



**Pie™ : International Award Winning
Portable Optical Measurement Tool**

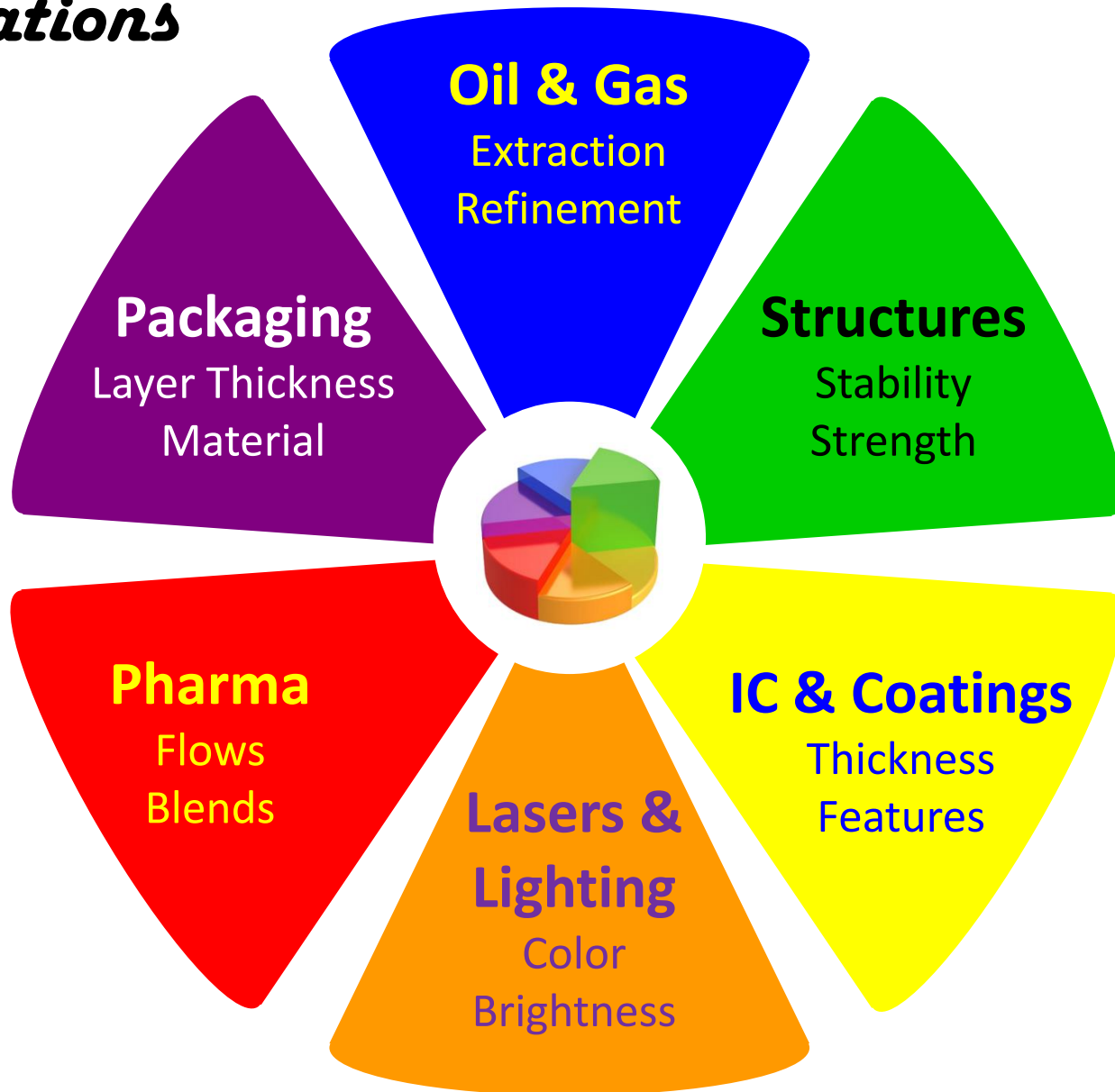
www.piephotonics.com

PieTM Value

- Portable, Lightweight, Low-Profile
- In-Line, On-Line, At-Line, In the Field
- Monitors, Identifies, Diagnoses, Alerts
- Optimises
 - Production Processes
 - Repair & Maintenance Schedules
- Saves
 - Wastage & Scrap
 - Unnecessary Maintenance
 - Breakdown Replacement



