

# Imaging & Analysis

## The leaders in advanced microscopy and imaging

15th January 2026

Richard Tyson, CEO

Dr Christian Lang, Managing Director, Imaging & Analysis



# Structured in two divisions

## Imaging & Analysis

Capabilities

Leading range of microscopy, scientific cameras, spectroscopy and associated analytical tools and software

24/25 pro-forma results and mid-term target

Revenue  
**£330.5m**

Margin  
**22.4%\***

*Mid-term margin target*  
**23-25%**

Strategic priorities

### Excellent business and good track record

- Share best practice across businesses and regions
- Standardise processes
- Improve operating efficiency
- Increase exposure to commercial markets

## Advanced Technologies

Compound semiconductor fabrication equipment; X-ray consumables

Revenue  
**£112.9m**

Margin  
**5.0%\***

*Mid-term margin target*  
**10-12%**

### Focus business on critical actions

- Extract full growth and margin potential from compound semi market and new facility
- Increase exposure to commercial markets
- Improve operational performance and efficiency

# Today's focus: Imaging & Analysis, representing c. 75% of Group revenue

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## What we'll cover today

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- Imaging and Analysis in Oxford Instruments
- Who are our customers today and what do they do with our products?
- Our opportunity – growing into industrial markets
  - Which markets does our technology provide a competitive edge in?
  - Why now? – the building blocks we have been putting into place
- What have we achieved so far?
- Live product demos:
  - BC43 microscope – from the demo centre
  - Ultim XTreme – on site via camera from the Plasma Technology clean room
  - Atomic force microscope – on site via camera from the Plasma Technology clean room
  - Electron microscope – in room

Over 60 years of history

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“

**The first commercially successful  
spin-out from Oxford University**



# From humble beginnings to a global footprint

**1959**

Founded by Martin and Audrey Wood to manufacture superconducting magnets.



**1980**

Built the first commercial whole-body MRI scanner for Hammersmith Hospital, London



**1986**

Plasma Technology joins Oxford Instruments



**1997**

Growth into Asian markets, opening offices in Japan & China

**2012**

Acquisition of Asylum Research

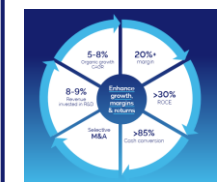


**2021**

WITec joins Oxford Instruments

**2024**

New customer-centric strategy targets operational excellence and 20% margins



**2024**

Purpose-built compound semiconductor facility opens

**1961**

Delivered first complete magnet to the Royal Radar Establishment, Malvern.



**1983**

Floated on the London Stock Exchange

**1989**

Link Analytical (now NanoAnalysis) acquired by the Group



**2010s**

Nanotechnology tools strategy and focus drives growth



**2014**

Acquisition of Andor Technology



**2024**

First Light Imaging and FemtoTool joins Oxford Instruments

**2025**

£50m share buyback launched; extended to £100m

**2026**

NanoScience divested to strengthen focus on three core markets

# Oxford Instruments' capabilities and enabling technology



Headquartered in the UK, with **c. 2,000 employees** and operations in **23 countries**, providing **solutions** for **academia, industry, and government** research

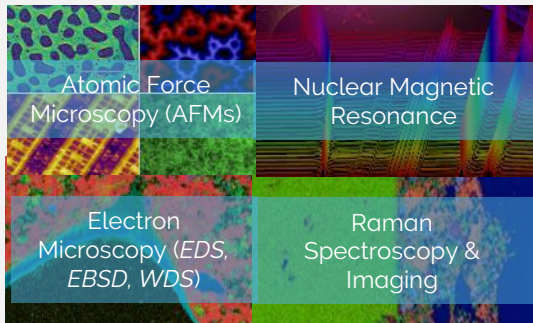


Operating in **three core structural growth markets: materials analysis, semiconductor and healthcare & life science** via **two divisions: Imaging & Analysis and Advanced Technologies**

