

Loic Eloy

President, Nuclear & Safety Group

39th User Meeting | Record Attendance 7 Industries | 11 Countries

Military & | Defense

Homeland Security

Education & Research

Laboratories & Science

Nuclear Power & Advanced Nuclear

Nuclear Medicine

Radiopharmacies

Agenda

- 19 Customer Training Courses
- New Tracks: Radiopharma, Homeland Security, Research & Technology
- New Nuclear Power Forums
 - Industry Needs of Today & Tomorrow
 - Advanced Reactor Technology and the Developing Fuel Cycle
- 27 Breakout Sessions
- Technology Hub demo room



Thomas Logan

Chief Executive Officer

OUR MISSION

To harness our unrivaled knowledge of ionizing radiation for the greater good of humanity.



FOR THE GREATER GOOD

Across End-markets
Within Mirion
All Around Us

Across End-markets

Within Mirion All Around Us

INNOVATION AT WORK Evolution Across End-Markets

Nuclear Power

Geopolitical instability.

Energy as a matter of **national security**.

US Executive Orders.

World Bank policy change.

Hyperscaler **commitments** to nuclear energy and advanced nuclear.

127 different SMR designs.



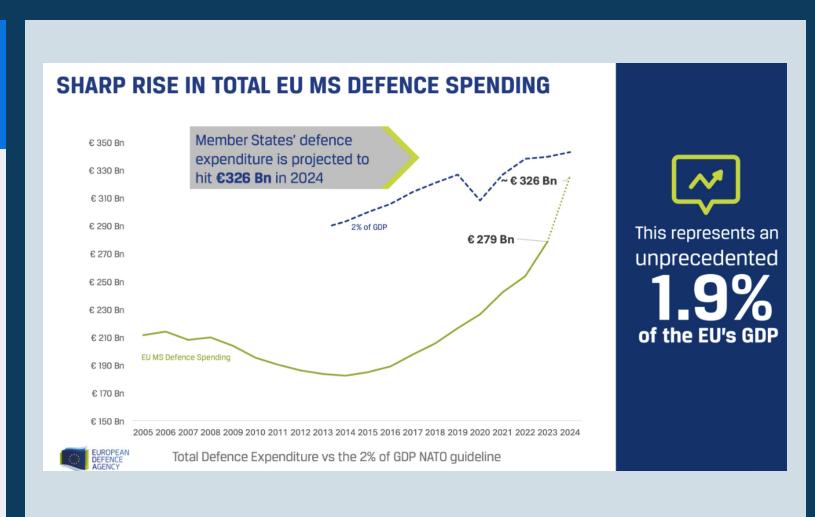
INNOVATION AT WORK Evolution Across End-Markets

Military & Homeland Security

Upgrade of European Militaries

Renewal of US **Nuclear Defense infrastructure**.

Increasing requirements for **border security** and **critical infrastructure**.



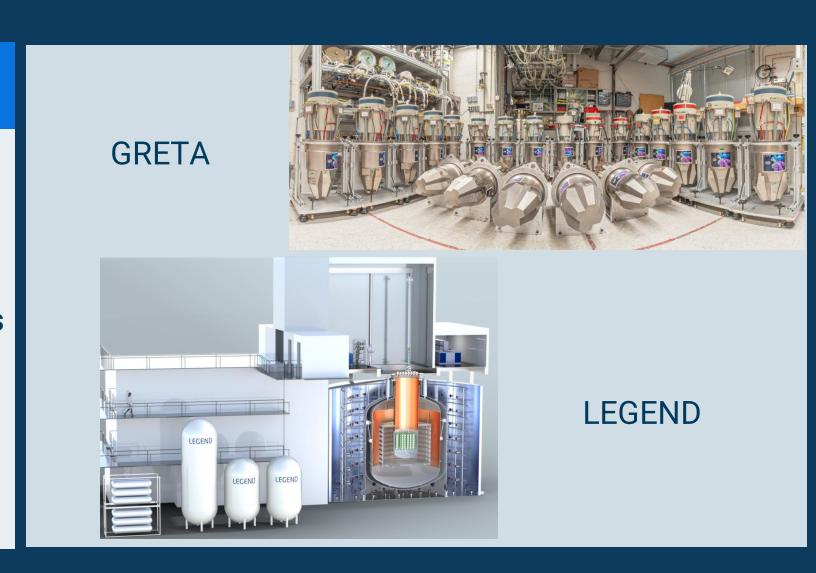
INNOVATION AT WORK Evolution Across End-Markets

