Oxford Instruments plc
Tubney Woods, Abingdon, Oxon OX13 5QX, UK
Tel: +44 (0) 1865 393200
Email:info.plc@oxinst.com
www.oxford-instruments.com

Press Release

Release Date: 7am Tuesday 14 November 2017

Oxford Instruments plc
Announcement of Half Year Results for the six months to 30 September 2017

Oxford Instruments plc, a leading provider of high technology products and systems for industry and research, today announces its Half Year Results for the six months to 30 September 2017.

	Half year to 30 September 2017 £m	Half year to 30 September 2016 £m	**% change**
Revenue[1]	**132.1**	132.4	**-0.2%**
Adjusted* operating profit[1]	**18.8**	16.4	**+14.6%**
Adjusted* profit before tax[1]	**16.3**	13.1	**+24.4%**
Profit/(loss) before tax[1]	**12.7**	(0.6)	
Adjusted* basic earnings per share[1]	**22.3p**	18.0p	**+23.9%**
Dividend per share (interim)	**3.7p**	3.7p	
Operating cash flow[1]	**4.1**	2.0	
Net debt	**45.5**	141.1	

[1]*Continuing operations*

Financial Highlights:

- Reported orders up 6.0% to £148.5 million (2016: £140.1 million), an increase of 1.8% at constant currency
- Reported revenue in line with previous year, down 4.5% at constant currency
- Adjusted profit before tax from continuing operations up 24.4% to £16.3 million (2016: £13.1 million)
- Adjusted operating margin up 180 basis points primarily reflecting currency benefits
- Profit before tax from continuing operations of £12.7 million (2016: loss of £0.6 million)
- Constant currency order book of £141.8 million up 3.3% and 11.8% against September 2016 and March 2017 respectively
- Significantly strengthened balance sheet with proceeds from sale of Industrial Analysis leading to reduction in net debt to £45.5m (2016: £141.1 million)
- Interim dividend maintained at 3.7 pence

Operational Highlights:

- Implementation of Horizon Strategy is progressing, repositioning the Group for long term growth and margin improvement, building on our world-class nanotechnology expertise
- Building management, leadership and core capabilities across the Group
- Portfolio management progress with sale of Industrial Analysis completed in July 2017
- New market focused structure to align the Group's management and reporting sectors with our customer and application focus, and to deliver synergies and benefits across the Group:
    - Materials & Characterisation: focuses on applied R&D and commercial customers, enabling the fabrication and characterisation of materials and devices down to the atomic scale
    - Research & Discovery: advanced solutions that create unique environments and enable measurements down to the molecular and atomic level, used in fundamental and applied research
    - Service & Healthcare: provides customer service and support for our own products and the service, sale and rental of third party healthcare imaging systems
- Continued investment in innovation with R&D spend maintained at 9.8% of revenue
- Appointment of Steve Blair as Senior Independent Director

Ian Barkshire, Chief Executive of Oxford Instruments plc, said:

“Our customers recognise us as key enablers of their strategies. As such, we are enjoying increasingly collaborative commercial relationships, delivering solutions that enable them to succeed at the frontiers of science and within applied R&D and commercial applications.

“Our new reporting structure enhances our focus on the growth drivers of our markets and the evolving demands of our customers and will drive cross-business synergies.

“Our expectations for the current financial year remain unchanged, supported by growth in constant currency orders and order book, the timing of new product introductions, our normal second half seasonal bias and favourable currency effects.

“I am encouraged by the progress we have made in the early stages of implementing the Horizon strategy, providing confidence in the longer term delivery of sustainable revenue growth and margin improvement.”

Enquiries:

Oxford Instruments plc Tel: 01865 393200
Ian Barkshire, Chief Executive
Gavin Hill, Group Finance Director

MHP Communications Tel: 020 3128 8100
Rachel Hirst / Luke Briggs

Number of pages: 39

**NOTE: Throughout this half year announcement we make reference to adjusted numbers. These are presented as, in the opinion of the Directors, they present a clearer picture of the business performance. A full definition of adjusted numbers can be found in note 2. Where we make reference to constant currency numbers these are prepared using the exchange rates which prevailed in the previous year rather than the actual exchange rates which prevailed in the year.*

Chief Executive's Review

Overview

We have made good progress in the initial implementation stages of our Horizon strategy whilst maintaining a focus on the near term delivery.

We have continued our proactive approach to portfolio management, successfully completing the disposal of the Industrial Analysis business in July. As a more focused nanotechnology Group, we have reorganised our structure in line with our chosen customer segments and applications.

Our three new reporting sectors - Materials & Characterisation, Research & Discovery, and Service & Healthcare – include business units with the same end-markets, enabling us to deliver higher value to our customers and drive synergies and efficiencies across the Group.

Reported orders for the Group were up 6.0% (1.8% at constant currency) to £148.5 million (2016: £140.1 million), with growth in both Materials & Characterisation and Research & Discovery, partially offset by lower orders in our Service & Healthcare sector due to fewer orders in our US Healthcare business.

Reported revenue was broadly in line with last year at £132.1 million (2016: £132.4 million), down 4.5% at constant currency. Adjusted operating profit was up 14.6% to £18.8 million (2016: £16.4 million), although down 12.2% at constant currency, with a strong performance in Materials & Characterisation and growth in Service & Healthcare offset by reduced volumes in Research & Discovery.

The order book, representing orders for future delivery, as at 30 September 2017 increased 11.8% at constant currency since the year end and is up 3.3% at constant currency on the prior half year.

Continuing adjusted basic earnings per share increased by 23.9% to 22.3p. The dividend is maintained at 3.7 pence, in line with last year.

The proceeds from the sale of Industrial Analysis have significantly strengthened the balance sheet with net debt at the end of the period reduced to £45.5 million, down from £109.3 million at year end.

Horizon Strategy Progress

We introduced our Horizon Strategy in June, outlining how it will help us achieve sustainable revenue growth and margin improvement. Horizon focuses the Group on those markets where nanotechnology will provide long-term growth drivers for our customers and where we have the opportunity to achieve or maintain market leadership. We provide value for our customers by offering solutions that enable them to be successful, tailoring our products and services to help them meet their current and future needs.

Our customers are at the centre of our focus, and I previously outlined the key capabilities that we are embedding across our organisation. These are market intimacy, innovation and product development, customer support, and operational excellence.

While it is still early in our Horizon journey we have made good progress in a number of areas in support of our new strategy. We have undertaken significant management of the portfolio, successfully completing the sale of Industrial Analysis in July, making us a more focused nanotechnology Group. We are building the management, leadership and core capabilities across the Group to enable us to deliver the Horizon strategy. Of the 40 top level leaders in the Group, 37% have been appointed since September 2016; and we recently recruited a US based Group Commercial Director to establish sales best practice globally. We continue to target experienced leaders from a range of different markets and disciplines to help us build on our capabilities.

A core part of the Horizon strategy is the transition of the Group from a product and technique focus to being customer application and market focused. Our new structure aligns our business operations, management and reporting sectors with our chosen market and customers' applications. It is also helping us build stronger relationships with our customers and will drive future synergies across and within the businesses. The Materials & Characterisation sector comprises our Asylum Research, NanoAnalysis and Plasma Technology businesses. Research & Discovery includes

Andor Technology, NanoScience (including Magnetic Resonance), X-ray Technology and ScientaOmicron. Our Service & Healthcare sector remains OiService and OI Healthcare.

Our new market focus structure is aligned with serving our core end markets in Healthcare & Life Science; Semiconductor & Communications; Quantum Technology; Environment; Energy; Advanced Materials; and Research & Fundamental Science. Beneath this top tier we have identified and are actively focusing on a number of specific niche segments that present particularly attractive growth opportunities.

We have also made good progress embedding our operating model, standardising a number of processes against best practice, and ensuring that we are leveraging the expertise we have across the Group to increased effect.

