

Nordion®

A Sotera Health company

Nordion's Gamma Centre of Excellence



World-class Applied Research and
Specialty Gamma Processing Facilities

nordion.com



Irradiation and Training

Nordion's Gamma Centre of Excellence (GCE) is an integral part of Nordion's commitment to gamma sterilization sciences.

Working in collaboration with national and international organizations, highly trained scientists and technical professionals, the Centre offers applied research, expert advice, and leading edge knowledge and information in the gamma irradiation field.

The Gamma Centre of Excellence provides a range of services including:

- Sterilization Science Services to help develop new applications and processes
- Irradiation Services for standard and specialty products
- Hands-on training for new and continuing education in irradiator operation and radiation safety
- NVLAP recognized calibration laboratory for radiation dosimetry

For more than 30 years, we have collaborated with companies like yours to determine gamma compatibility of materials; develop highly effective gamma processes; and provide reliable sterilization and flexible irradiation parameters for medical devices, polymer products, pharmaceutical and food products. GCE offers all of the gamma processing services and expertise you need to achieve your irradiation and sterilization goals.

Irradiation Services, the GCE Advantage

We are proud to provide a reliable gamma service for all of your irradiation needs, including medical devices, pharmaceuticals, human tissue products, spices and other specialty applications.

GCE offers timely irradiation of your product with flexible scheduling and both high-and-low-volume irradiation capabilities. Our state-of-the-art irradiation systems and gamma processing expertise offer our partners many advantages.

- **Precision and scale.** We maintain underwater precision dose systems for small-scale sample testing and a full-scale irradiator capable of processing high volumes of product with exceptional flexibility. The irradiators feature computerized monitoring systems that govern operations, control timing and generate accurate, detailed documentation.
- **Quality.** Our full-scale carrier irradiator features automatic, speed-controlled, floor-to-ceiling carriers that are designed to deliver the right dose to your product, uniformly, at the right time and according to your schedule. Each carrier can accommodate two product stacks up to 120 cm (48 in) by 60 cm (24 in) by 137 cm (54 in) and a total weight of 1,958 kg (4,308.5 lb).
- **Expertise.** Because we are experts in gamma processing, you are assured that your product is delivered a validated process, meeting and exceeding regulatory requirements.

Training – Learning by Doing, Relevant and Insightful Continuing Education

At the Gamma Centre of Excellence, we share our knowledge and expertise with customers around the world. A unique resource, the GCE offers high-value hands-on experience. Drawing on the experience of our GCE team, we deliver relevant and insightful training courses to a wide range of industry professionals. Working in small groups, we provide effective, hands-on instruction—basic, advanced and specialized—that takes full advantage of our comprehensive facilities.

We offer the following continuing education courses:

- Radiation Safety in Industrial Irradiation Operations
- Radiation Safety Review for Irradiator Operators
- Radiation Safety Officer: Industrial and Research Irradiator
- Facility Process Management (includes course components on basic, advanced and specialized industrial irradiation operations)
- Irradiator Technology for Inspectors
- Dosimetry and Dose Mapping (upon request)

We continue to add courses to our curriculum to benefit our customers.



Sterilization Science and Dosimetry

Sterilization Science – Applied Research in Gamma

We understand the challenge you face to sterilize your medical device, improve the properties of your polymer product or improve the safety of food and other consumer goods.

For more than 30 years, we have collaborated with companies like yours to determine gamma compatibility of materials and to develop highly effective gamma processes.



World-class Researchers; First-class Problem Solvers

- **Does your product have a maximum dose constraint?** We collaborate with you to design processes around challenging materials. The solution could be developing a specific approach to irradiate the material or a validation study to reduce the dose requirement.
- **Unsure if your product is gamma compatible?** We collaborate with you to determine the gamma compatibility of any challenging material.
- **Want to change the property of a product?** Whether your goal is to change the colour of a material or change the mechanical properties, we look forward to collaborating with you.