Labs & Research

Large investment in research applications, fundamental physics.

DOE engaging deeper **across Nuclear and Medicine.**

Technologies deployed to **other industries** - space, mining, nuclear medicine.



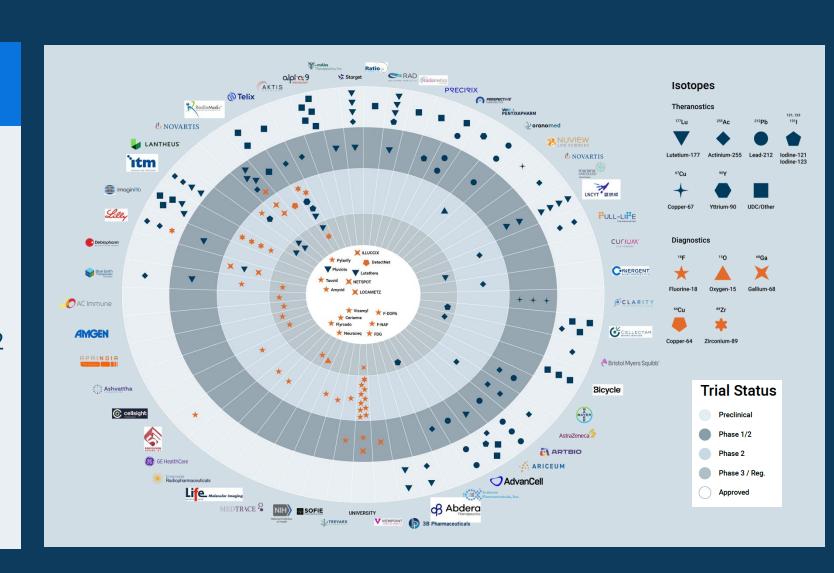
INNOVATION AT WORK Evolution Across End-Markets

Radiopharmaceuticals

Radiopharma market to surpass \$40B by 2032.

Approval of **new therapeutic** drugs
Lutetium 177, Actinium 225, Lead 212

Application to **pre-chemo** patients will increase procedure potential.



Across End-markets

Within Mirion

All Around Us

INNOVATION AT WORK Within Mirion

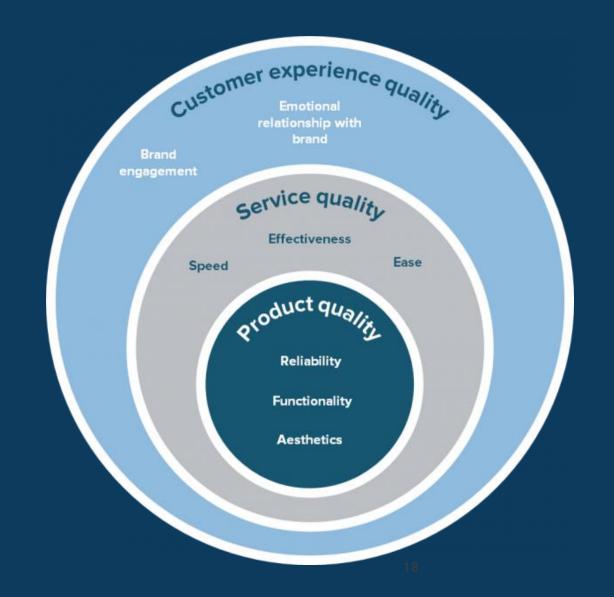
Customer Experience

Focus on your experience. Q4 Customer Survey

Provide a more responsive footing.