Our customers recognise us as key enablers of their strategies. As such, we are enjoying increasingly collaborative commercial relationships, delivering solutions that enable them to succeed within fundamental research, applied R&D and commercial applications. Our new reporting structure enhances our focus on the growth drivers of our markets and the evolving demands of our customers and will drive cross-business synergies.

Sector Performance

Turning to the performance of our individual sectors:

Materials & Characterisation focuses on applied R&D and commercial customers, enabling the fabrication and characterisation of materials and devices down to the atomic scale. This sector delivered a strong first half, with positive contributions from the NanoAnalysis, Plasma Technology and Asylum Research businesses. Reported revenue increased by 10.6% to £50.1 million (2016: £45.3 million), with reported adjusted operating profit increasing to £7.2 million (2016: £4.2 million). Furthermore, strong reported order growth of 25.8% to £61.9 million (2016: £49.2 million) provided positive order book growth for future deliveries. The enhanced results were driven by strong demand for recently launched higher margin products, an increased focus on end customer applications and operational efficiencies. In particular, we saw increased demand for our semiconductor and advanced materials processing solutions and our portfolio of scanning probe microscopes.

Research & Discovery provides advanced solutions that create unique environments and enable measurements down to the molecular and atomic level, used in fundamental and applied research. This sector saw increased orders in the period of £57.8 million (2016: £54.3 million), up 6.4% on a reported basis driven, in part, by growth in quantum related research applications and increased demand for our benchtop NMR products. Revenues of £48.0 million were down 13.4% on the previous year (2016: £55.4 million). This was due firstly to a softer financial performance from the optical microscopy products in Andor Technology as we transition from third party systems to our own portfolio. In addition, the higher proportion of longer lead time customised cryogenic and magnet system orders with lower margins in NanoScience is depressing financial performance. We are at the early stages of addressing this by moving towards a greater proportion of revenue derived from standardised systems.

Service & Healthcare provides customer service and support for our own products and the service, sale and rental of third party healthcare imaging systems. This sector increased reported revenue by 7.6% to £34.1 million, up 2.5% at constant currency (2016: £31.7 million) driven by strong demand for services related to our own products. Reported adjusted operating profit increased 42.3% to £7.4 million, representing an increase at constant currency of 34.6%, supported by an increased contribution from services for our own products and healthcare related services for third party equipment. Increased orders for services relating to our own products were more than offset by reduced orders for refurbished equipment from our US Healthcare business due to a combination of phasing and previously reported structural changes in the market. Our strategy is to move the US Healthcare business towards a higher proportion of service revenue.

R&D

Innovation remains core to our Horizon strategy and we continue to invest in solutions and technology that help our customers improve their productivity and develop new capabilities. We have maintained our level of investment in R&D initiatives at £13.0 million (2016: £13.0 million), equivalent to 9.8% of revenue (2016: 9.8%).

People

It is our talented people that make us successful and our thanks go to all our employees for their support and dedication to helping Oxford Instruments support our customers.

Dividends

The Board has declared an interim dividend of 3.7 pence per share (2016: 3.7 pence), in line with last year.

Current Trading and Outlook

Our full year expectations remain unchanged, supported by growth in constant currency orders and order book, the timing of new product introductions, our normal second half seasonal bias and favourable currency effects.

We are encouraged by the early progress in the implementation of the Horizon strategy, providing confidence in the longer term delivery of sustainable revenue growth and margin improvement.

Ian Barkshire
Chief Executive
14 November 2017

Operations Review

As outlined above, our Group now reports in the following three sectors: Materials & Characterisation, Research & Discovery, and Service & Healthcare.

Materials & Characterisation

	2017 £m	2016 £m	Growth	Constant Currency Growth[1]
Revenue	**50.1**	45.3	10.6%	6.6%
Adjusted[2] operating profit	**7.2**	4.2		
Adjusted[2] operating margin	**14.4%**	9.3%		
Profit before tax after adjusting items	**5.8**	2.1		

[1]For definition refer to note on page 2 of highlights
[2]Details of adjusting items can be found in Note 2 of these Financial Statements

The Materials & Characterisation sector is comprised of Asylum Research, NanoAnalysis and Plasma Technology. This sector focuses on applied R&D and commercial customers, enabling the fabrication and characterisation of materials and devices down to the atomic scale. Our products are used across a broad range of applications, for example those undertaking work with semiconductors, photonic devices, metals and polymers, exploring fundamental properties through to regulatory quality assurance (QA) and quality control (QC). We continue to aid fundamental understanding in these areas to facilitate the development of new devices as well as the next generation of higher functioning, stronger and lighter materials. Revenue in Materials & Characterisation comes from a broad range of end applications with about 74% from Semiconductor & Communications and Advanced Materials related customer segments. Industrial and commercial customers represent about 48% of revenue, with the balance from academic and government funded customers.

In the first half Materials & Characterisation continued to show improvement with increased orders, revenue and profitability driven by strong demand for recently launched products and an energised focus on customer applications.

Asylum Research is the technology leader in scanning probe microscopy (SPM) for both materials and bioscience applications. Focusing on the challenges customers face has helped us develop a number of products that have been well received in the market. The Origin+ offers a more affordable and easy to use SPM to the broader market that still wants enhanced capability. We have seen a resurgence in first half orders due to performance enhancements aligned to specific market needs. The recently launched Cypher VRS is providing new insights to researchers exploring disease mechanisms and the efficacy of new medicines. It achieves this by enabling the observation of biological interactions in real time and is the first and only full-featured video rate SPM. We are also seeing increased interest in our solutions for advanced materials, energy production and storage applications.

NanoAnalysis delivers innovative solutions that enable materials characterisation and manipulation at the nanoscale within electron microscopes and ion-beam systems. Our products determine the material properties of plastics through to advanced aerospace components and quantum devices. A steady half year of growth in both orders and revenue was supported by two major product launches. Symmetry, our super-fast material structure analyser, is providing major productivity improvements for customers researching and manufacturing semiconductors and advanced materials for example in the automotive, aerospace and high performance steel markets. Symmetry overcomes the technological barriers of incumbent technology enabling significantly higher quality of data at much higher speeds.
The newly launched Ultim detectors are providing increased capabilities and productivity for customers developing advanced materials, semiconductors and batteries by delivering unparalleled analysis speed and sensitivity. Product innovations continue to drive new capabilities and productivity improvements across a diverse range of end customer applications.

Plasma Technology provides advanced material etch and deposition processes and solutions to semiconductor research laboratories and advanced specialised production facilities that exploit nanotechnology for a range of applications including laser devices, plastic electronics, high brightness laser emitting diodes (LEDs) and microelectromechanical systems (MEMs) for sensors and life science applications. A strong first half was supported by favourable general market conditions. We have seen significantly increased interest in the optoelectronics device market, where our customers are developing laser and photonic devices that are key to enabling the increased data communication rates resulting from increased device connectivity and usage through the development and ramp up for 5G networking. Our expertise in the advanced processing of compound semiconductors provides the foundation for growth within, and expansion into, related specialised production markets.

Research & Discovery

	2017 £m	2016 £m	Growth	Constant Currency Growth[1]
Revenue	**48.0**	55.4	(13.4%)	(17.5%)
Adjusted[2] operating profit	**4.2**	7.0		
Adjusted[2] operating margin	**8.8%**	12.6%		
Profit before tax after adjusting items	**0.1**	2.9		

[1]For definition refer to note on page 2 of highlights
[2]Details of adjusting items can be found in Note 2 of these Financial Statements

The Research & Discovery sector includes Andor Technology, Magnetic Resonance, NanoScience, X-ray Technology and our minority share in ScientaOmicron. This sector provides advanced solutions that create unique environments and enable measurements down to the molecular and atomic level, used in fundamental and applied research. We are able to build on our relationships with customers working on breakthrough applications in research to gain insights and support future commercial applications.

