# Fireside chat: Oxford Instruments Advanced Technologies

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# Oxford Instruments at a glance

**£443.4m** FY25 revenue*

**17.9%** FY25 adjusted operating profit margin*

## Serving three core structural growth markets**

| Materials Analysis | Semiconductor | Healthcare & Life Science |
|---|---|---|
| 43% | 34% | 17% |

In two divisions

**Imaging & Analysis**
Microscopy, cameras, analytical instruments and software

**Advanced Technologies**
Compound semiconductor fabrication equipment and X-ray tubes

**8 well-invested manufacturing sites** in the UK, Europe and the US**, including a brand-new purpose-built compound semiconductor facility** at Severn Beach, near Bristol

**c. 2,000** employees in **23** countries

20%+ employees PhD scientists or engineers

* For continuing operations **Other markets, including quantum, 6%

# Structured in two divisions

| | Imaging & Analysis | Advanced Technologies |
|---|---|---|
| Capabilities | Leading range of microscopy, scientific cameras, spectroscopy and associated analytical tools and software | Compound semiconductor fabrication equipment; X-ray consumables |
| 24/25 pro-forma results and mid-term target | **Revenue** £330.5m<br>**Margin** 22.4%*<br>*Mid-term margin target* *23-25%* | **Revenue** £112.9m<br>**Margin** 5.0%*<br>*Mid-term margin target* *10-12%* |
| Strategic priorities | **Excellent business and good track record**<br>• Share best practice across businesses and regions<br>• Standardise processes<br>• Improve operating efficiency<br>• Increase exposure to commercial markets | **Focus business on critical actions**<br>• Extract full growth and margin potential from compound semi market and new facility<br>• Increase exposure to commercial markets<br>• Improve operational performance and efficiency |

*Pro-forma numbers for continuing operations following the divestment of NanoScience in January 2026.

# Compound semiconductors: what's the difference?

The efficiency and flexibility of compound materials enables applications not possible with silicon

- Higher energy efficiency
- Higher power
- Wider temperature range
- Greater optoelectronic properties

Higher growth market with 10% - 20% CAGR

**Indium phosphide & gallium arsenide**

Increased optical fibre data bandwidth for next gen lasers and receivers

**Gallium arsenide**

3D sensing arrays and short-range fibre connections in datacentres

**Gallium nitride**

5G/6G base stations, power-efficient consumer electronics and micro-LED display

**Silicon carbide**

More efficient power conversion
in electric vehicles & renewable energy

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# Plasma Technology: our strategic evolution

## Origins: high-end pure research

- Founded in **1980** to address the high-end plasma physics research market
- Acquired by Oxford Instruments in **1990**
- **Broad compound capability** with no area of focus: focus on broad technology seed investments

**1980-mid-2010s**

## Transition to serve academic and commercial markets

- **Establishes position** with **academic** and low volume manufacturing **commercial** customers
- **Global installed base reaches** more than **3,500 systems**

**mid-2010s-early 2020s**

## Investment and strategic focus on volume manufacturing

- **£70m+ investment** in world-class Severn Beach facility, opened in 2024
- Strategic focus on applications for **datacomms, augmented reality, uLED** and **power electronics** deploying indium phosphide, gallium nitride, gallium arsenide and silicon carbide
- **Pivot** to **high volume manufacturing** customers
- **Improved sales & service capability** inc 'white glove' offering for volume production