Introduce **new products & innovation** for your benefit.

More from Shelia & James!



INNOVATION AT WORK Within Mirion

Customer Experience

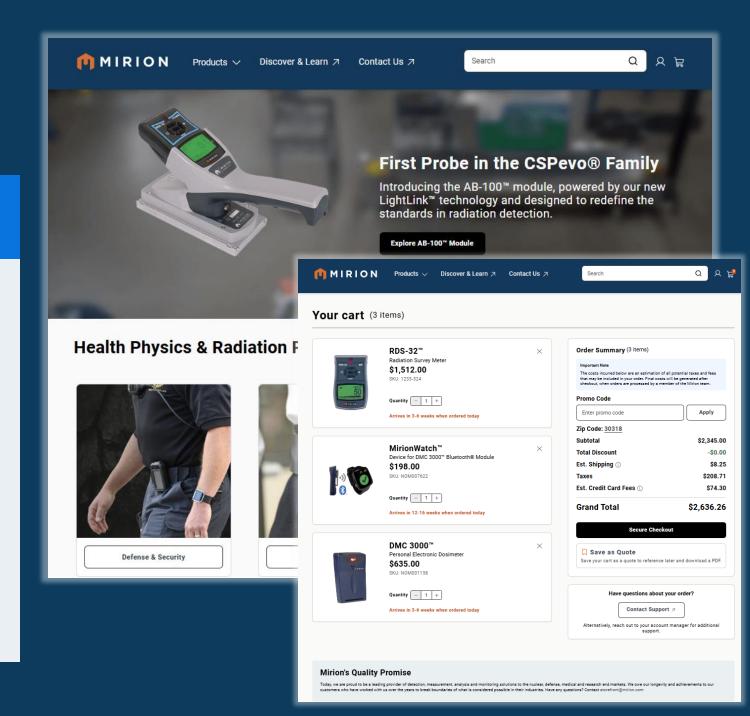
Easing access via **eCommerce**.

Purchase directly or download a quote.

Stated **shipping timelines**.

>200 products available online.

Defense & Security | Dosimetry Systems
Portable Health Physics | Telemetry
Radiation Monitoring Systems | Cameras
Contamination & Clearance



Across End-markets
Within Mirion

All Around Us

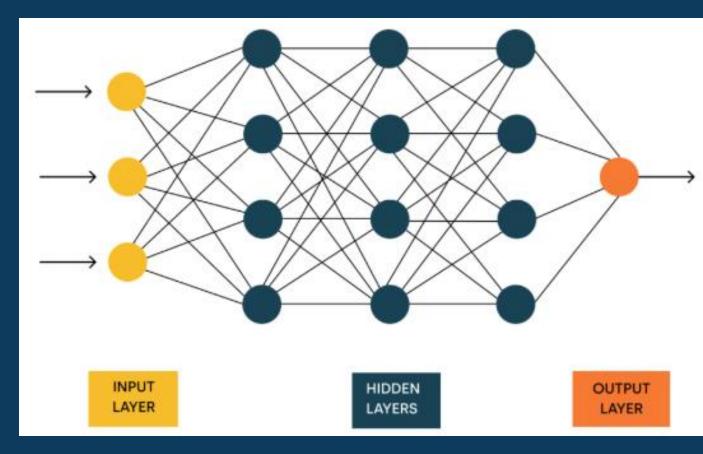
INNOVATION AT WORK All Around Us

Artificial Intelligence

Transforming how we **solve complex problems**.

Advances in **Neural Network** frameworks.

Convolutional neural networks (CNNs) are **revolutionizing visual recognition**.