## ← Imaging & Analysis →

## ← Advanced Technologies →

### Facilitating new materials analysis at the nanoscale



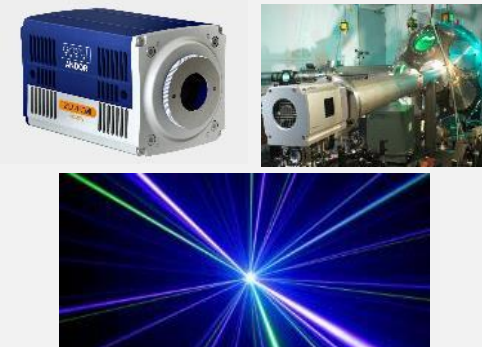
Supporting understanding of material properties in commercial and academic applications

### Accelerating development of new treatments and medicines



Google Earth-style capability enables users to zoom in to large samples

### Supporting key enabling technologies



Providing key enabling technologies including scientific cameras, lasers and spectrographs

### Enabling development of next-gen devices and data communications



Supporting R&D and manufacture of complex devices with higher yields and lower costs

# Imaging & Analysis: divisional overview

**High margin** products and analytical software, **common routes to market**

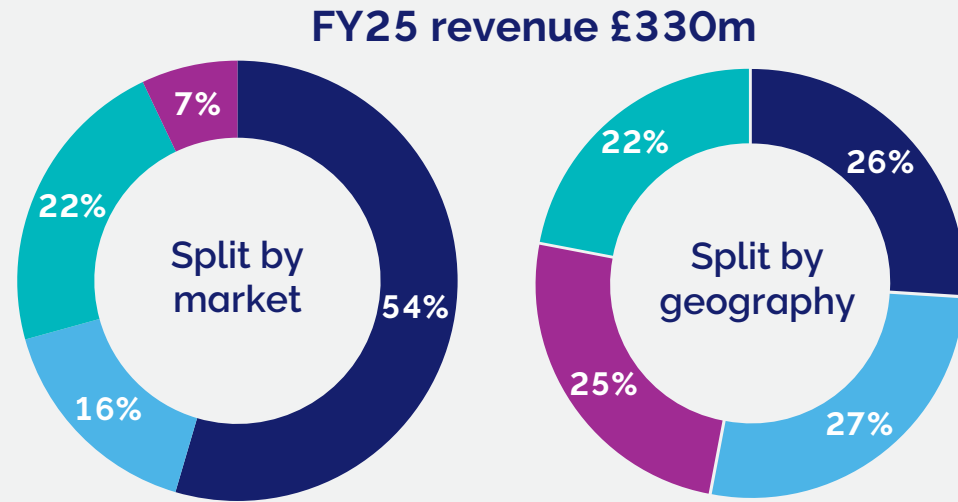
## Markets

Three key markets:



## Manufacturing bases

Belfast and High Wycombe (UK), Santa Barbara (USA), Ulm (Germany), Aix-en-Provence (France) and Zurich (Switzerland)



## End markets

- Healthcare & Life Science
- Semiconductor
- Materials Analysis
- Other

## Geographical reach

- EMEA
- North America
- China
- Rest of Asia

Electron microscopy components



Atomic force microscopes



Fluorescence microscopy solutions



Nuclear magnetic resonance



Optical spectroscopy



Scientific imaging cameras



Nanoindentation



3D Raman & correlative microscopy



Acquisition and analysis software



# Imaging and Analysis – business model

## Electron microscopy

#1 position in the market  
>40% market share

<p>Market-leading detectors and probes for nanoscale analysis</p> <p>ASP ~£50k-£150k</p>	<p>Detector upgrades, Automation software Knowledge-based services Consumables</p>
<p>Highly light-sensitive scientific cameras, spectrographs, laser engines and other components</p> <p>ASP ~£20k-£70k</p>	<p>Raman microscopes, AFMs, nanoindenters, NMR and spinning disk confocal microscopes, Imaging software</p> <p>ASP ~£200k-£400k</p>