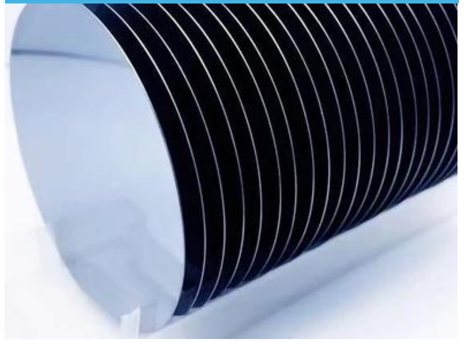
**2024-2026 and beyond**

# Playing a critical part in the compound semiconductor value chain

**Boule growth**

Boules are grown…

**Wafering**

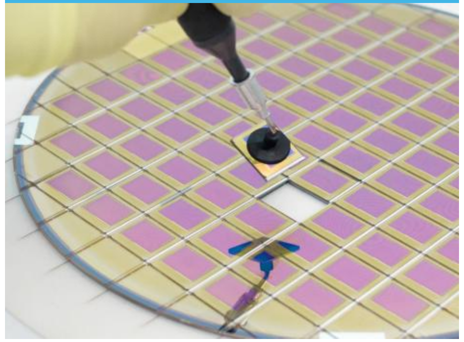


…then sliced into wafers…

**Front end processing**

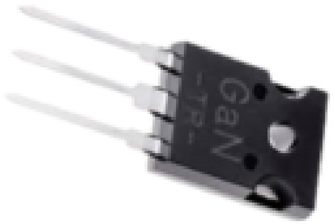
Layers are etched and deposited on the wafer using process gases. Plasma Technology operates in this part of the value chain

**Back end processing**



Wafers are diced into individual chips…

**Packaging**



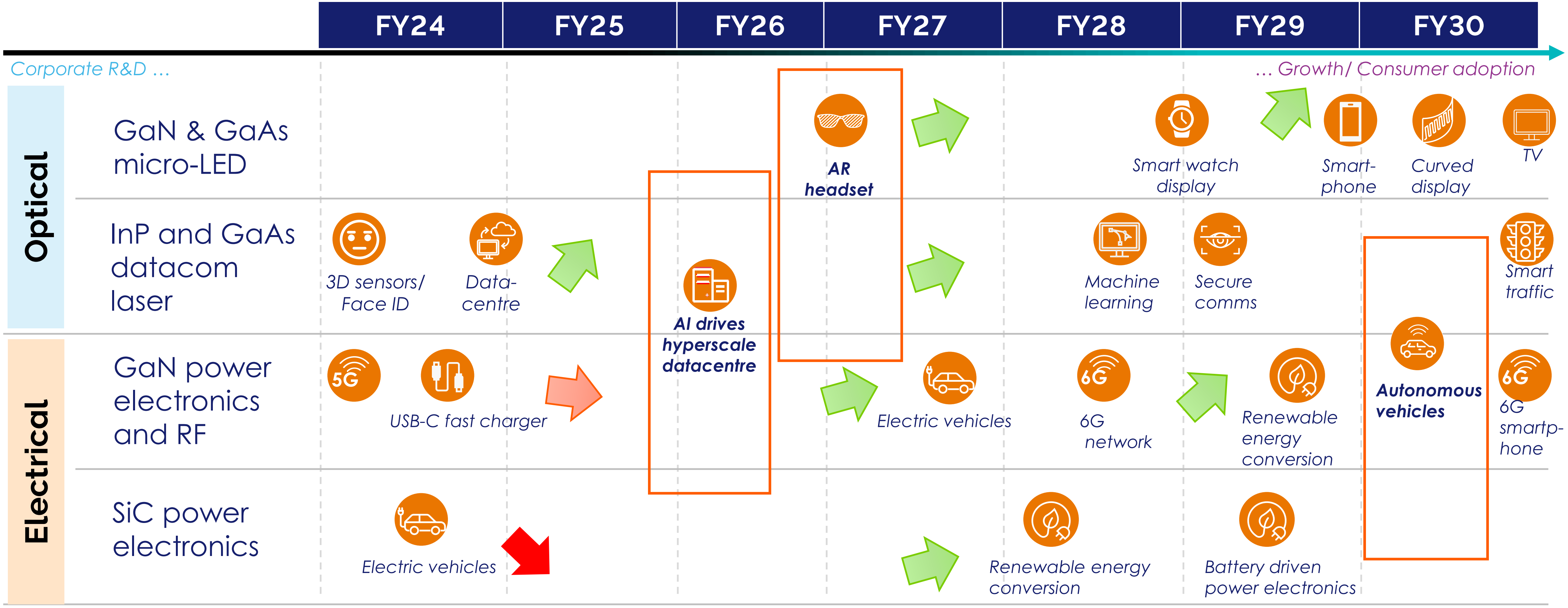
… and incorporated into the final packaged device

