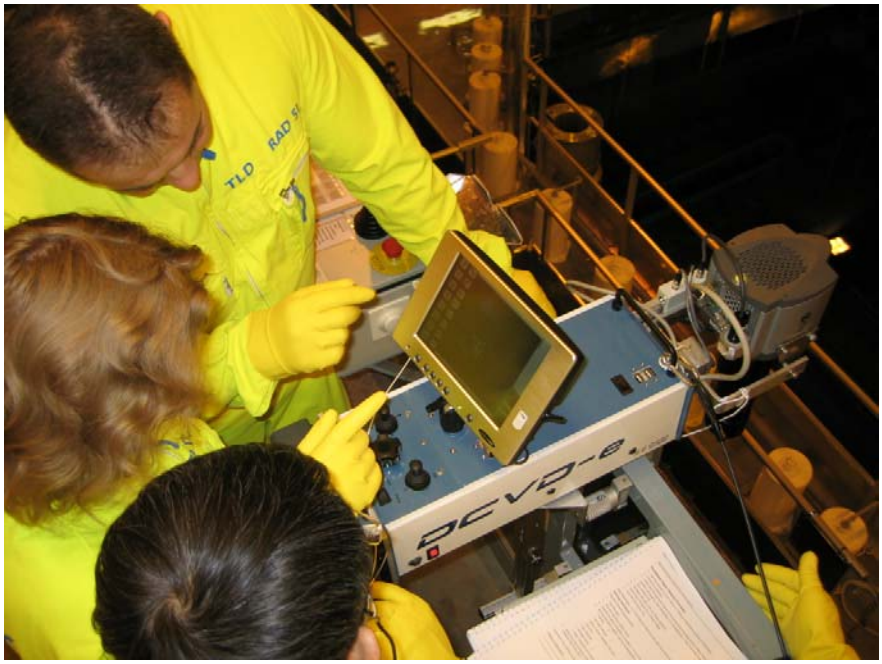
# DCVD-e—Enhanced Digital Cerenkov Viewing Device

**Spent Nuclear Fuel Measurement System**

The DCVD-e is the newest generation Cerenkov device for non-intrusive inspection and verification of spent nuclear fuel in spent fuel ponds. It is a simple and highly effective instrument that offers real-time display and capture of digital measurements for analysis and comparison. The DCVD-e is sensitive and has high resolution making it capable of verifying spent fuel cooled for more than 40 years. This instrument can verify that a fuel assembly is intact and detect if fuel rods have been removed or substituted. Results are displayed in real-time to enable inspectors to verify spent fuel immediately, and can also be archived for future retrieval and analysis.




- **Verification of facility declarations**
- **Spent fuel pond inventories**
- **Partial defect detection**
- **Measurement of freshly discharged to very long-cooled fuel**

See what you've been missing...

Product Information, Application and Tech Support at www.channelsystems.ca

Channel Systems Phone: 1.204.753.5190 Toll Free: 1.866.300.9799 Email: sales@channelsystems.ca

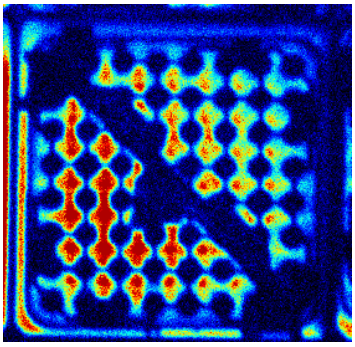
# Channel Systems

## Features

- Portable, mounts on most host bridge railings and fuelling machines (17.5 kg)
- Non-intrusive, works above the pond, no need to move fuel
- High resolution measurements
- Fatigue-free operation
- Colour-assisted display to enhance fuel features
- Compatible with ambient lighting
- Laser pointer to reference location in the pond
- 8” LCD display for easy, collaborative viewing
- Archives measurements to USB memory drive
- 80-200 mm zoom lens suitable for all fuel types and fuel ponds
- Battery or AC operation (3-4 hour runtime with Lithium Ion batteries, AC-110/220)

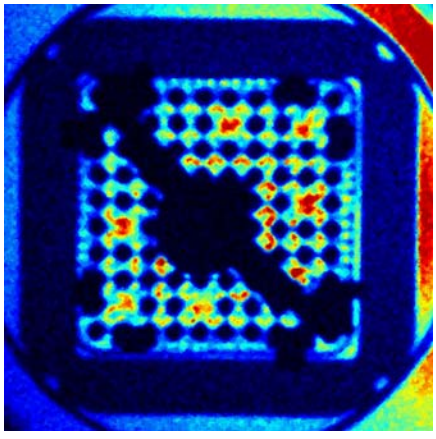

## Applications

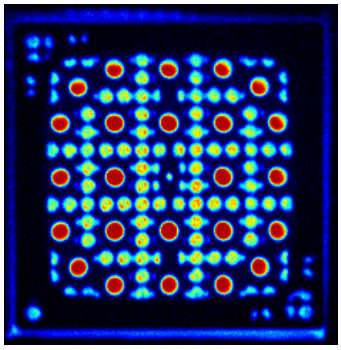
- Inspection of spent nuclear fuel
- Differentiation of irradiated items and non-irradiated items
- Verification of spent fuel with very low burn-up or very long cooling times
- Detection of fuel rod removal or substitutions



**BWR Fuel**

**The DCVD detected a partial defect (missing rod) in this fuel assembly. Can you see where?**





**PWR Fuel**

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