**Subsystem partnerships**

**End user**

- Unique end user and academic reach providing unparalleled voice of customer to keep our technology market leading
- Enables strong partnership positions to deliver critical subsystems and software capability to OEM partners
- Software ecosystem simplifies user interface and provides intelligent acquisition and outputs based on AI
- Deeply embedded with both OEM and end-user customers

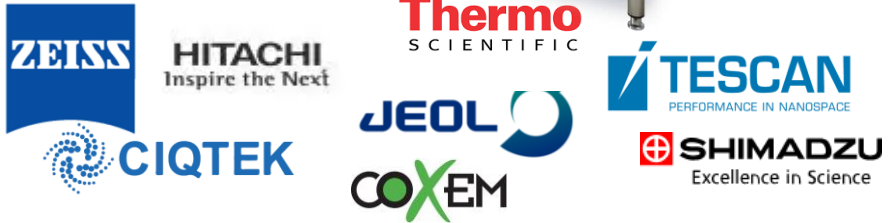
## Advanced microscopy & optical imaging systems

#2 or #3 position  
10-20% market share range presents key opportunity for growth



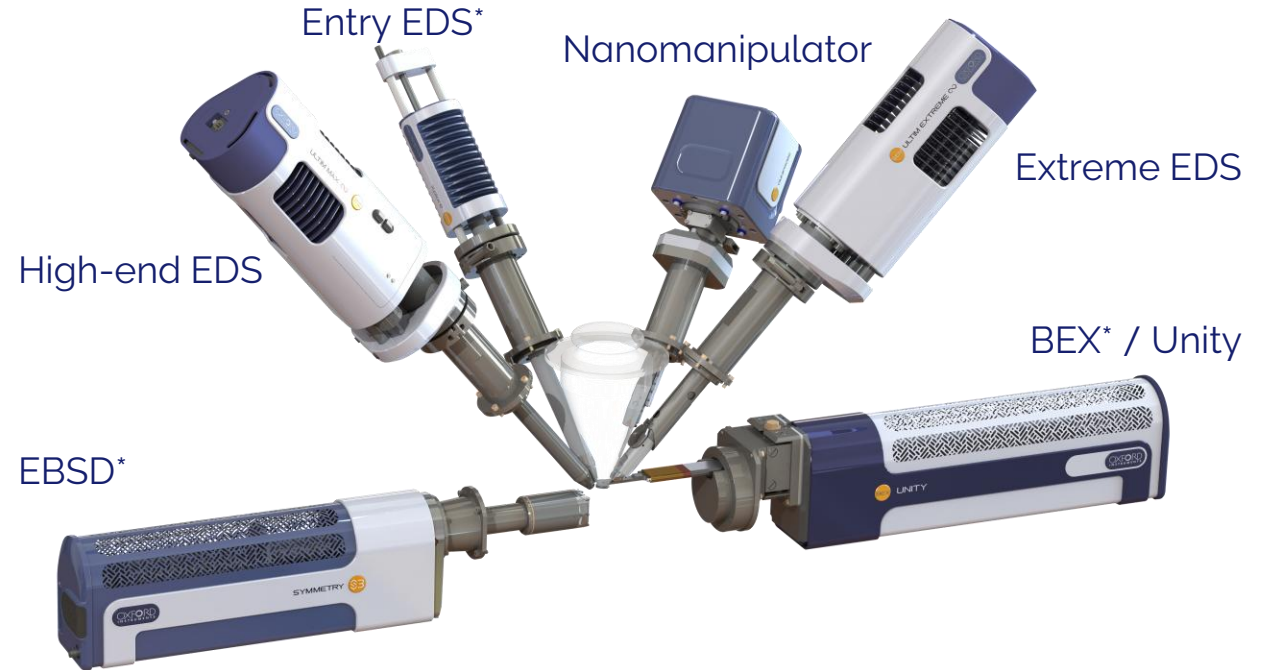
# The electron microscopy ecosystem - the most significant revenue contribution to I&A