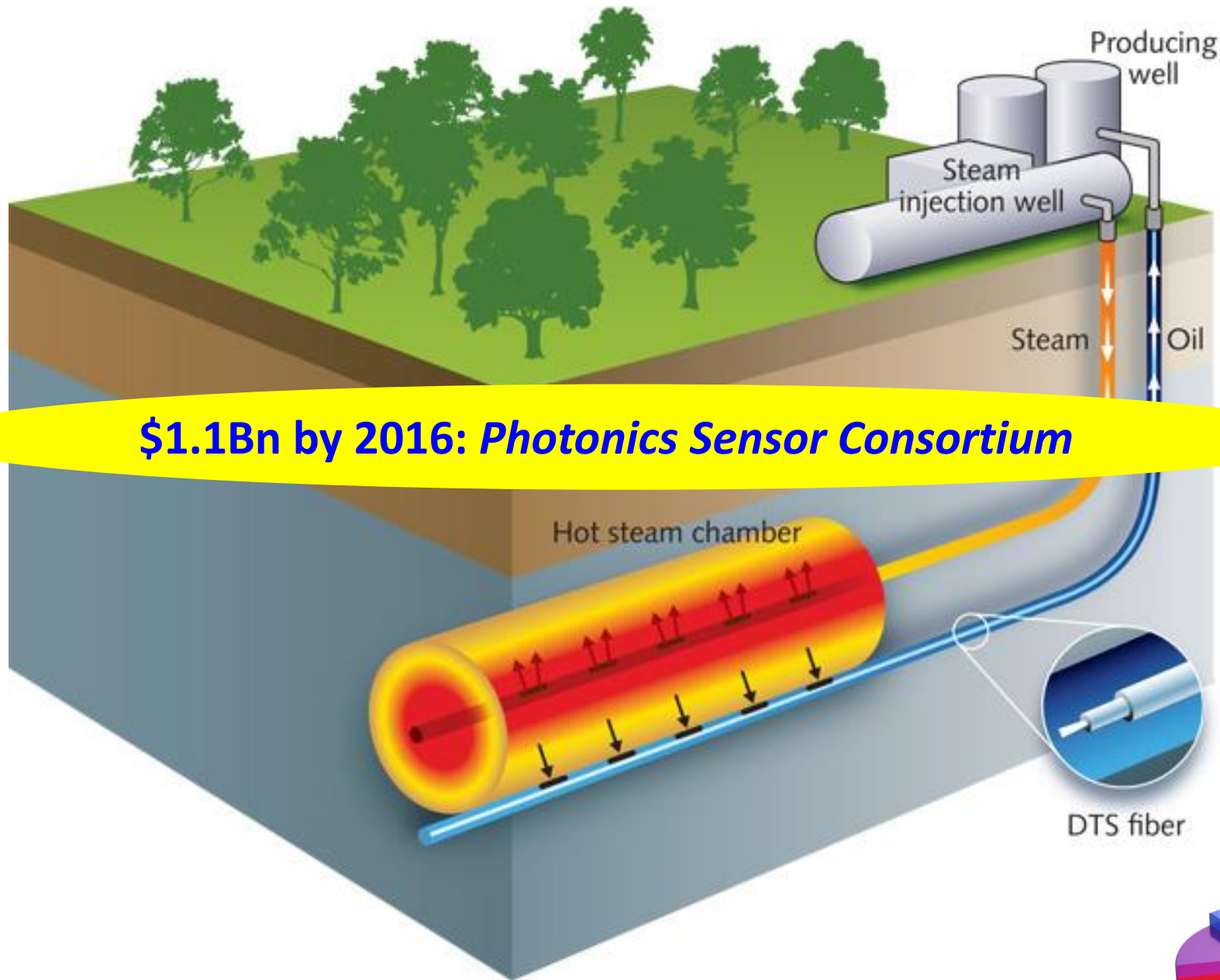
Applications



Oil & Gas
Extraction
Refinement

**Precision monitoring of Oil and Gas Fields to
optimise extraction yields**





\$1.1Bn by 2016: *Photonics Sensor Consortium*



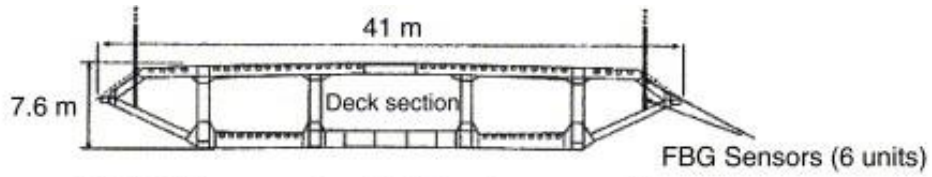