Broad range of processes in ‘Front End’ - Epi Growth, Etch, Deposition, ALD, Ion Beam. Players include: →

← Front end of line processing represents c. 65% of capital expenditure in compound semiconductor market

AIXTRON
Veeco
Plasma Therm
scia systems
Beneq
samco PARTNERS IN PROGRESS
evatec process systems
ULVAC
SPTS A KLA Company

# Increasing volume of applications for Compound Semiconductors



Capex market inflections / significant changes

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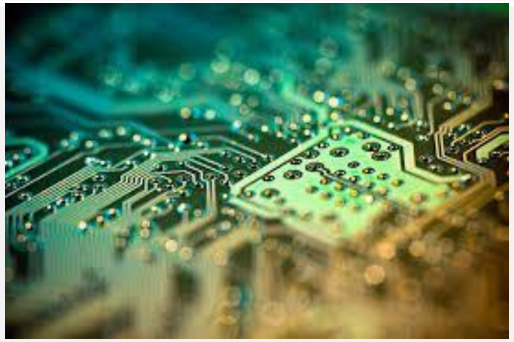
# Focus in an expanding landscape of compound semiconductor applications

Current lifecycle stage:
**Production ramp**

## Laser transceivers

- Fabrication of datacom lasers using InP, GaAs
- Etch and deposition applications
- Driven by data centre scaling to support AI



Current lifecycle stage:
**Placement systems**

## Gallium nitride (GaN) power

- Fabrication of power devices
- High efficiency, low thermal load
- Automotive on-board chargers (OBC), consumer devices & AI servers

## Micro LED (uLED)

- Fabrication of uLED
- Etch and atomic layer deposition to improve sidewall quality and maximise quantum efficiency
- High brightness display applications – augmented reality glasses

Current lifecycle stage:
**Corporate research**

# The compound semiconductor ecosystem

**#1 supplier** to **major semiconductor universities**

**Increasing installed base** for **next generation** compound semi **production** applications

**Enabling** semiconductor **manufacturing yields** and cost reductions to support scaling

**Academic R&D:**
**40% Plasma Technology revenue**

Fraunhofer CSP
University of Oxford
Berkeley Lab
California Institute of Technology
The Hong Kong University of Science and Technology
University of Southampton
RWTH Aachen University
University of Glasgow
UCSB
AIST National Institute of Advanced Industrial Science and Technology (AIST)
University at Albany State University of New York
TU/e Technische Universiteit Eindhoven University of Technology
NC State University
cnrs
EPFL
leti ceatech
MIT MIT
GRC Glenn Research Center at Lewis Field

**Corporate R&D:**
**10% Plasma Technology revenue**

VueReal
tsmc
Dow
ABB
SAIT
ETRI Electronics and Telecommunications Research Institute
Bosch
Tyntek Corporation
Texas Instruments
ITRI Industrial Technology Research Institute
NXP
Analog Devices
imec aspire invent achieve
Leonardo
Mitsubishi
Lumileds
Sony
plessey microLEDs

**Compound semiconductor production:**
**50% Plasma Technology revenue**

X-FAB Mixed-Signal Foundry Experts
Epson
Wolfspeed
Hamamatsu
Nokia
三安光电 Sanan Optoelectronics
ams OSRAM
ST life.augmented
muRata
Coherent
SiCrystal AG
II-VI Laser Enterprise A Global Leader in Semiconductor Lasers
Toshiba
ROHM Semiconductor
Vishay
Silan
soitec
MACOM
晶湛半导体 Enkris Semiconductor
Fujitsu
Power Integrations
Lumentum
Sumitomo
Ennostar
Broadcom

**Note: Graphic does not necessarily represent OI customers.**

OI Instruments

# Thank you