Electron microscopes – generating the signal



Our strategic initiatives on **AI data processing**, **advanced sensor design** and **software automation** provide **clear differentiation** into the future

Electron microscope detectors – detecting the signal and interpreting the data



**~50% of all electron microscopes** globally are sold with one or more Oxford Instruments detectors  
Our **AZtec software** is the **most-used software interface** on electron microscopes

\*EDS – electron dispersive spectrography; EBSD – electron backscatter diffraction; BEX – backscattered electron and X-ray

# Camera portfolio and market segments

## Visible cameras

CCD / EMCCD

sCMOS



## Intensified cameras



## Visible spectroscopy



Astronomy and aerospace

X-ray and neutron

Quantum

Microscopy

OEM imaging & inspection

Time-resolved

Research spectroscopy

OEM spectroscopy

## Infrared cameras

Cutting edge

InGaAs

MCT



## Infrared cameras

Mid-range

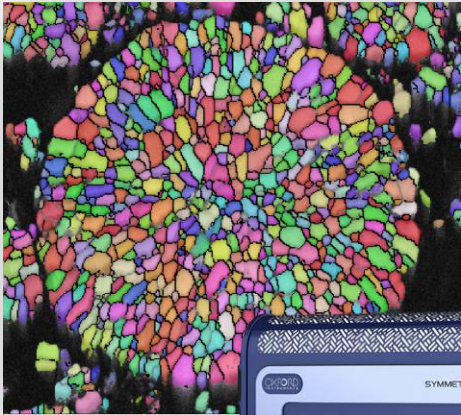


## Infrared spectroscopy



# Materials analysis

## EBSD



Market leader

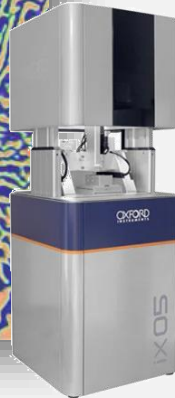
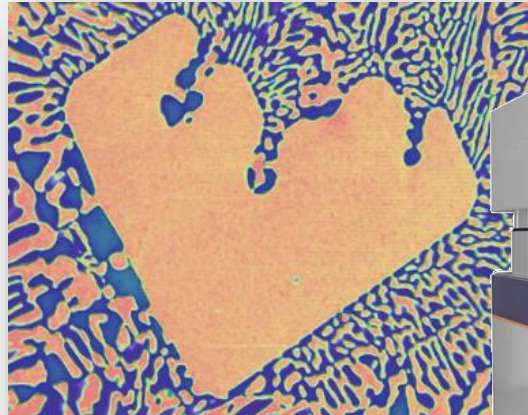


*Analysing material properties through identification and imaging of crystal orientation, phases and strain & much more.*

**Critical for prediction of material behaviour** such as deformation, fracture and corrosion. Our all-in-one solution gives **exceptional performance** for all EBSD applications and is finding a **new market** with **commercial customers**.

## Nanoindentation

NEW

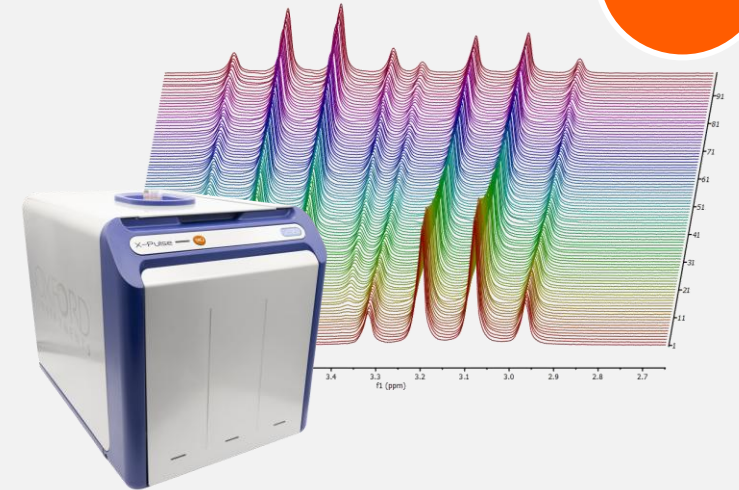


*Assessment of local mechanical behaviour of a material by pressing a sharp tip into the surface and measuring the force needed to make an indentation.*