Structures

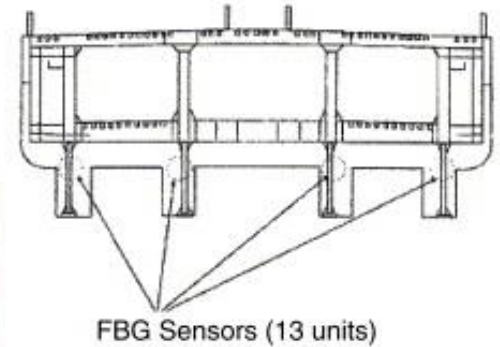
Stability
Strength

**Early alert of defects in civil structures to avoid
collapse and injury**

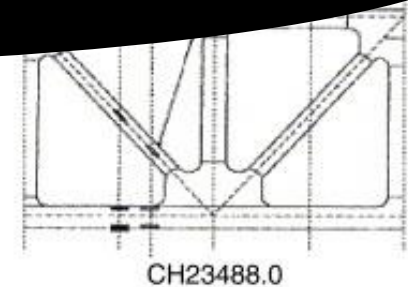
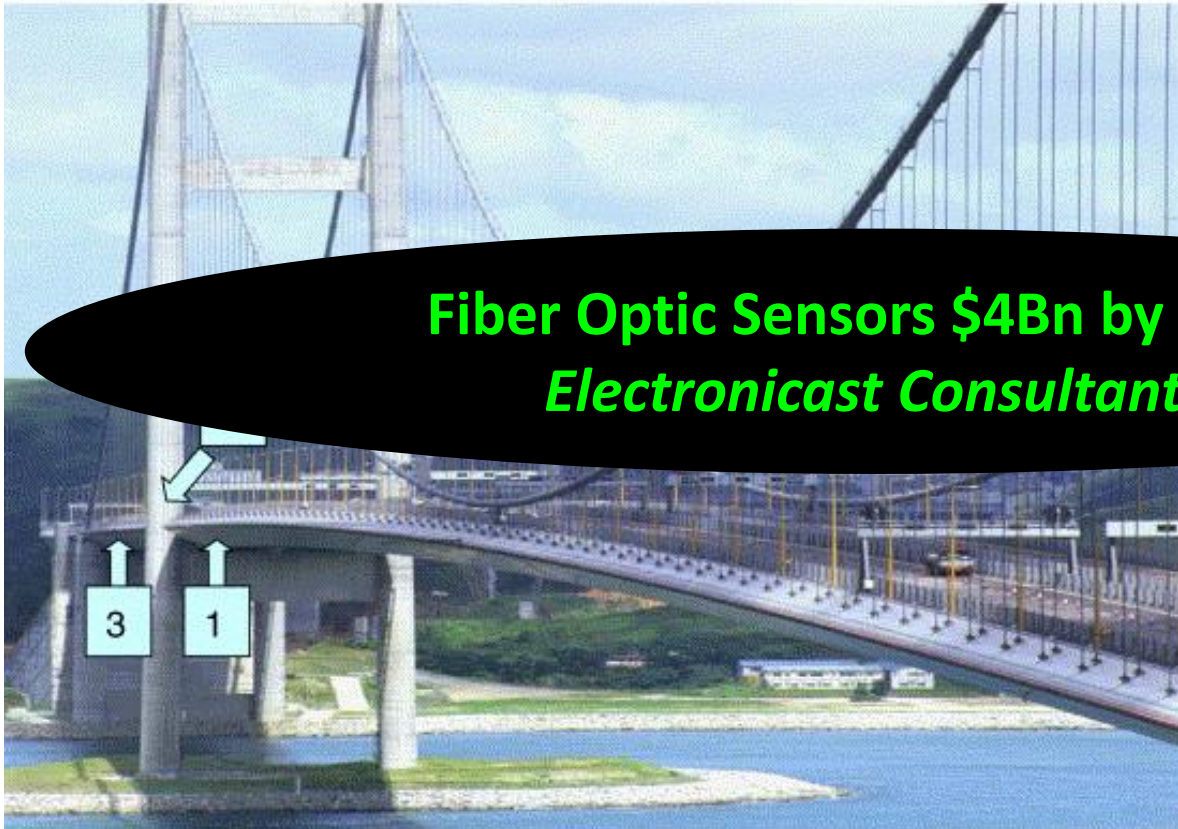