In this sector, 42% of revenue comes from customers working within Healthcare & Life Science applications. Customers exploring new semiconductor materials and devices make a significant contribution, and an increasing share is coming from customers working in quantum technology applications and research. Quantum Technology is a strong growth area for the sector due to increased government and corporate funding including applications such as quantum information processing and quantum sensors. Research & Fundamental Science contributes 4% of revenue. The sector has a higher proportion of revenue from academic and government funded customers at 72%, with 28% from commercial and industrial customers.

This sector saw an increase in orders in the period but with lower revenue and profitability due to softer financial performance from our optical microscopy products in Andor Technology and a higher proportion of longer production lead time specialist system orders from NanoScience.

Andor Technology is the global leader in the design and manufacture of high performance scientific imaging cameras, spectroscopy solutions and microscopy systems for research and some commercial applications. Revenue is predominately from life science applications with significant contributions from semiconductor materials and astronomy applications. Improved performance from our scientific cameras for astronomy and our imaging analysis software, Imaris, was more than offset by lower sales of our optical microscopy systems, leading to softer financial performance in the half year. The reduction in microscopy sales is due to the transition from third party systems to our own portfolio; increased orders at the back end of the half year, and the launch of the lower price positioned Dragonfly 200, provide positive momentum for the second half of the year. Our Imaris software is enabling customers in cell biology and neuroscience to visualise and interpret the huge data sets that are now being produced by modern microscopy systems. This has driven strong growth for Imaris, which we sell for use with our own and other optical microscopy systems. Our high speed cameras are being deployed in quantum imaging research and we continue to enhance our range of market leading astronomy solutions. Over 25 of our deep cooled cameras were used around the world in the recent and first ever observation of the optical signature of the violent collision of two neutron stars, which were identified by gravitational wave ripples in space-time.

NanoScience designs, manufacturers and supports market-leading products that provide the unique environments critical in fundamental science, the exploitation of many quantum technology applications and new materials and device development in the physical sciences. Strong order growth was driven by government and commercial focus and associated funding into quantum technology, including quantum information processing and sensors. An increase in the proportion of customised magnet and cryogenic systems has depressed financial performance. We are addressing this by moving towards a greater proportion of revenue from standardised systems. We have enhanced our Triton ultra-low temperature cryogenic product range with the launch of “Io”, the most compact, affordable and easy to use Cryogenic platform, making this technology available to a wider range of customers, for example those developing low temperature sensor and optical devices.

Magnetic Resonance's easy to operate benchtop NMR solutions provide essential information about the identification and quantification of foods and chemicals for academic and industrial researchers and for QA and QC applications. The business, which was previously within the Industrial Products sector, has been merged into our NanoScience business providing operational efficiencies and broader capabilities to drive future growth. Our enhanced Pulsar and MQC+ systems provide efficiencies compared to wet chemistry and higher cost alternatives, driving strong order growth. In addition, our recently launched GeoSpec rock core analyser is providing increased capabilities for the assessment of economic extraction of oil through its increased sensitivity.

X-ray Technology supplies X-ray sources to leading OEM's for industry, research and medical applications, including material characterisation, real-time medical imaging and analysis of multi-layer printed circuit boards. Growth in healthcare applications was more than offset by a decline from industrial segments.

The ScientaOmicron joint venture created the largest player in the Ultra-High Vacuum surface science field. The Group has a 47% share in the joint venture. The business is showing year on year improvement in its operational and financial performance. During the first half of the year the shareholders completed a refinancing of the business with a rights issue in order to strengthen the balance sheet and provide long-term liquidity.

Service & Healthcare Sector

	2017 £m	2016 £m	Growth	Constant Currency Growth[1]
Revenue	**34.1**	31.7	7.6%	2.5%
Adjusted[2] operating profit	**7.4**	5.2		
Adjusted[2] operating margin	**21.7%**	16.4%		
Profit before tax after adjusting items	**6.7**	4.3		

[1]For definition refer to note on page 2 of highlights
[2]Details of adjusting items can be found in Note 2 of these Financial Statements

The Service & Healthcare sector comprises the Group's maintenance service contracts, billable repairs, training and support services, and spare part sales related to Oxford Instruments' own products under the OiService brand; and the sale, service and rental of refurbished third party MRI and CT machines under the OI Healthcare brand.

Reported revenue increased in the half year, driven predominantly by strong demand for our OiService offerings. Increased orders from OiService were more than offset by reduced orders for refurbished equipment sales within OI Healthcare due to a combination of the timing of sales prospects and previously reported structural changes in the market by OEM providers. Within OiService we continue our drive for enhanced customer support services tailored to their needs, including remote diagnosis and support, and online self-help. Training programmes are designed to maximise increased customer capability and productivity.

For OI Healthcare the first half has been largely focused on management restructuring, allowing us to recruit expert talent from a range of market disciplines. We are currently introducing a new Field Aware project that allows our engineers to provide our customers with real time service updates. We have also recently secured a service contract for a later model GE 3 Tesla MRI scanner. Our strategy is to move the business towards a higher proportion of service contracts and scale back sales of refurbished systems.

Finance Review

During the half year the Group disposed of its Industrial Analysis business and this has been treated as a discontinued operation in the financial statements. Accordingly, the numbers detailed in the Finance Review refer to continuing operations and exclude the results of Industrial Analysis in both the current and prior periods.

Reported revenue was broadly in line with the same period last year at £132.1 million (2016: £132.4 million). Revenue, excluding currency effects, declined by 4.5%, with the movement in average currency exchange rates over the last year positively impacting reported revenue by £5.7 million.

Reported orders increased by 6.0% to £148.5 million (2016: £140.1 million), an increase of 1.8% at constant currency. At the end of the period the Group’s order book for future deliveries stood at £141.8 million (2016: £140.0 million), growth of 1.3% on a reported basis and 3.3% at constant currency.

Adjusted operating profit from continuing operations increased by 14.6% to £18.8 million (2016: £16.4 million). Adjusted operating profit from continuing operations, excluding currency effects, declined by 12.2%. This was principally due to two factors: first, the impact from lower first half microscopy revenue, some of which is expected to unwind in the second half of the year; and second, the longer production lead times from our customised magnet and cryogenic systems, compounded by their margins being lower than the business average. As we move to a greater proportion of standardised systems and unwind the more complex orders, we expect the financial performance to improve in the medium term.

Adjusted operating margin from continuing operations increased by 180 basis points to 14.2% (2016: 12.4%), supported by currency benefits and portfolio changes.

Adjusted profit before tax from continuing operations grew by 24.4% to £16.3 million (2016: £13.1 million). A pre-tax adjusted profit of £0.7 million from the Industrial Analysis business for the three months of ownership, prior to its sale on 3 July 2017, is included in discontinued operations. For the six months to 30 September 2016 the Industrial Analysis and Superconducting Wire businesses delivered an operating profit of £2.6 million. Including discontinued operations, the Group achieved reported adjusted profit before tax of £17.0 million (2016: £15.7 million).

Non-recurring items and acquisition related costs were £0.6 million, of which £0.3 million relates to our Scienta Omicron joint venture. The movement in the mark-to-market valuation of currency hedges for future periods gave rise to a gain of £2.6 million.

Adjusted profit before tax from continuing operations of £16.3 million (2016: £13.1 million) represents a margin of 12.3% (2016: 9.9%). After the amortisation of acquired intangibles, the mark-to-market of derivative financial instruments and other adjusting items, the Group recorded a profit before tax of £12.7 million (2016: loss of £0.6 million).

Continuing adjusted basic earnings per share grew by 23.9% to 22.3 pence (2016: 18.0 pence). Continuing basic earnings per share was 17.5 pence (2016: loss of 0.9 pence).