INNOVATION AT WORK All Around Us

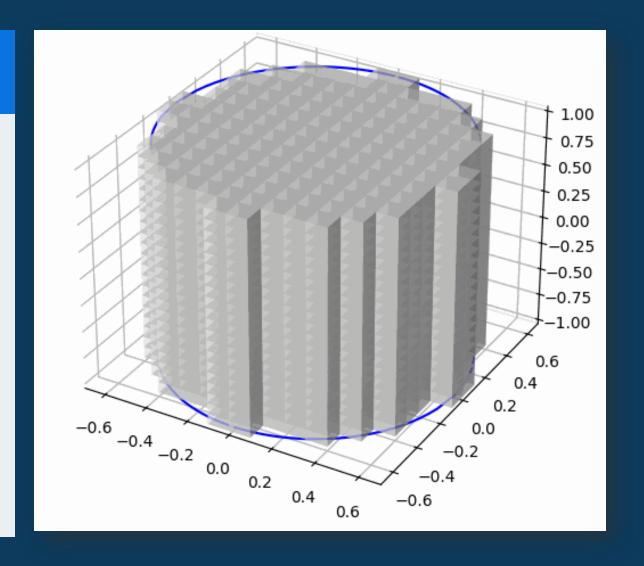
Artificial Intelligence

NeRD iteratively **refines** its tomographic reconstruction. Localizes sources.

Compares measured peak efficiencies to expected.

Performs gradient descent to improve reconstruction.

$$(x,y,z,\theta,\phi) \rightarrow \begin{array}{|c|c|c|}\hline & & & \\ & & & \\ & & & \\ \hline \text{Peak} & & & \\ \hline \text{Efficiencies} & & & \\ \hline \end{array}$$