(1) 6 FBG sensors installed on hanger cables



(2) 13 FBG sensors installed on 4 rocker



(3) 21 FBG sensors installed on Chainage 23488

**Fiber Optic Sensors \$4Bn by 2017:
Electronicast Consultants**



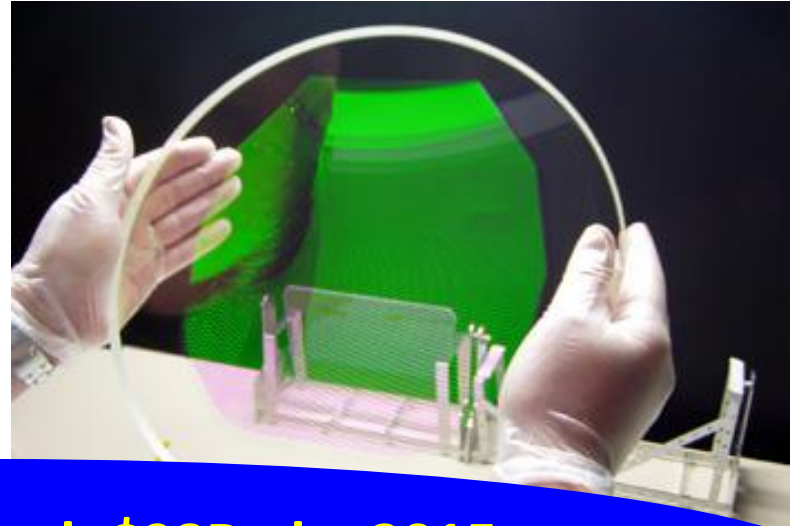
Early identification of production defects and drifts to minimise wastage and reduce scrap

IC & Coatings

Thickness

Features





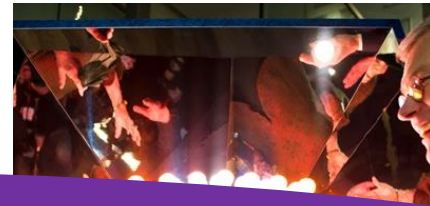
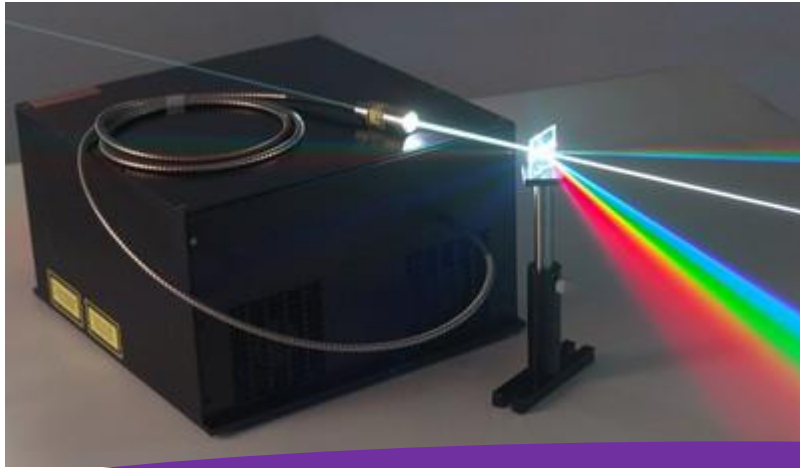
Global Market to reach \$98Bn by 2015
• *Source: Global Industry Analysts*