Dosimetry Lab

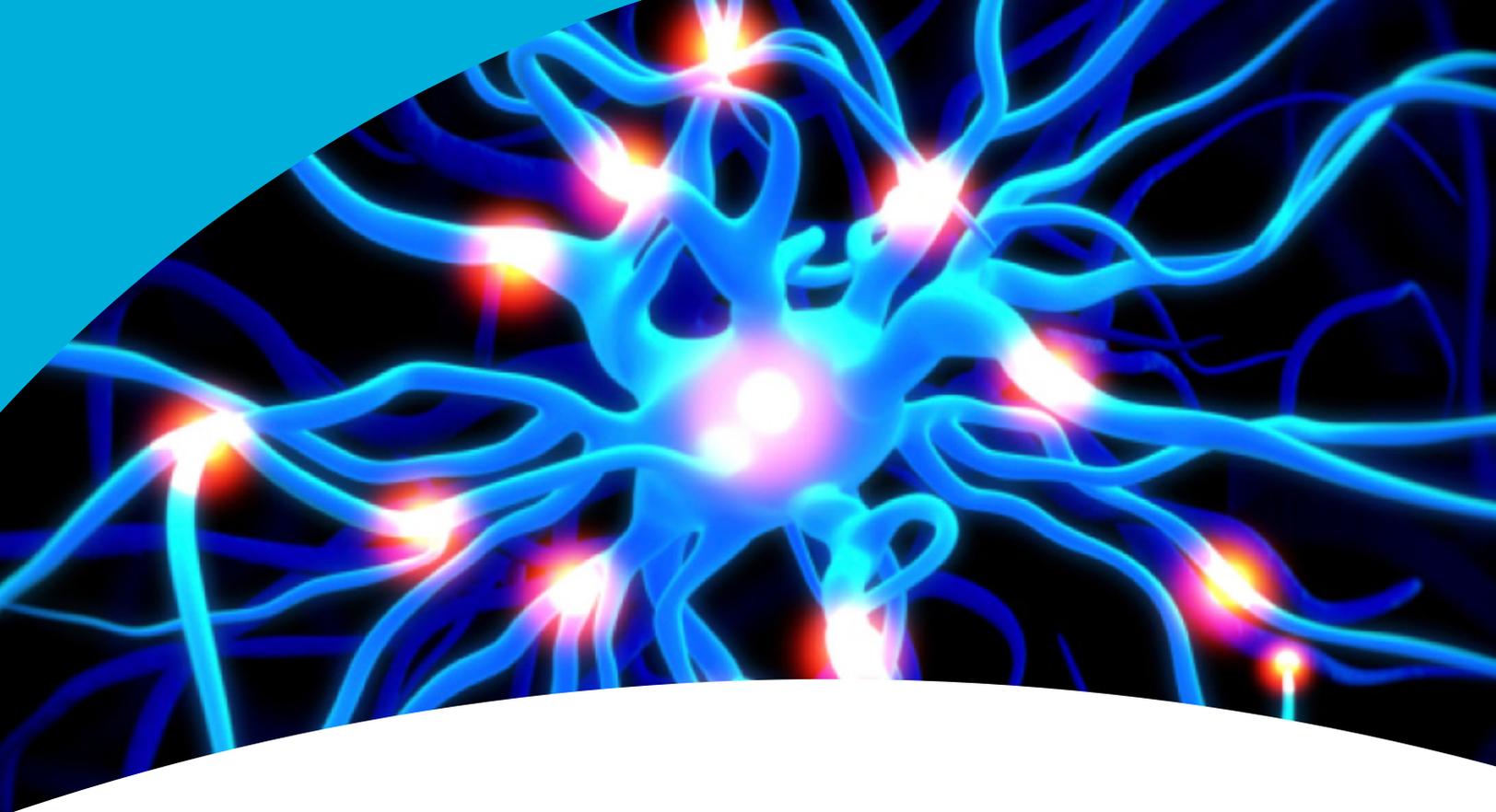
Our Dosimetry Lab is recognized through the NIST Voluntary Laboratory Accreditation Program (NVLAP), and provides industry leading calibration, irradiation and dose measuring services, including the following:

- Evaluation of transfer-standard and reference-standard dosimeters (Alanine and Ceric-Cerous)
- Irradiation of dosimeters to known absorbed-dose levels
- Calibration of routine dosimeters using reference-standard or transfer-standard dosimeters

With this certification, we are able to provide both in-plant and laboratory calibration services for routine dosimeters used in gamma irradiators globally. We also manufacture and calibrate Ceric-Cerous dosimeters for transfer-standard or routine use.

You can find more information about our Dosimetry Products and Services at nordion.com/gamma-technologies/dosimetry.





Nordion is guided by a core purpose of making a distinctive contribution to the health and wellbeing of people. We are a leader in protecting the health and safety of our employees, our neighbours and the environment. We have a sound environmental management system and certified operating practices that meet stringent international standards for environmental sustainability. Nordion and our employees take an active role in building healthy, strong, happy communities, both at home and abroad.

About Nordion

Nordion, a Sotera Health company, is a leading provider of medical isotopes and gamma technologies used for the prevention, diagnosis and treatment of disease and infection. Nordion's products are used daily by pharmaceutical and biotechnology companies, medical-device manufacturers, hospitals, clinics and research laboratories. Nordion supplies products to more than 40 countries around the world, and is committed to their mission, Safeguarding Global Health™ with every critical isotope they supply.

About Sotera Health LLC

Sotera Health LLC—parent company of Nordion, Nelson Labs, Sterigenics—is the world's leading, fully integrated protector of global health. With over 500 combined years of industry-recognized scientific and technological expertise, Sotera Health ensures the safety of global health by providing mission-critical services to the medical, pharmaceutical, tissue and food industries.

Next Steps

Let's discuss how we can work together to find gamma solutions that make the best sense for your product.

For the most trusted value added gamma service in the industry, contact us at <http://nordion.com/gce/contact.asp>.



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