Operating cash flow (as defined in section 3.0) increased by £2.1 million to £4.1 million. Adjusted operating cash (defined as adjusted EBITDA, less movement in working capital, capitalised development expenditure and capital expenditure) represents 10.1% (2016: 3.7%) of adjusted operating profit. Proceeds from the sale of our Industrial Analysis business contributed to a fall in net debt from £109.3 million to £45.5 million, representing a net debt to EBITDA ratio (for banking covenant purposes) of 0.9 times, well within our banking covenant of 3.0 times.

Adjusted operating profit is stated before impairment and amortisation of goodwill and acquired intangibles, non-recurring items and acquisition-related costs, and the mark-to-market valuation of unexpired currency hedges, as set out in note 2 to the financial statements.

Following the sale of Industrial Analysis we have reorganised the management structure of the Group, resulting in a change to our reporting sectors. NanoAnalysis, Asylum Research and Plasma Technology constitute the Materials & Characterisation sector. Andor Technology, NanoScience and X-ray Technology are included within Research & Discovery, as well as our share of ScientaOmicron. Our Service & Healthcare sector remains unchanged, incorporating the contribution from our Healthcare businesses along with the service revenue and profits of businesses in the other two sectors. The previous NanoTechnology Tools sector comprised the product based results of the businesses within Materials & Characterisation and Research & Discovery with the addition of Magnetic Resonance (now part of NanoScience) and X-ray Technology, both of which were previously part of our Industrial Products sector. Revenue from these businesses for the half year to 30 September 2017 totalled £10.2 million (2016: £10.8 million) and was £22.7 million for the year to 31 March 2017.

The results under the new sectors, including the full year comparative (unaudited) are shown in tables 1 and 2.

Table 1: Sector information: Revenue

	Half year to 30 September 2017 £m	Half year to 30 September 2016 £m	Year to 31 March 2017 £m
Materials & Characterisation	**50.1**	45.3	104.1
Research & Discovery	**47.9**	55.4	125.2
Service & Healthcare	**34.1**	31.7	70.9
Total	**132.1**	132.4	300.2

Table 2: Sector information: Adjusted operating profit

	Half year to 30 September 2017 £m	Half year to 30 September 2016 £m	Year to 31 March 2017 £m
Materials & Characterisation	**7.2**	4.2	10.9
Research & Discovery	**4.2**	7.0	13.8
Service & Healthcare	**7.4**	5.2	13.3
Total	**18.8**	16.4	38.0

1. Income statement

The Group's income statement is summarised below.

Table 3: Income statement

	Half year to 30 September 2017 £m	Half year to 30 September 2016 £m	Change
Revenue	**132.1**	132.4	(0.2%)
Adjusted gross profit	**67.7**	69.5	(2.6%)
Administrative expenses	**(48.9)**	(53.1)	
Adjusted operating profit from continuing operations	**18.8**	16.4	+14.6%
Net finance costs	**(2.5)**	(3.3)	
Adjusted profit before tax from continuing operations	**16.3**	13.1	+24.4%
Amortisation of acquired intangibles	**(5.6)**	(6.0)	
Impairment of capitalised development costs	**-**	(0.7)	
Non-recurring items and acquisition-related costs	**(0.6)**	(0.6)	
Mark-to-market of currency hedges	**2.6**	(6.4)	
Profit/(loss) before tax from continuing operations	**12.7**	(0.6)	
Tax from continuing operations	**(2.7)**	0.1	
Profit/(loss) for the period from continuing operations	**10.0**	(0.5)	

Adjusted effective tax rate[1]	**22.1%**	21.4%	
Continuing adj. earnings per share – basic	**22.3p**	18.0p	+23.9%
Earnings per share – basic	**17.5p**	(0.9p)	
Continuing adj. earnings per share – diluted	**22.1p**	18.0p	+22.8%
Earnings per share – diluted	**17.4p**	(0.9p)	
Dividend per share	**3.70p**	3.70p	

[1] The adjusted effective tax rate is calculated excluding impairment of non-current assets, amortisation on acquired intangibles, non-recurring items and acquisition related costs and the mark-to-market of financial derivatives

1.1 Revenue

Reported revenue of £132.1 million (2016: £132.4 million) was broadly flat year-on-year. Materials & Characterisation grew by 10.6% and Service & Healthcare by 7.6%. Research & Discovery declined by 13.4%.

The depreciation of Sterling against the US Dollar, Euro and Japanese Yen has increased reported revenue by £5.7 million. Excluding currency effects, revenue grew by 6.6% for Materials & Characterisation with growth across all constituent businesses. Lower optical microscopy sales and an increase in the proportion of customised magnetic and cryogenic systems with longer production lead times, resulted in a constant currency decline of 17.5% in Research & Discovery revenue. Good growth in revenue from service of our own products more than offset a decline in Healthcare revenue, leading to constant currency revenue growth of 2.5% in Service & Healthcare.

On a geographical basis, at constant currency, revenue grew by 4.6% in Europe. Revenue in North America, Asia and Rest of World declined by 10.0%, 1.6% and 64.3% respectively. Orders, at constant currency, increased by 5.5% in Europe, 9.0% in Asia and 333.3% for the Rest of World. Excluding the decline in orders from used imaging systems in the US, orders in North America increased by 5.7%.

1.2 Gross profit

Gross profit fell by 2.6% to £67.7 million (2016: £69.5 million), representing an adjusted gross profit margin of 51.2%, a decline of 130 basis points over last year.

1.3 Operating profit

Adjusted operating profit increased by 14.6% to £18.8 million (2016: £16.4 million), representing an adjusted operating profit margin of 14.2%, an increase of 180 basis points against last year. The Materials & Characterisation margin rose by 510 basis points to 14.4% (2016: 9.3%). The revenue decline within Research & Discovery contributed to a fall in adjusted operating margin of 380 basis points to 8.8% (2016: 12.6%). Service & Healthcare margin rose by 530 basis points to 21.7% (2016: 16.4%).

Our share of the ScientaOmicron joint venture showed a breakeven result in the period, an improvement of £0.4 million against the comparative period. After restructuring costs, our share of the ScientaOmicron joint venture was a loss of £0.3 million.

Currency effects (including the impact of transactional currency hedging) have increased reported adjusted operating profit by £4.4 million when compared to blended hedged exchange rates for the comparative period. Blended hedged exchange rates for the US Dollar, Euro and Japanese Yen against Sterling are all at stronger rates than last year.

At constant currency the adjusted operating profit margin was 11.4%, a decline of 100 basis points.

1.4 Adjusting items

Amortisation of acquired intangibles of £5.6 million relates to intangible assets identified on acquisitions, being the value of technology, customer relationships and brands.

Non-recurring costs during the period were £0.6 million. These comprise £0.3 million of restructuring costs relating to our US Healthcare and Asylum businesses and £0.3 million of restructuring and charges relating to the ScientaOmicron joint venture.

The Group uses derivative products to hedge its exposure to fluctuations in foreign exchange rates. It is Group policy to have in place at the beginning of the financial year hedging instruments to cover 75% of its forecast transactional exposure for that year. The Group has decided that the additional costs of meeting the extensive documentation requirements of IAS 39 to apply hedge accounting to these foreign exchange hedges cannot be justified. Accordingly, the Group does not use hedge accounting for these derivatives.

Net movements on marking-to-market derivatives in respect of future periods are disclosed in the Income Statement as financial expenditure and excluded from our calculation of adjusted profit before tax.

The mark-to-market gain in respect of derivative financial instruments was £2.6 million (2016: £6.4 million loss). This reflects a movement from a net fair value liability to a small net asset position on currency derivatives that are hedging future transactional currency exposures for the Group compared to the previous year end. The un-crystallised balance sheet asset is attributable to a rise in the value of Sterling at the balance sheet date against a blended rate achieved on US Dollar, Euro and Japanese Yen forward contracts that will mature over the next eighteen months.

