

NORDION STERILIZATION UPDATE



nordion
SCIENCE ADVANCING HEALTH

Issue 5: December 2013

A Message to Our Valued Customers

Season's Greetings,

It was a pleasure to see so many of you at IMRP 2013 in Shanghai. As 2013 draws to a close, we would like to use this issue of Sterilization Update to reflect on the year that has been and share some of our experiences.

This year we have been investing in the future of gamma by helping customers upgrade their technology, intensifying our research and development focus at the Gamma Centre of Excellence, and broadening our efforts to strengthen the industry. In today's newsletter, you'll learn about the success of a challenging upgrade project at Food Technology Service Industry (FTSI), the unique research collaboration with Adesto Technologies and our participation in and lessons from IMRP 2013.

In 2014 we would like to continue the dialogue we started about the critical factors to your business' success and how working with Nordion could support your efforts. We will also continue our focus on applied research into new applications for gamma processing technology as well as education and training for the next generation of gamma experts.

We wish you, our valued customers and partners, a safe and happy holiday season and all the best in the coming New Year.

Sincerely,

Scott McIntosh
COO Specialty Isotopes General Manager,
Sterilization Technologies



Important New Download: Conditions of Use for Cobalt-60 Sources in Wet Storage Production Irradiators Brochure (PDF)

Cobalt-60 sources are used within wet storage production irradiators for a prolonged period of time, often 20 years or more. Following the conditions outlined in our updated brochure and those reflected in the IAEA's Specific Safety Guide SSG-8 "Radiation Safety of Gamma, Electron and X Ray Irradiation Facilities" will support such longevity.

Visit the GAMMA TECHNOLOGIES > RESOURCES page at nordion.com to access this PDF.

IMRP 2013 was the Perfect Venue to Learn about the Latest Irradiation Developments



In November, we joined many of you at IMRP 2013 in Shanghai, China.

In an increasingly complex world and in keeping with the IMRP theme, "Irradiation for Life: Safe, Green and Growing," we endeavored to build greater awareness on how the science of gamma irradiation is evolving to solve today's unique product challenges.

We invest in applied research and developing expertise, both of which are intended to continue to open global market opportunities for gamma irradiation. As a result our team was invited to give five presentations focused on sharing the latest developments in gamma technology.

IMRP 2013 was a great success and we were proud to be a Diamond Sponsor of the meeting. We look forward to continuing our support and participation in future IMRP conferences.

PHOTO: Ella Korets-Smith (left) of Nordion presents Wang Chunlei (right) of Suzhou CNNC Huadong Radiation Co., Ltd. with the iPad he won from Nordion at IMRP 2013.

CONGRATULATIONS TO ALL IPAD WINNERS: In appreciation of the time attendees took to fill out our survey at IMRP, we put their names in a draw to win one of three iPads. Winners of the iPads were Wang Chunlei (Suzhou CNNC Huadong Radiation Co., Ltd.), John Irvine (Steritech, New South Wales, Australia) and Prof Manny. Mathuthu (North-West University, Centre for Applied Radiation Science and Technology, South Africa). Congratulations!

Did You Know?

Improving the Efficiency of their Irradiation Operations is the #1 Critical Business Issue for Gamma Users.

"The partnership between Nordion and FTSI teams resulted in a very effective program to upgrade the FTSI irradiator. Thanks to the cooperation and innovative thinking of the teams, we believe our gamma business will continue to prosper."

**—Rick Hunter,
CEO of FTSI**

We surveyed attendees at IMRP and the results are in. The numbers reveal that the #1 critical business issue for gamma users is improving the efficiency of their irradiation operations.

If maximizing your uptime is important to you, you may want to read the article, How to Improve Irradiator Safety and Minimize Downtime / Lost Revenue, which appeared in our December 2012 issue.

A recent collaboration between Nordion and Food Technology Service Industry (FTSI), a sterilization service provider, will also be of interest to you. The collaboration resulted in the development of a method to upgrade FTSI's irradiator with minimal downtime, thereby minimizing impact on customers. The collaboration was the subject of a presentation at IMRP entitled, The Challenge of Implementing System Upgrades.

Over the many years we have worked closely with our customers to help increase operating efficiency of their gamma facilities. Projects such as product container size optimization, material handling improvements and overall source configuration optimizations have been highly effective at providing increase efficiency.

If you have questions about improving efficiency of your operations, be sure to contact us at sterilization@nordion.com.

The Science of Irradiation is Expanding the Gamma Processing Market

Did you know that Nordion's Gamma Centre of Excellence's (GCE) mandate is to further the science of gamma processing? In support of this mandate, we are working with industry and academic partners who have new products and materials they would like to test for compatibility with gamma.

Some of the work done by us and our partnering organizations includes research into gamma irradiation of pharmaceuticals, packaging materials, and biological samples. One of the more recent and innovative research collaborations was with Adesto Technologies, a memory solutions provider. Their CBRAM® memory technology can be embedded in microcontrollers or System-on-Chip (SOC).

The results of applied research demonstrated CBRAM's tolerance for gamma testing with device function and data storage surviving gamma radiation exposure. The testing exposed standard packaged CBRAM memory to doses up to 50 kGy (5Mrad).

"The unique mechanism of data storage employed in CBRAM technology protects the data from the effects experienced by traditional non-volatile memories when exposed to irradiation. The results open new possibilities for Adesto and prospective customers. Medical applications and other uses that require sterile memory components and ultra-low power operation are natural matches for CBRAM technology."

— Ishai Naveh, Vice President of Marketing, Adesto Technologies

Continuing Education Opportunities at ASTM 2014



The ASTM 8th International Workshop on Dosimetry for Radiation Processing will take place in Oxford, England, August 3-7, 2014. This popular workshop focuses on the application of dosimetry in industrial irradiation applications and includes sessions on dosimetry system selection, calibration, dose mapping and process control.

Emily Craven, Nordion's Manager of Sterilization Science and Production Irradiator Engineering, will co-chair this workshop along with David Pymer, General Manager of

Harwell Dosimeters and, together with an international team of experts, they plan to build on the success of the previous workshops and provide content electronically on tablets for the first time.

Upcoming Events

February 11-13

MD&M West in Anaheim, CA

June 9-12

MD&M East in New York, NY



Contact

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