Scott Claunch

President

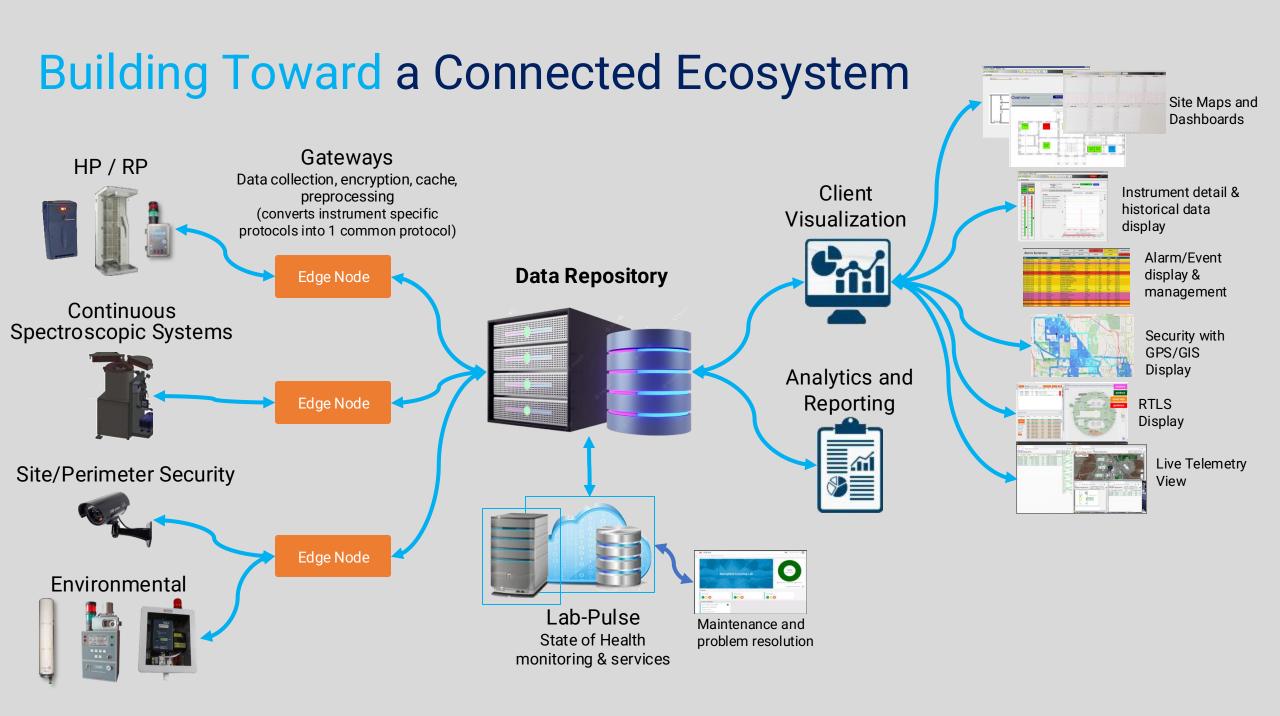
TerraPower Isotopes®

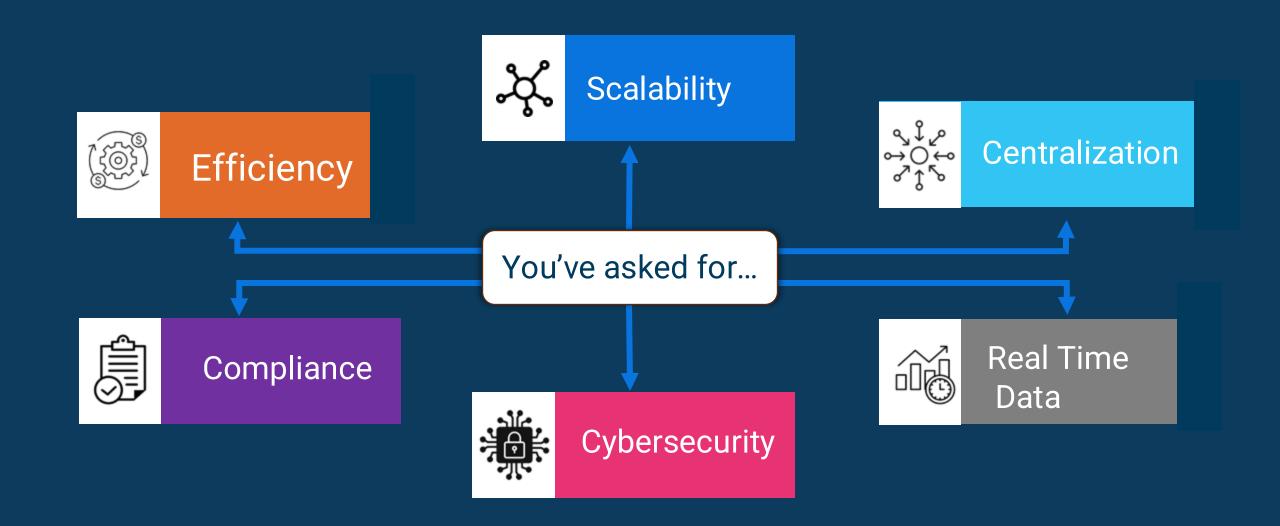


Joey Smiley Principal Health Physicist Savannah River Site

New Solutions to Meet Your Needs

Shelia Webb, Chief Digital Officer James Cocks, Chief Technology Officer





Vital[®]

POWERED BY MIRION



INTRODUCING



A connected digital ecosystem to simplify aggregation of data and expert review

Will enable a single, unified view of data, instruments and advanced analytics to drive integrated operations

Intended to integrate seamlessly and scale with ease

Supports workflow optimization and software footprint consolidation goals



Maps | Gain Real-Time Visibility & Navigation

Sitewide Visibility: Monitor instrument status and location across your facility

Interactive Maps: Navigate buildings, floors, and rooms with custom site and floor maps

Live Insights: View real-time readings and alarm status directly on the map

Quick Access: Click on any instrument to jump to detailed data and controls

Flexible Setup: Add multiple maps with graphical overlays to match your site layout