Early identification of production defects and drifts to minimise wastage and reduce scrap

**Lasers &
Lighting**
Color
Brightness

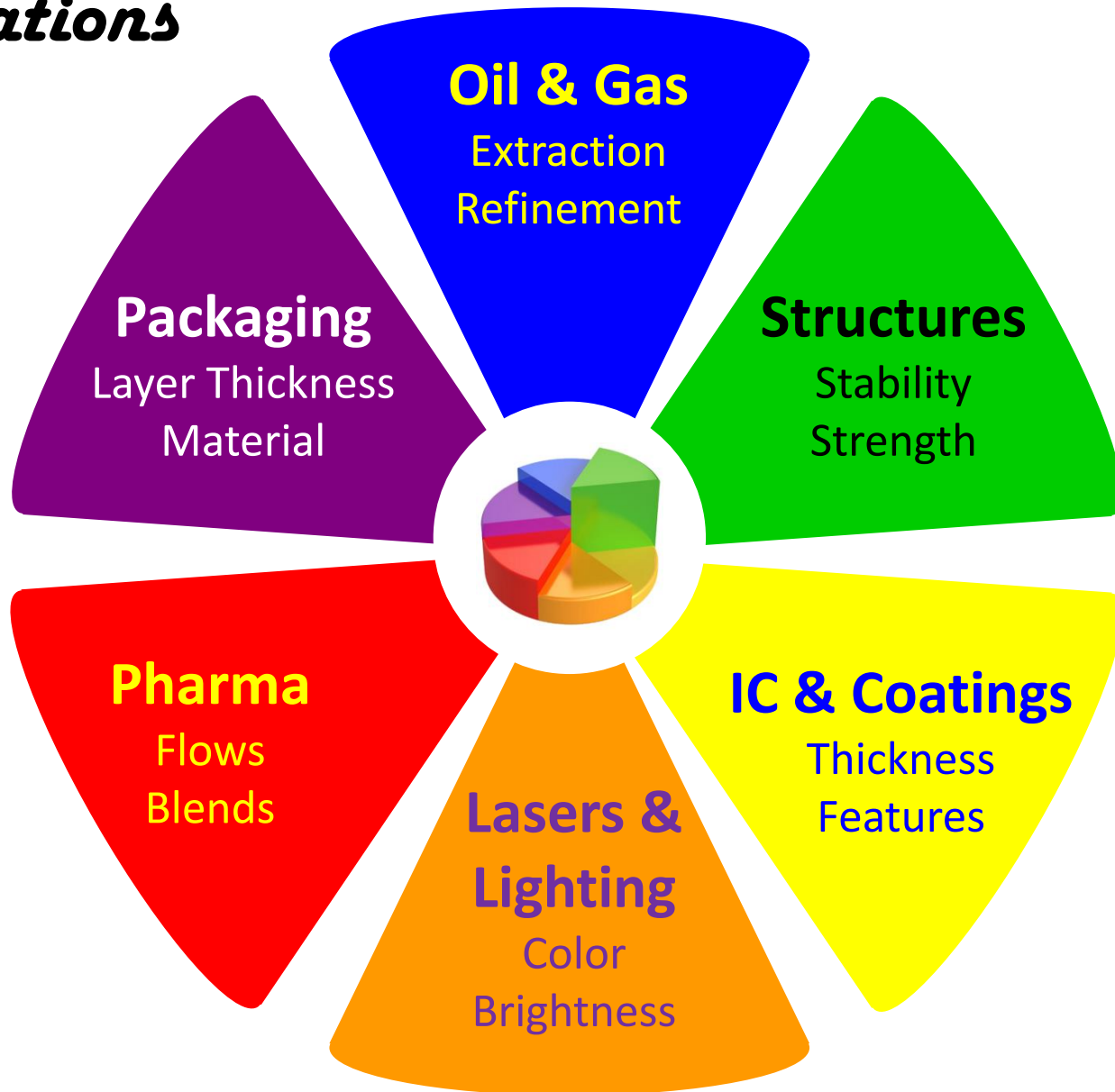