Our **patented** micro-chip-based **force sensing technology** allows for ultra-fast "hardness mapping" at nano-scale resolution

## NMR

NEW



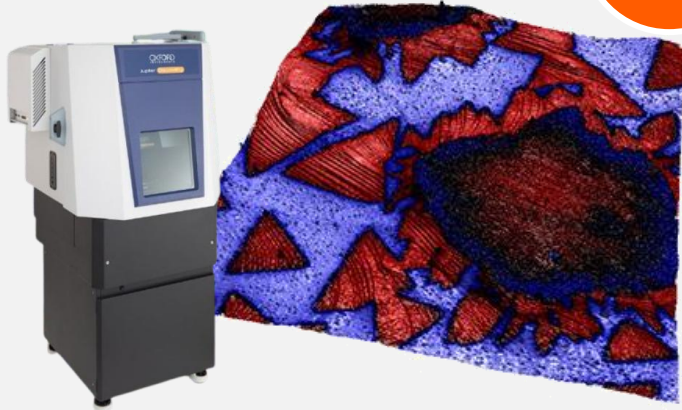
*NMR spectroscopy uses compact / high power magnets to explore molecular structure and monitor chemical reactions in many sectors including pharma, polymers and batteries.*

**Up to 4x faster** than legacy technology, our newest models offer **intuitive operation, modular design and systems tailored by end market**

# Semiconductors

## AFM

NEW

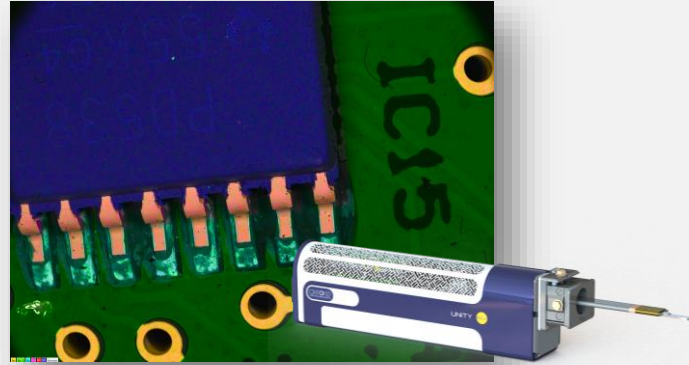


Atomic Force Microscopy (AFM) is a technique that uses a tiny probe to “feel” the surface of a material at the atomic scale, creating a detailed 3D map of its structure, down to sub-nanometre roughness

Jupiter Discovery combines **ease of use**, offers scanning **20× faster than most other AFMs**, and accommodates **semicon wafers up to 300mm** diameter.

## BEX

NEW



Our unique Unity detector combines Backscattered Electron and X-ray (**BEX**) Imaging providing real-time elemental imaging in scanning electron microscopes.

This **world-first technology, unique to Oxford Instruments**, allows for nanometre-scale **contaminant identification** across entire semicon wafers **in minutes**.

## Cameras for X-ray microscopy

Top 3



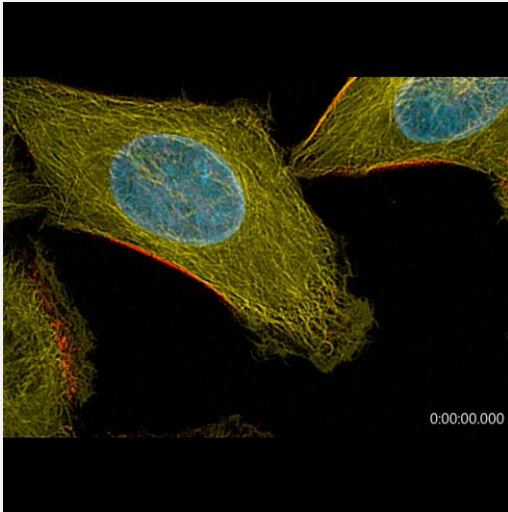
X-ray microscopy works like hospital X-ray machines but uses high-sensitivity cameras to yield resolution in the sub-micron scale and provides 3D images.