1.5 Net finance costs

The Group's adjusted net finance costs fell by £0.8 million to £2.5 million (2016: £3.3 million) with net finance charges falling by £0.5 million to £2.2 million and pension financing charges falling by £0.3 million to £0.3 million.

1.6 Profit before tax

Continuing adjusted profit before tax increased by 24.4% to £16.3 million (2016: £13.1 million). The continuing adjusted profit before tax margin increased by 240 basis points to 12.3% (2016: 9.9%).

Profit before tax of £12.7 million (2016: loss of £0.6 million) is after the mark-to-market movement on derivative financial instruments and amortisation of acquired intangibles and other adjusting items.

1.7 Tax

The adjusted tax charge from continuing operations of £3.6 million (2016: £2.8 million) represents an effective tax rate of 22.1% (2016: 21.4%). The increase is due to a change in the geographical mix of profits. The statutory effective tax rate from continuing operations is 21.3%.

1.8 Earnings per share

Continuing adjusted basic earnings per share increased by 23.9% to 22.3 pence (2016: 18.0 pence); adjusted diluted earnings per share increased by 22.8% to 22.1 pence (2016: 18.0 pence). Continuing adjusted diluted earnings per share were 17.5 pence (2016: loss of 0.9 pence); adjusted diluted earnings per share were 17.4 pence (2016: loss of 0.9 pence).

Undiluted weighted average shares have stayed flat at 57.1 million.

1.9 Foreign Exchange

The Group faces transactional and translational currency exposure, most notably against the US Dollar, Euro and Japanese Yen. For the half year, approximately 16% of Group revenue was denominated in Sterling, 56% in US Dollars, 17% in Euros, 10% in Japanese Yen and 1% in other currencies. Translational exposures arise on the consolidation of overseas company results into Sterling. Transactional exposures arise where the currency of sale or purchase transactions differs from the functional currency in which each company prepares its local accounts.

The Group maintains a hedging programme against its net transactional exposure using internal projections of currency trading transactions expected to arise over a period extending from 12 to 24 months. As at 30 September 2017 the Group had currency hedges in place extending up to 18 months forward.

2. Dividend

The Group's policy is to increase the dividend each year in line with the increase in underlying earnings. However, taking into account the impact on the Group of business disposals, currency effects and our progressive strengthening of the balance sheet, the Board has proposed to hold the dividend at last year's level. This results in an interim dividend of 3.7 pence. The dividend will be paid on 6 April 2018 to shareholders on the register as at 23 February 2018.

3. Cash flow

The Group cash flow is summarised below. Adjusted operating cash flow excludes rental assets held for resale and profits or losses on disposal of fixed assets, both of which are included within expenditure on tangible and intangible assets.

Table 4: Cash flow from continuing operations

	Half year to 30 September 2017 £m	Half year to 30 September 2016 £m
Adjusted operating profit	**18.8**	16.4
Depreciation and amortisation	**4.0**	4.0
Adjusted EBITDA	**22.8**	20.4
Working capital movement	**(15.0)**	(14.9)
Non-recurring items and acquisition related costs	**(0.7)**	(0.4)
Pension scheme payments above charge to op. profit	**(3.5)**	(3.5)
Equity settled share schemes	**0.5**	-
Share of loss of associate	**-**	0.4
Adjusted operating cash flow	**4.1**	2.0
Interest	**(1.0)**	(2.6)
Tax	**(2.5)**	(0.7)
Expenditure on tangible and intangible assets	**(2.8)**	(1.9)
Capitalised development expenditure	**(3.1)**	(3.0)
Increase in investment in associate	**(2.1)**	-
Acquisition of subsidiaries, net of cash acquired	**-**	(6.8)
Net cash flow from sale of subsidiary undertaking	**73.0**	-
Dividends paid	**(2.1)**	(2.1)
Proceeds from issue of share capital	**0.2**	-
(Decrease)/increase in borrowings	**(77.6)**	11.6
Net decrease in cash and cash equivalents from continuing operations	**(13.9)**	(3.5)

Note: Adjusted EBITDA is earnings before interest, tax, depreciation, intangible amortisation, mark-to-market of financial derivatives and other non-cash adjusting items

3.1 Adjusted operating cash flow

Adjusted operating cash flow in the year increased by £2.1 million to £4.1 million (2016: £2.0 million). Adjusted operating cash (defined as adjusted EBITDA, less movement in working capital, capitalised development expenditure and capital expenditure) represents 10.1% (2016: 3.7%) of adjusted operating profit due to an outflow of working capital over the period.

The working capital outflow of £15.0 million reflects an increase in inventories of £6.6 million, an increase in receivables of £1.3 million, a decrease in payables of £9.2 million and an increase in customer deposits of £2.1 million. The increase in inventories largely reflects an increase in work in progress and inventory of customised magnets and cryogenic systems. The fall in payables is due to inventory building during the last quarter of last year to support order growth of our Plasma Technology process tools, combined with the cash settlement of currency hedging contracts.

3.2 Interest

Net interest paid was £1.0 million (2016: £2.6 million). The difference from last year is due to lower financing costs arising from a lower level of average net debt compared to the comparative period following the receipt of proceeds from the sale of Industrial Analysis part way through the period and the settlement of £1.0 million of interest payments made just after the half year close.

3.3 Tax
Tax paid was £2.5 million (2016: £0.7 million), the comparative period benefiting from tax deductions on allowable adjusting items and utilisation of brought forward tax losses.

3.4 Investment in research and development (R&D)
Total cash spend on R&D in the half year was £13.0 million, equivalent to 9.8% of sales, (2016: 13.0 million, 9.8% of sales). A reconciliation between the amounts charged to the Income Statement and the cash spent is given below:

Table 5: Investment in research and development (R&D) from continuing operations

	Half year to 30 September 2017 £m	Half year to 30 September 2016 £m
R&D expense charged to the Income Statement	**11.4**	12.1
Amounts capitalised as fixed assets	**0.1**	0.1
Amortisation and impairment of R&D costs capitalised as intangibles	**(1.6)**	(2.2)
Amounts capitalised as intangible assets	**3.1**	3.0
Total cash spent on R&D during the year	**13.0**	13.0

3.5 Investment in Associate
The shareholders of ScientaOmicron agreed to a capital injection to strengthen the balance sheet of the joint venture and ensure future liquidity in support of the business strategy. Our share was £2.1 million and was paid in September 2017.

3.6 Disposals
The sale of Industrial Analysis was completed on 3 July 2017. A post-tax profit of £45.3 million has been recorded within discontinued adjusting items this includes an impairment of £1.8 million of capitalised development costs.

4 Net debt and funding

4.1 Net debt
Net debt decreased in the period from £109.3 million to £45.5 million. Operating cash flow was £4.1 million. Disposal proceeds of £73.0 million relate to the sale of Industrial Analysis. The Group invested in tangible and intangible assets of £2.8 million and capitalised development costs of £3.1 million.

Table 6: Movement in net debt

	£m
Net debt as at 31 March 2017	**109.3**
Adjusted operating cash flow	(4.1)
Interest	2.0
Tax	2.5
Capital expenditure on tangible and intangible assets	2.8
Capitalised development expenditure	3.1
Increase in investment in associate	2.1
Net cash flow from sale of subsidiary undertaking	(73.0)
Dividends paid	2.1
Other items	(1.3)
Net debt as at 30 September 2017	**45.5**

4.2 Funding

The Group has in place an unsecured multi-currency revolving facility agreement which is committed until February 2020. The facility has been entered into with a group of three banks and comprises a Sterling denominated multi-currency facility of £100.0 million and a US Dollar denominated multi-currency facility of $37.0 million.

In this half year the Group has repaid £5.0 million of its bilateral private placement note, leaving an outstanding note of £39.5 million, which matures in 2021. In September 2017, the Group repaid the balance of its amortising fixed rate loan from the European Investment Bank. The Group has uncommitted facilities of £20.6 million.