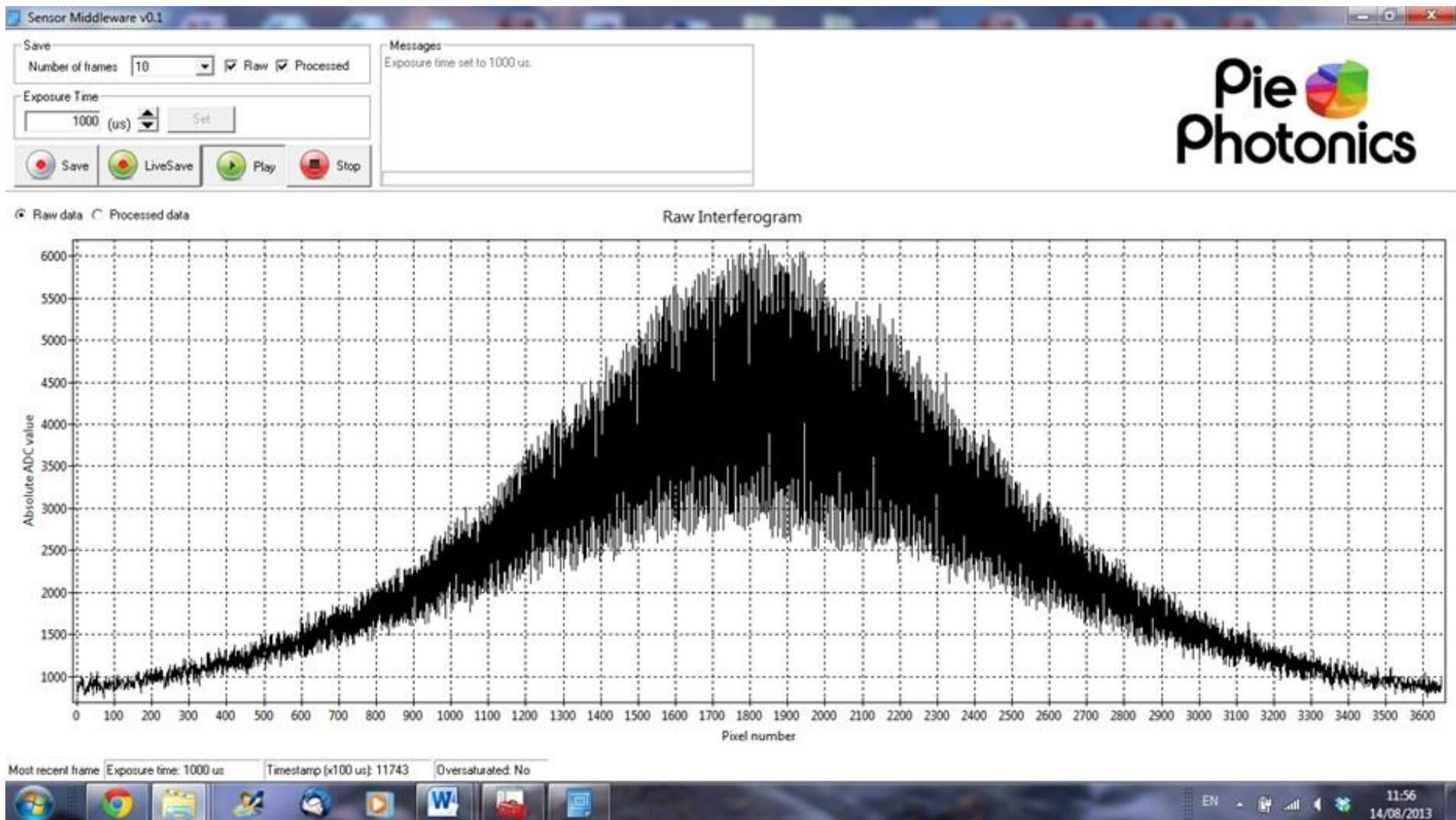
Philips: LEDs €75-80Bn by 2015 (45% of market)
Strategies Unlimited: Lasers \$8.34Bn 2012



