

Spectrifire – A Unique Fusion of Optical Technologies



Presenter:

Dr. Dominic Murphy

Fusion Photonics Ltd.

Technology:

Spectrifire -
A Unique Fusion
of Optical Technologies

Optical fibre technologies provide a convenient and powerful solution for transmitting, manipulating and monitoring light. Their unrivalled functionality has been widely utilised across application areas including Telecommunications, Sensing, Exploration, Structural Health Monitoring, Materials Processing and Medical Diagnosis & Treatment.

A new start-up company, Fusion Photonics Ltd. is commercialising a new technology, Spectrifire. Spectrifire, a unique fusion of optical technologies, was invented by Dr. Dominic Murphy and Dr. Kieran O'Mahoney while working in the Optics Research Group at Waterford Institute of Technology.

Consumers and industries worldwide need to identify materials, monitor systems and control processes in real-time, on-line and on-site. Current portable systems cannot achieve the combination of wide information bandwidth and fine information detail with extremely high accuracy. Spectrifire overcomes these limitations by analysing more information in the finest detail with the highest accuracy in one capture. It can deliver convenient and detailed analyses to the Life Sciences, Electronics, Process Control, Environmental Monitoring and Medical Diagnostics markets. Activity within these market segments is worth €1.5B annually

Spectrifire offers this combined advantage with:

- Highest accuracy measurements over the widest range
- Most information in the finest detail in a single capture
- Fewest components and no moving parts.

If you haven't got Spectrifire, you can't see the full picture.