Debt covenants are net debt to EBITDA less than 3.0 times and EBITDA to interest greater than 4.0 times. As at 30 September 2017 net debt to EBITDA was at 0.9 times and EBITDA to interest was 10.1 times, both well within our banking covenants.

5 Pensions

The Group has defined benefit pension schemes in the UK and USA. Both have been closed to new entrants since 2001 and closed to future accrual from July 2010.

At 30 September 2017, the net liability arising from our defined benefit scheme obligations was £22.5 million (31 March 2017: £25.1 million), a fall of £2.6 million. The reduction in the deficit was primarily due to the contributions paid in the period. Total scheme assets at 30 September 2017 were £283.3 million (31 March 2017: £287.9 million) while liabilities were £305.8 million (2016: £313.0 million).

6 Going Concern

The Group's business activities, together with the factors likely to affect its future development, performance and position, are set out in the Performance, Strategy and Operations sections. The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in the Financial Review.

The diverse nature of the Group, combined with its financial strength, provides a solid foundation for a sustainable business. The Directors have reviewed the Group's forecasts and flexed them to incorporate a number of potential scenarios relating to changes in trading performance. The Directors believe that the Group will be able to operate within its existing debt facilities. This review also considered hedging arrangements in place. The Directors believe that the Group is well placed to manage its business risks successfully.

The Financial Statements have been prepared on a going concern basis, based on the Directors' opinion, after making reasonable enquires, that the Group has adequate resources to continue in operational existence for the foreseeable future.

7 Forward-Looking Statements

This document contains certain forward-looking statements. The forward-looking statements reflect the knowledge and information available to the Company during the preparation and up to the publication of this document. By their very nature, these statements depend upon circumstances and relate to events that may occur in the future thereby involving a degree of uncertainty. Therefore, nothing in this document should be construed as a profit forecast by the Company.

Gavin Hill
Group Finance Director
14 November 2017

Condensed Consolidated Statement of Income

Half year ended 30 September 2017 – unaudited

		Half Year to 30 Sept 2017			Half Year to 30 Sept 2016		
		Adjusted	**Adjusting items***	**Total**	Adjusted	Adjusting items*	Total
	Notes	**£m**	**£m**	**£m**	£m	£m	£m
Revenue	3	**132.1**	—	**132.1**	132.4	—	132.4
Cost of sales		**(64.4)**	—	**(64.4)**	(62.9)	—	(62.9)
Gross profit		**67.7**	—	**67.7**	69.5	—	69.5
Research and development	4	**(11.4)**	—	**(11.4)**	(11.4)	(0.7)	(12.1)
Selling and marketing		**(25.4)**	—	**(25.4)**	(25.3)	—	(25.3)
Administration and shared services		**(11.9)**	**(5.9)**	**(17.8)**	(12.5)	(6.3)	(18.8)
Share of loss of associate, net of tax		—	**(0.3)**	**(0.3)**	(0.4)	(0.1)	(0.5)
Foreign exchange loss		**(0.2)**	—	**(0.2)**	(3.5)	—	(3.5)
Operating profit/(loss)		**18.8**	**(6.2)**	**12.6**	16.4	(7.1)	9.3
Other financial income		**0.1**	**2.6**	**2.7**	0.1	—	0.1
Financial income		**0.1**	**2.6**	**2.7**	0.1	—	0.1
Interest charge on pension scheme net liabilities		**(0.3)**	—	**(0.3)**	(0.6)	—	(0.6)
Other financial expenditure		**(2.3)**	—	**(2.3)**	(2.8)	(6.6)	(9.4)
Financial expenditure		**(2.6)**	—	**(2.6)**	(3.4)	(6.6)	(10.0)
Profit/(loss) before income tax from continuing operations	3	**16.3**	**(3.6)**	**12.7**	13.1	(13.7)	(0.6)
Income tax (expense)/credit	7	**(3.6)**	**0.9**	**(2.7)**	(2.8)	2.9	0.1
Profit/(loss) for the period from continuing operations		**12.7**	**(2.7)**	**10.0**	10.3	(10.8)	(0.5)
Profit/(loss) from discontinued operations after tax	6	**0.3**	**45.3**	**45.6**	1.9	(2.1)	(0.2)
Profit/(loss) for the period attributable to equity holders of the parent		**13.0**	**42.6**	**55.6**	12.2	(12.9)	(0.7)
		pence		**pence**	pence		pence
Earnings per share							
Basic earnings per share	8						
From continuing operations		**22.3**		**17.5**	18.0		(0.9)
From discontinued operations	6	**0.5**		**79.9**	3.4		(0.4)
From profit/(loss) for the period		**22.8**		**97.4**	21.4		(1.3)
Diluted earnings per share	8						
From continuing operations		**22.1**		**17.4**	18.0		(0.9)
From discontinued operations	6	**0.5**		**79.5**	3.3		(0.4)
From profit/(loss) for the period		**22.6**		**96.9**	21.3		(1.3)
Dividends per share							
Dividends paid	9			**3.70**			3.70
Dividends proposed	9			**3.70**			3.70

* Adjusted numbers are stated to give a better understanding of the underlying business performance. Details of adjusting items can be found in note 2 of this Half Year Report.

Condensed Consolidated Statement of Income

Half year ended 30 September 2017 – unaudited

	Notes	Year to 31 March 2017 Adjusted £m	Adjusting items* £m	Total £m
Revenue	3	**300.2**	**—**	**300.2**
Cost of sales		(142.9)	—	(142.9)
Gross profit		157.3	—	157.3
Research and development	4	(23.6)	(0.7)	(24.3)
Selling and marketing		(54.1)	—	(54.1)
Administration and shared services		(28.8)	(49.6)	(78.4)
Share of loss of associate, net of tax		(0.8)	(8.4)	(9.2)
Foreign exchange loss		(12.0)	—	(12.0)
Operating profit/(loss)		**38.0**	**(58.7)**	**(20.7)**
Other financial income		0.2	1.2	1.4
Financial income		**0.2**	**1.2**	**1.4**
Interest charge on pension scheme net liabilities		(1.1)	—	(1.1)
Other financial expenditure		(5.6)	(0.2)	(5.8)
Financial expenditure		**(6.7)**	**(0.2)**	**(6.9)**
Profit/(loss) before income tax from continuing operations	3	**31.5**	**(57.7)**	**(26.2)**
Income tax (expense)/credit	7	(7.8)	8.5	0.7
Profit/(loss) for the year from continuing operations		**23.7**	**(49.2)**	**(25.5)**
Profit from discontinued operations after tax	6	4.3	0.9	5.2
Profit/(loss) for the year attributable to equity holders of the parent		**28.0**	**(48.3)**	**(20.3)**
Earnings per share				
Basic earnings per share	8			
From continuing operations		41.5		(44.7)
From discontinued operations		7.5		9.1
From profit/(loss) for the period		49.0		(35.6)
Diluted earnings per share	8			
From continuing operations		41.4		(44.7)
From discontinued operations		7.5		9.1
From profit/(loss) for the period		48.9		(35.6)
Dividends per share				
Dividends paid	9			13.0
Dividends proposed	9			13.0

*Adjusted numbers are stated to give a better understanding of the underlying business performance. Details of adjusting items can be found in note 2 of this Half Year Report.