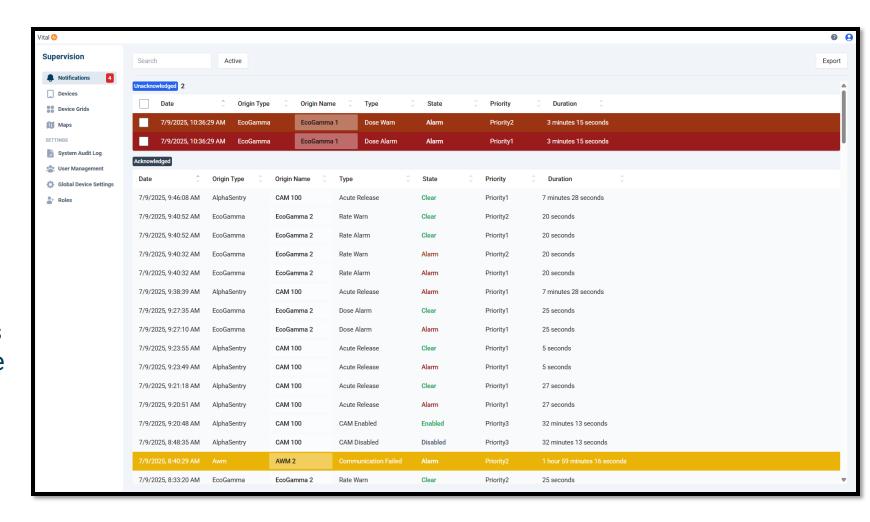


Notifications | Drive Informed Action & Decisions

Visualize events clearly: Instantly see alarms, alerts, and faults

Act Fast: Identify the source, priority, and duration of each event

Stay Informed: Authorized users can acknowledge events and access full details anytime from this dashboard





Device Grids | Oversee Dynamic Telemetry Work

Customizable Monitoring:

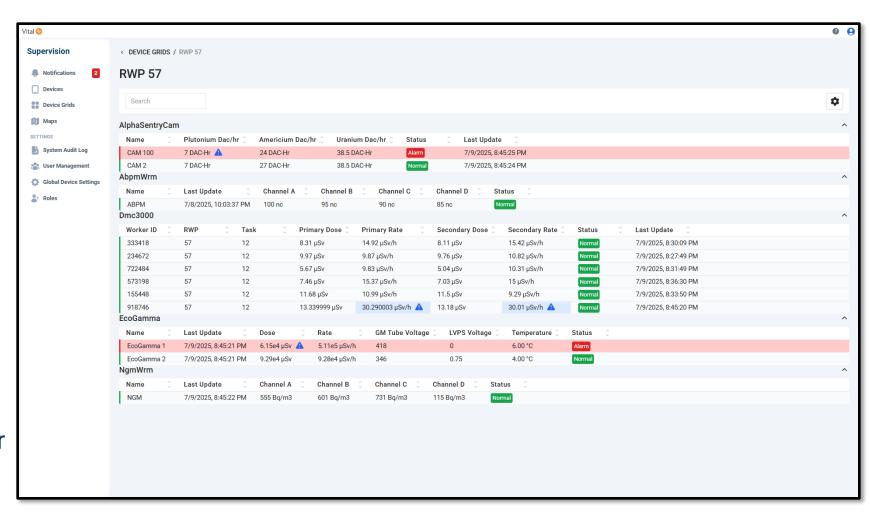
Create multiple data grids, monitor specific instruments based on various criteria.

Live Dynamic Filtering:

Automatically include new devices that meet defined filter criteria, ensuring all relevant instruments are monitored in real-time.

Warning Thresholds:

Set customizable alert levels for key instruments to notify users of rising dose rates, enabling proactive responses.