This allows **inspection** of internal structures **without cutting or damaging** delicate semiconductor components. 3D assessments of interconnects and packaging layers facilitate **detection of hidden defects** like voids or cracks.



## Spinning disk microscopy

Top 3

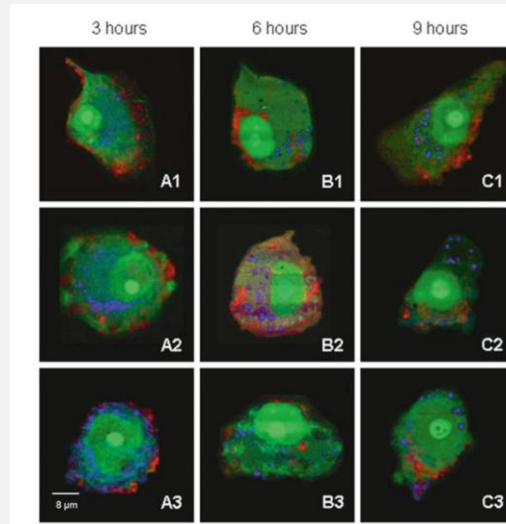


*Dynamic imaging of cells and organisms at very high resolution*

**Critical for life science research and drug discovery.** Our Andor cameras provide high resolution images and our unique micro-lens based spinning disk systems deliver those images at **unprecedented speeds.**

## Raman microscopy

Top 3



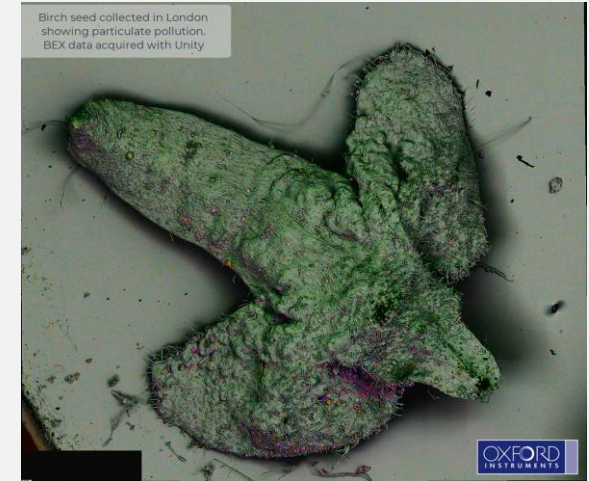
*Label-free imaging of cells*

**Development of new cancer treatments and diagnostic methods.**

Our confocal Raman microscopes in combination with our Andor cameras offer the **highest sensitivity & resolution** and **fastest speed on the market.**

## Elemental analysis (EDS)

Market leader



*High resolution imaging and analysis of medical implants & environmental pollutants*

We offer the **fastest and most sensitive elemental analysis** in the electron microscope. Our **powerful but easy to use** AZtec software and EDS detectors command a **global share of ~50%.**