Condensed Consolidated Statement of Comprehensive Income

Half year ended 30 September 2017 - unaudited

	Half year to 30 Sept 2017 £m	Half year to 30 Sept 2016 £m	*Year to 31 March 2017 £m*
Profit/(loss) for the period	**55.6**	(0.7)	*(20.3)*
Other comprehensive income/(expense):			
Items that may be reclassified subsequently to profit or loss			
Gain/(loss) on effective portion of changes in fair value of cash flow hedges, net of amounts recycled	**—**	0.1	*0.1*
Foreign exchange translation differences	**(5.4)**	14.7	*18.8*
Net cumulative foreign exchange gain on disposal of subsidiaries recycled to the Income Statement	**(4.8)**	—	*(5.7)*
Tax on items that may be reclassified to profit or loss	**—**	—	*—*
Items that will not be reclassified subsequently to profit or loss			
Remeasurement (loss)/gain in respect of post retirement benefits	**(0.8)**	(15.1)	*4.4*
Tax on items that will not be reclassified to profit or loss	**0.2**	2.7	*(0.9)*
Total other comprehensive income	**(10.8)**	2.4	*16.7*
Total comprehensive income for the period attributable to equity shareholders of the parent	**44.8**	1.7	*(3.6)*

Condensed Consolidated Statement of Changes in Equity

Half year ended 30 September 2017 – unaudited

	Share capital £m	Share premium account £m	Other reserves £m	Foreign exchange translation reserve £m	Retained earnings £m	Total £m
Balance at 1 April 2017	**2.9**	**61.5**	**0.2**	**22.8**	**45.1**	**132.5**
Total comprehensive income:						
Profit for the period	—	—	—	—	**55.6**	**55.6**
Other comprehensive income:						
– Foreign exchange translation differences	—	—	—	**(5.4)**	—	**(5.4)**
– Net foreign exchange gain on disposal of subsidiaries recycled to the Income Statement	—	—	—	**(4.8)**	—	**(4.8)**
– Remeasurement loss in respect of post-retirement benefits	—	—	—	—	**(0.8)**	**(0.8)**
– Tax on items recognised directly in other comprehensive income	—	—	—	—	**0.2**	**0.2**
Total comprehensive (expense)/income attributable to equity shareholders of the parent	—	—	—	**(10.2)**	**55.0**	**44.8**
Transactions with owners recorded directly in equity:						
– Proceeds from issue of shares	—	**0.2**	—	—	—	**0.2**
– Credit in respect of employee service costs settled by award of share options	—	—	—	—	**0.5**	**0.5**
– Dividends payable	—	—	—	—	**(7.4)**	**(7.4)**
Total transactions with owners recorded directly in equity:	—	**0.2**	—	—	**(6.9)**	**(6.7)**
Balance at 30 September 2017	**2.9**	**61.7**	**0.2**	**12.6**	**93.2**	**170.6**

	Share capital £m	Share premium account £m	Other reserves £m	Foreign exchange translation reserve £m	Retained earnings £m	Total £m
Balance at 1 April 2016	2.9	61.5	0.1	9.7	68.8	143.0
Total comprehensive income:						
Loss for the period	—	—	—	—	(0.7)	(0.7)
Other comprehensive income:						
– Foreign exchange translation differences	—	—	—	14.7	—	14.7
– Gain on effective portion of changes in fair value of cash flow hedges, net of amounts recycled	—	—	0.1	—	—	0.1
– Remeasurement loss in respect of post-retirement benefits	—	—	—	—	(15.1)	(15.1)
– Tax on items recognised directly in other comprehensive income	—	—	—	—	2.7	2.7
Total comprehensive income/(expense) attributable to equity shareholders of the parent	—	—	0.1	14.7	(13.1)	1.7
Transactions with owners recorded directly in equity:						
– Dividends payable	—	—	—	—	(7.4)	(7.4)
Total transactions with owners recorded directly in equity:	—	—	—	—	(7.4)	(7.4)
Balance at 30 September 2016	2.9	61.5	0.2	24.4	48.3	137.3

Condensed Consolidated Statement of Changes in Equity

Half year ended 30 September 2017 – unaudited *continued*

	Share capital £m	Share premium account £m	Other reserves £m	Foreign exchange translation reserve £m	Retained earnings £m	Total £m
Balance at 1 April 2016	***2.9***	***61.5***	***0.1***	***9.7***	***68.8***	***143.0***
Total comprehensive income:						
Loss for the year	—	—	—	—	*(20.3)*	*(20.3)*
Other comprehensive income:						
– Foreign exchange translation differences	—	—	—	*18.8*	—	*18.8*
– Net foreign exchange gain on disposal of subsidiaries taken to the Income Statement	—	—	—	*(5.7)*	—	*(5.7)*
– Gain on effective portion of changes in fair value of cash flow hedges, net of amounts recycled	—	—	*0.1*	—	—	*0.1*
– Remeasurement gain in respect of post-retirement benefits	—	—	—	—	*4.4*	*4.4*
– Tax on items recognised directly in other comprehensive income	—	—	—	—	*(0.9)*	*(0.9)*
Total comprehensive (expense)/income attributable to equity shareholders of the parent	**—**	**—**	***0.1***	***13.1***	***(16.8)***	***(3.6)***
Transactions with owners recorded directly in equity:						
– Charge in respect of employee service costs settled by award of share options	—	—	—	—	*0.5*	*0.5*
– Dividends payable	—	—	—	—	*(7.4)*	*(7.4)*
Total transactions with owners recorded directly in equity:	—	—	—	—	***(6.9)***	***(6.9)***
Balance at 31 March 2017	***2.9***	***61.5***	***0.2***	***22.8***	***45.1***	***132.5***

Condensed Consolidated Statement of Financial Position

As at 30 September 2017 - unaudited

	As at 30 Sept 2017 £m	As at 30 Sept 2016 £m	*As at 31 March 2017 £m*
Assets			
Non-current assets			
Property, plant and equipment	**29.3**	36.0	*32.5*
Intangible assets	**164.9**	220.7	*181.0*
Investment in associate	**5.7**	12.6	*3.9*
Long-term receivables	**2.1**	3.6	*3.6*
Deferred tax assets	**28.8**	21.5	*26.0*
	230.8	294.4	*247.0*
Current assets			
Inventories	**48.6**	69.8	*53.9*
Trade and other receivables	**67.8**	79.2	*81.1*
Current income tax receivable	**3.9**	2.4	*4.2*
Derivative financial instruments	**2.3**	—	*0.6*
Cash and cash equivalents	**14.3**	20.9	*27.2*
	136.9	172.3	*167.0*
Total assets	**367.7**	466.7	*414.0*
Equity			
Capital and reserves attributable to the Company's equity shareholders			
Share capital	**2.9**	2.9	*2.9*
Share premium	**61.7**	61.5	*61.5*
Other reserves	**0.2**	0.2	*0.2*
Translation reserve	**12.6**	24.4	*22.8*
Retained earnings	**93.2**	48.3	*45.1*
	170.6	137.3	*132.5*
Liabilities			
Non-current liabilities			
Bank loans	**59.2**	154.0	*129.6*
Retirement benefit obligations	**22.5**	47.5	*25.1*
Deferred tax liabilities	**10.3**	1.8	*5.6*
	92.0	203.3	*160.3*
Current liabilities			
Bank loans and overdrafts	**0.6**	8.0	*6.9*
Trade and other payables	**79.0**	87.3	*93.0*
Current income tax payables	**9.3**	3.5	*6.5*
Accrued dividend	**5.3**	5.3	*—*
Derivative financial instruments	**1.0**	10.9	*5.0*
Provisions	**9.9**	11.1	*9.8*
	105.1	126.1	*121.2*
Total liabilities	**197.1**	329.4	*281.5*
Total liabilities and equity	**367.7**	466.7	*414.0*

Condensed Consolidated Statement of Cash Flows half year ended 30 September 2017 - unaudited