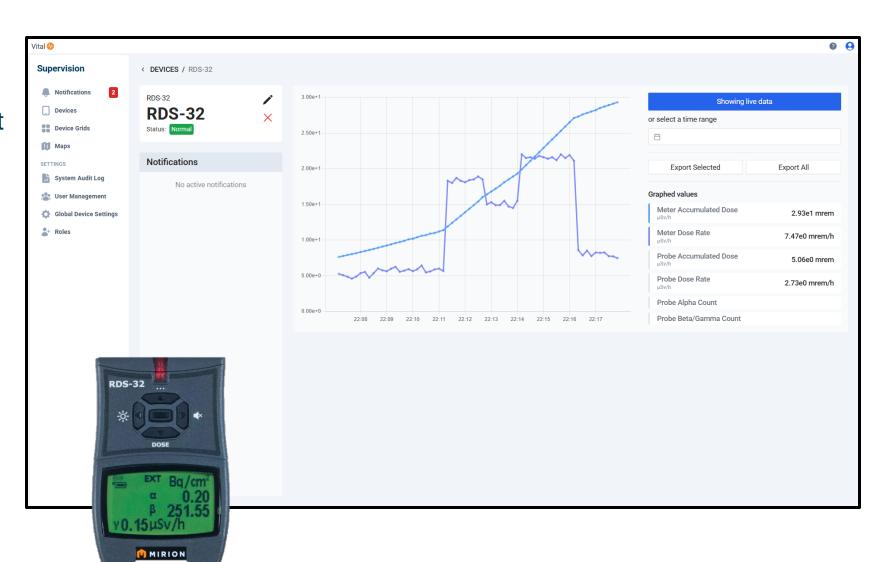
Review Instrument Data:

Live measurement readings, historical data, and instrument alarms and faults

Interact with Devices:

Acknowledge alarms, adjust alarm setpoints, clear total dose accumulations

Analyze & Optimize: Explore time-series plots, export data, and view spectra





Device Details | Connected Instruments



RDS-32™ & RDS-31™ Survey Meter



DMC 3000[™] Personal Dosimeter



iCAM™ Alpha/Beta Particulate Monitor

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DRM-3000™ Radiation Monitoring Systems