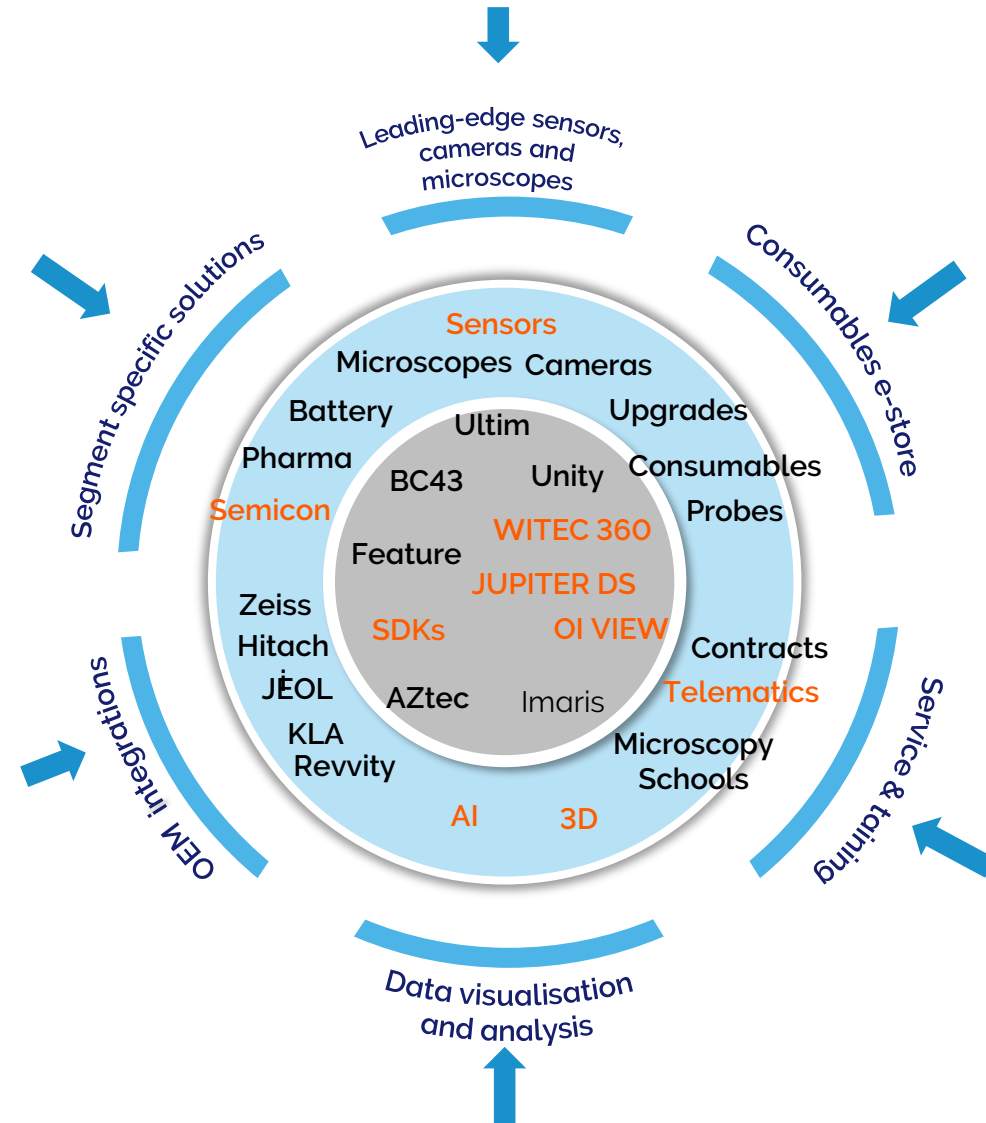
# Why do we win with our product and software ecosystem?

Years of experience, deep market intimacy and application understanding enables us to **develop the highest performance devices** that are also **optimised for ease of use...**

...Our solutions are protected by **background IP** and the **primary differentiator** of Oxford Instruments

## The I&A product ecosystem

- Building gateways to enter
- Creating reasons to stay inside



# AI and machine learning enhances offer to customers and maintains leading edge

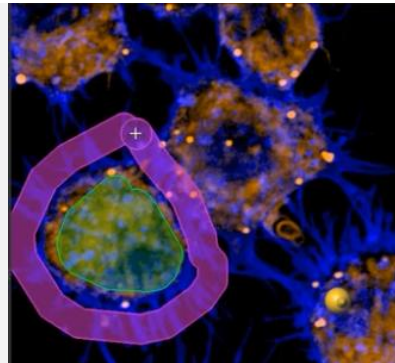
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Manual identification and classification of specific objects in hundreds of images is incredibly time-consuming and prone to human error. We have deployed AI across Life and Material science applications to automate image screening, whilst simultaneously improving the quality of analysis.