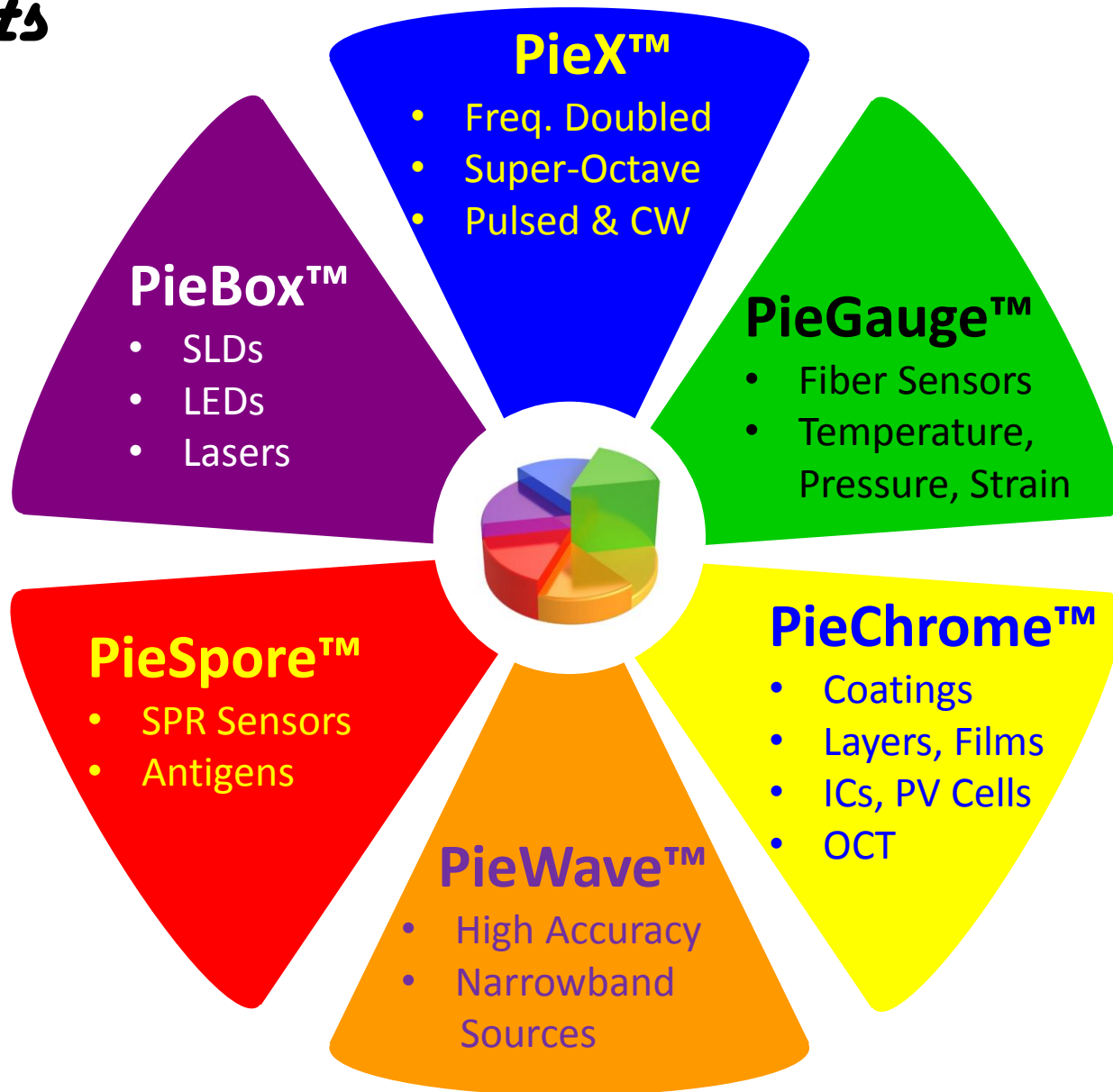
Applications



Pie™ Graphical User Interface



Products



PieTM News & Awards

[Laser Focus World, Newsbreak, June 2013](#)

[Nature, Product Focus, April 2013](#)

[Pittcon Editors' Award Spectroscopy Now Video, March 2013](#)

[American Laboratory, Awarding Innovation](#)

[American Laboratory, What's new in Optical Spectroscopy](#)

[Pittcon Today](#)

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Thank You!



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