EcoGamma-g™ Radiation Monitoring Systems



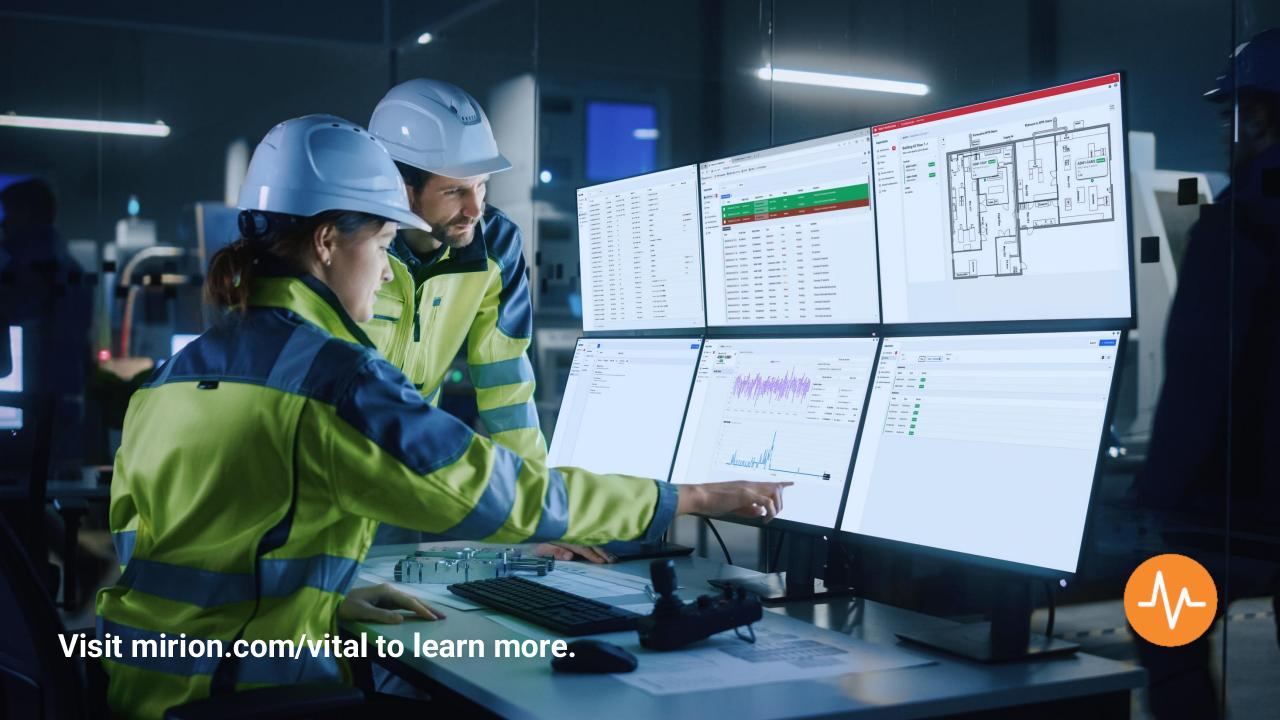
ABPM Alpha/Beta Particulate Monitors



NGM Noble Gas Monitors

INITIAL CONNECTED INSTRUMENTS





INNOVATION AT WORK

New Solutions to Meet Your Needs

Shelia Webb, Chief Digital Officer

James Cocks, Chief Technology Officer

CSPevo® With LightLink Technology

- Advanced light collection with over
 85% detection homogeneity
- Lightweight, ergonomic design
- Robust
- Reliable performance and seamless integration



LightLink[®] Advanced SiPM Technology

- Revolutionary advancement in radiation detection with benefits across HP Product Line
- Robust Silicon Photomultipliers and latest in readout electronics
- Ergonomic, compact, lightweight
- Enhanced performance



iPA™II Intelligent Preamplifier for HPGe Detectors

- Low-noise with performance matching analog preamplifiers
- Smarter, more reliable
- Improved Quality & Serviceability
- Enables extensive control and monitoring of critical State-of-Health parameters
- Onboard storage of detector data (drawings, manuals, ISOCS info,...)



Argos-3 Modular Transportable Body Contamination Monitor

- Easily transportable
- Assembly/disassembly in ~15 minutes
- Compact (31.0 × 79.9 × 24.0 in.)
- Comprehensive Coverage of body, head, legs, arm, hands and feet with 19 detectors



Aegis[™] CSM Data Analyst Mode

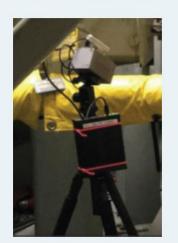
- Continuous Spectroscopy Monitoring (CSM) features fully embedded on AEGIS
- Reduce or eliminate sample collection
- Automated, unattended monitoring
- Realtime analysis providing immediate results
- Expands range of deployed CSM solutions (see right)

RADIOPHARMACEUTICAL SAMPLE ASSAY AT REACTOR SITES





NUCLEAR POWER PLANT IN-SITU MONITORING



PRIMARY COOLANT MONITORING (HPGe)



STACK GAS MONITORING WITH HPGe SYSTEM



HP Technology Platform Upgrades

IC3

- Compact and portable (2.4lb)
- Large 3" auto-ranging color display
- Connectivity with WRM telemetry
- No desiccant required

SVHD(/W)

- Up to 1,000 Sv/h (100 krem/h)
- CSP compatible
- IP68 (fuel ponds)



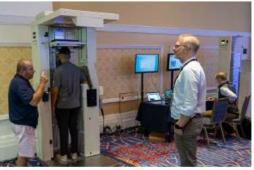
Apex-Guard 1.2 Radionuclide Impurity Identity and Analysis

- Defensible and ready-to-use impurity analysis algorithm
- Optimized measurement starts and durations with new counting features
- Comprehensive audit logs with change control & auditing capabilities
- Integrated electronic signatures in line with U.S. FDA Title 21 CFR Part 1



Technology Hub Explore the latest technologies hands-on.









MIRION Connect 25 Annual Users' Conference