbia), J. Barbet (Arronax GIP/CRCNA), invited

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Cochairs: Meera Venkatesh (IAEA), Jim Simon (IsoTherapeutics)

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Cochairs: Cathy Cutler (Univ of Missouri, Columbia), Bernard Ponsard (SCK-CEN - BR2 Reactor)

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Cochairs: Wolfgang Runde (LANL), Darren Brown (Trace Sciences International Corp)

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Cochairs: Syed Qaim (Research Centre Jülich), Elena Bodnar (ANL)

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Cochairs: Heinz Gaeggeler (Paul Scherrer Inst.), Thomas F. Wall (LBL)

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WCI PRESIDENT'S FORUM

"The Public Health Dilemma: Balancing Isotope Supply and Safety and Security"

Session Organizer: Paul T. Dickman (ANL)

Cochairs: Myung-Chul Lee Kim (Seoul National Univ), Wessel Van Zyl de Villers (IAEA)

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Jong Kyung Kim (KAERI)

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PRODUCTION OF PET RADIONUCLIDES

Session Organizer: Syed M. Qaim (Forschungszentrum Juelich), Suzanne Lapi (Washington Univ)

Co-chairs: Suzanne Lapi (Washington Univ, St.Louis), Ingo Spahn (Research Centre Jülich)

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Cochairs: Roy W. Brown (Mallinckrodt Pharmaceuticals), Henri Bonet (IRE, retired)	
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Cochairs: F. Meiring Nortier (LANL), Boris Zhuikov (RAS)	
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 Cochairs: Sharon Robinson (ORNL), Matthias Schaedel (JAEA/GSI)

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Thursday, August 28, 2014, 8:00 A.M.

ISOTOPE RECOVERY AND RECLAMATION

Session Organizer: Dorothea Schumann (Paul Scherrer Inst)

Cochairs: Dorothea Schumann (Paul Scherrer Inst.), Henri Bonet (IRE, retired)

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Rugard Dressler, Dorothea Schumann (Paul Scherrer Inst), invited	
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Joseph Lapinskas (QSA GLOBAL Inc.)	
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PRODUCTION AND APPLICATION OF ALPHA EMITTERS

Session Organizers: Alfred Morgenstern (EC JRC), Bryan Bednarz (Univ of Wisconsin)

Cochairs: Bryan Bednarz (Univ of Wisconsin, Madison), Michael Zalutsky (Duke Univ Medical Center)

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F. L. Giesel, C. Kratochwil (Univ Hospital Heidelberg), F. Bruchertseifer (Inst for Transuranium Elements, EC), W. Mier (Univ Hospital Heidelberg), C. Apostolidis (Inst for Transuranium Elements, EC), U. Haberkorn (Univ Hospital Heidelberg), A. Morgenstern (Inst for Transuranium Elements, EC), invited

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Jonathan W. Engle, Eva R. Birnbaum, Hong T. Bach, Michael E. Fassbender, Eric R. Olivas (LANL), David Denton, Saed Mirzadeh (ORNL), Dmitri Medvedev, Leonard Mausner (BNL), Francois M. Nortier, Kevin D. John (LANL), invited

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Radioactive Nanoparticles 286

A. Bilewicz, A. Piotrowska, E. Leszczuk, L. Janiszewska, P. Koźmiński (Inst of Nuclear Chemistry and Technology), A. Morgenstern, F. Bruchertseifer (Inst for Transuranium Elements, JRC), invited

Investigation of Astatine Chemistry in Solution 287

G. Montavon (Subatech), N. Galland (CEISAM), invited

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ISOTOPES IN PLANT BIOLOGY: FUTURE SUSTAINABILITY IN ENERGY AND AGRICULTURE—II

Session Organizers: Richard A Ferrieri (BNL), Ben Babst (BNL)

Cochairs: Siegfried Jahnke (Research Centre Jülich), Paul Ellison (Univ of Wisconsin, Madison)

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R. C. Dirks, M. Singh, G. S. Potter, Lee G. Sobotka, J. Schaefer (Washington Univ), invited

Allocation and Partitioning of Recently Fixed Carbon as ¹¹C in *Arabidopsis Thaliana* 291

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Mobility of Immune Ligands and Signal Molecules in the Model Plant Arabidopsis 292

Jean T. Greenberg, Joanna Jelenska, Nicolas Cecchini (Univ of Chicago), Sandra M. Davern, Robert F. Standaert (ORNL/Univ of Tennessee), Saed Mirzadeh (ORNL), Andrew N. Gifford (BNL), invited

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Chantal D. Reid, Greg Bonito (Duke Univ), Larry Cumberbatch (Duke Univ/ Triangle Univ Nuclear Lab), Andrii Gryganskyi (Duke Univ), Alex Crowell, Calvin R. Howell (Duke Univ/Triangle Univ Nuclear Lab), invited

Providing Foundational Knowledge of Resource Allocation and Stem Growth Regulation in Bioenergy Crops 294

Benjamin A. Babst (BNL), David Braun (Univ of Missouri, Columbia), David Alexoff, Youwen Xu, Wenchao Qu (BNL), Anna Kunert (Johannes Gutenberg Univ), Michael Schueller, Ryan Tappero, Lisa Miller (BNL), invited

APPLICATIONS OF RESEARCH AND INDUSTRIAL ISOTOPES

Session Organizer: Meera Venkatesh (IAEA)

Cochairs: Elisabete Fernandes (CENA), Meera Venkatesh (IAEA)

Radiotracer Generators for Application in Process Industries 295

Tor Bjørnstad (IFE/Univ of Oslo), Liv Stavsetra, Kristin Fure, Are Haugan (IFE), invited

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Jefferson Vianna Bandeira, Lécio Hannas Salim (Brazilian Nuclear Energy Commission), Patrick Brisset (IAEA), Catherine E. Hughes (ANSTO), invited

Polarized ^3He Spin Filters for Neutron Science 297

Thomas R. Gentile (NIST), invited

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Sung-Hee Jung (KAERI), Sung-Ho Choi (Hannam Univ), Jin-Ho Moon, Jong-Bum Kim (KAERI), Min-Seok Oh, Sang-Ei Seo (Hannam Univ)

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Mohammed Al Mesfer (King Khalid Univ), Muthanna Al-Dahhan (Missouri Univ Sci Tech)

Utilization of Enriched Stable Isotopes to Increase Isotope Reactor Output and Improve the Quality of Radioisotope Sealed Sources 300

Robert Neal Brososky (QSA Global, Inc)

Research on Cobalt-60 Spiral CT for Studying Fuel Sphere's Motion Law in HTGR 301

Ximing Liu, Zhifang Wu, Peng Cong, Jichen Miao (Tsinghua Univ)

Thursday, August 28, 2014, 10:20 A.M.

CLOSING PLENARY

Session Organizer: Paul T. Dickman (*ANL*), Rolf Zeisler (*NIST*), Stephen P. LaMont (*LANL*)

Cochairs: Paul Dickman (*ANL*), Wessel Van Zyl de Villers (*IAEA*)

Emerging Applications of Nuclear and Isotopic Techniques in the Environmental Sciences 302

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Heavy and Super Heavy Elements Research 303

Andreas Türler (*Paul Scherrer Inst/Univ of Bern*), invited

The Future of Molecular Imaging: A Radiochemist's Perspective 304

Henry F. VanBrocklin (*Univ of California San Francisco*), invited