## Life Sciences

Our Imaris software has functionality which allows rapid training of the AI – the user can “paint” a handful of objects in a training dataset as good/bad, healthy/unhealthy, etc.

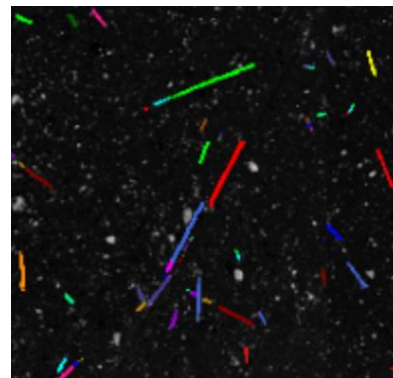
The AI can then be deployed on masses of images, automatically categorising and cataloguing millions of objects using this simple-to-create training model.



## Material Sciences

Identifying and characterising asbestos fibres in electron microscope images is particularly challenging.

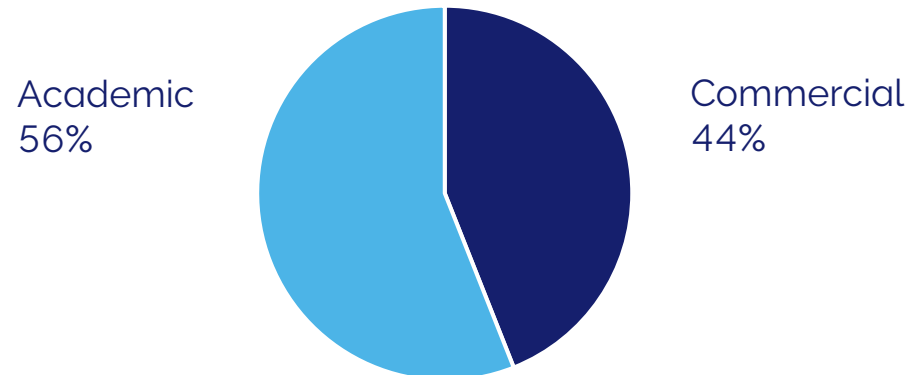
Our new AZtecAsbestos AI software screens electron microscope images, and then rapidly deploys EDS detection to classify the fibres in question, this AI-enabled workflow is 50x faster than the traditional human led approach.



# The opportunity – increase our presence in commercial and industrial customers

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- **Commercial and R&D markets are considerably larger than academia**
- **Faster growth than academic markets**
- **Continuing increase in the need for nanoscale characterisation across several industrial segments**
- **Greater need for highly profitable service**



## The opportunity to succeed with our technology in commercial markets is now:

- OI30 strategy delivers operational and service readiness to live up to industry expectations
- Global manufacturing strategy offers global market access
- I&A structure gives us the scale across advanced microscopy product lines and a standard software interface
- Regional Sales model & Marketing Centre of Excellence enables global customer access across product lines

# Structural growth markets, differentiated technology, excellent margins: an exciting future

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## 01 Managing geopolitics with agility

- AFMs made in Germany
- EDS made in China
- Nanoindenter made in the UK

## 03 Belfast business stabilised

- Restructuring completed
- New OEMs won
- Refresh of product lines underway

## 02 New product launches and awards

- Jupiter Discovery AFM
- NMR XPulse 90
- Imaris 11 3D rendering software maintains leadership
- IoP and Microscopy Today awards for Unity

## 04 The opportunity

- Excellent business with differentiated technology
- Mid to high single digit growth
- Sector-leading margins, high ROIC