	Half year to 30 Sept 2017 £m	Half year to 30 Sept 2016 £m	*Year to 31 March 2017 £m*
Profit/(loss) for the period from continuing operations	**10.0**	(0.5)	*(25.5)*
Adjustments for:			
Income tax expense/(credit)	**2.7**	(0.1)	*(0.7)*
Net financial (income)/expense	**(0.1)**	9.9	*5.5*
Acquisition related costs	—	0.3	*0.3*
Restructuring costs	**0.3**	—	*0.4*
Restructuring costs – relating to associate	**0.3**	0.1	*0.4*
Impairment of capitalised development costs	—	0.7	*0.7*
Loss on disposal of subsidiary	—	—	*0.4*
Impairment of investment in associate	—	—	*8.0*
Amortisation and impairment of acquired intangibles	**5.6**	6.0	*46.3*
Impairment of capitalised intangible software costs	—	—	*2.2*
Depreciation of property, plant and equipment	**2.4**	2.5	*5.1*
Amortisation of capitalised development costs	**1.6**	1.5	*3.8*
Adjusted earnings before interest, tax, depreciation and amortisation	**22.8**	20.4	*46.9*
Loss on disposal of plant, property and equipment	**0.2**	0.3	*0.5*
Cost of equity settled employee share schemes	**0.5**	—	*0.5*
Share of loss from associate	—	0.4	*0.8*
Acquisition related costs paid	—	—	—
Restructuring costs paid	**(0.7)**	(0.4)	*(1.1)*
Foreign currency loss on intra-Group Dividends	—	—	*(0.8)*
Cash payments to the pension scheme more than the charge to operating profit	**(3.5)**	(3.5)	*(6.9)*
Operating cash flows before movements in working capital	**19.3**	17.2	*39.9*
Increase in inventories	**(6.6)**	(3.7)	*(1.7)*
(Increase)/decrease in receivables	**(1.3)**	2.9	*(1.1)*
Decrease in payables and provisions	**(9.2)**	(14.3)	*(2.5)*
Increase in customer deposits	**2.1**	0.2	*0.9*
Purchase of rental assets held for later resale	**(0.6)**	(0.5)	*(1.0)*
Cash generated by operations	**3.7**	1.8	*34.5*
Interest paid	**(1.0)**	(2.6)	*(5.0)*
Income taxes paid	**(2.5)**	(0.7)	*(2.1)*
Net cash from operating activities	**0.2**	(1.5)	*27.4*
Cash flows from investing activities			
Acquisition of subsidiaries – net of cash acquired	—	(6.8)	*(9.8)*
Acquisition of property, plant and equipment	**(2.2)**	(1.6)	*(3.0)*
Acquisition of intangible assets	**(0.2)**	(0.1)	*(0.1)*
Net cash flow on disposal of businesses	**73.0**	—	*12.2*
Capitalised development expenditure	**(3.1)**	(3.0)	*(5.9)*
Increase in investment in associate	**(2.1)**	—	—
Net cash generated from/(used in) investing activities	**65.4**	(11.5)	*(6.6)*
Cash flows from financing activities			
Proceeds from issue of share capital	**0.2**	—	—
(Decrease)/increase in borrowings	**(77.6)**	11.6	*(12.8)*
Dividends paid	**(2.1)**	(2.1)	*(7.4)*
Net cash (used in)/generated from financing activities	**(79.5)**	9.5	*(20.2)*
Net decrease in cash and cash equivalents from continuing operations	**(13.9)**	(3.5)	*0.6*
Increase in cash from discontinued operations	**1.9**	0.6	*3.6*
Cash and cash equivalents at beginning of the period	**26.5**	20.4	*20.4*
Effect of exchange rate fluctuations on cash held	**(0.8)**	1.6	*1.9*
Cash and cash equivalents at end of the period	**13.7**	19.1	*26.5*

Reconciliation of changes in cash and cash equivalents to movement in net debt

	Half year to 30 Sept 2017 £m	Half year to 30 Sept 2016 £m	*Year to 31 March 2017 £m*
(Decrease)/increase in cash and cash equivalents	**(12.0)**	(2.9)	*4.2*
Effect of foreign exchange rate changes on cash and cash equivalents	**(0.8)**	1.6	*1.9*
	(12.8)	(1.3)	*6.1*
Cash outflow/(inflow) from decrease/increase in debt	**77.6**	(11.6)	*12.8*
Accrued interest	**(1.0)**	—	—
Movement in net debt in the period	**63.8**	(12.9)	*18.9*
Net debt at start of the period	**(109.3)**	(128.2)	*(128.2)*
Net debt at the end of the period	**(45.5)**	(141.1)	*(109.3)*

Notes on the Half Year Financial Statements

Half year ended 30 September 2017 – unaudited

1 BASIS OF PREPARATION OF ACCOUNTS

Reporting entity

Oxford Instruments plc is a company incorporated in England and Wales. The condensed consolidated half year financial statements consolidate the results of the Company and its subsidiaries (together referred to as the Group). They have been prepared and approved by the Directors in accordance with International Financial Reporting Standard (IFRS) IAS 34 Interim Financial Reporting as adopted by the EU. They do not include all of the information required for full annual financial statements, and should be read in conjunction with the consolidated financial statements of the Group for the year ended 31 March 2017.

The financial information contained herein is unaudited and does not constitute statutory accounts as defined by Section 435 of the Companies Act 2006. The comparative figures for the financial year ended 31 March 2017 are not the company's statutory accounts for that financial year. Those accounts have been reported on by the Company's auditors and delivered to the registrar of companies. The report of the auditors was (i) unqualified, (ii) did not include a reference to any matters to which the auditors drew attention by way of emphasis without qualifying their report, and (iii) did not contain a statement under section 498 (2) or (3) of the Companies Act 2006.

Significant accounting policies

As required by the Disclosure and Transparency Rules of the Financial Conduct Authority, the condensed set of financial statements has been prepared applying the accounting policies and presentation that were applied in the preparation of the Company's published consolidated financial statements for the year ended 31 March 2017, except as explained below.

Adoption of new and revised standards

At present, there are no other new standards, amendments to standards or interpretations mandatory for the first time for the year ending 31 March 2018.

Estimates

The preparation of half year financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expense. Actual results may differ from these estimates.

In preparing these half year financial statements, the significant judgements made by management in applying the group's accounting policies and key sources of estimation uncertainty were the same as those that applied to the Consolidated Financial Statements as at and for the year ended 31 March 2017.

Going concern

The condensed consolidated half year financial statements have been prepared on a going concern basis, based on the Directors' opinion, after making reasonable enquiries, that the Group has adequate resources to continue in operational existence for the foreseeable future.

Notes on the Half Year Financial Statements (continued)

Half year ended 30 September 2017 – unaudited

1 BASIS OF PREPARATION OF ACCOUNTS *continued*

Exchange rates

The principal exchange rates used to translate the Group's overseas results were as follows:

Period end rates	**Half year to 30 Sept 2017**	Half year to 30 Sept 2016	*Year to 31 March 2017*
US Dollar	**1.34**	1.30	*1.25*
Euro	**1.13**	1.16	*1.17*
Yen	**151**	132	*139*

Average translation rates	**US Dollar**	**Euro**	**Yen**
Half year to 30 September 2017			
April	**1.27**	**1.18**	**142**
May	**1.29**	**1.17**	**143**
June	**1.29**	**1.14**	**144**
July	**1.31**	**1.13**	**146**
August	**1.30**	**1.10**	**143**
September	**1.31**	**1.11**	**146**

Average translation rates year ended 31 March 2017	**US Dollar**	**Euro**	**Yen**
April	*1.45*	*1.27*	*159*
May	*1.46*	*1.30*	*159*
June	*1.41*	*1.27*	*150*
July	*1.35*	*1.21*	*138*
August	*1.32*	*1.18*	*134*
September	*1.31*	*1.16*	*132*
October	*1.26*	*1.13*	*130*
November	*1.23*	*1.14*	*134*
December	*1.24*	*1.17*	*142*
January	*1.25*	*1.17*	*144*
February	*1.25*	*1.18*	*142*
March	*1.25*	*1.18*	*140*

Notes on the Half Year Financial Statements (continued)

Half year ended 30 September 2017 – unaudited

2 NON-GAAP MEASURES

The Directors present the following non-GAAP measures as they believe it gives a better indication of the underlying performance of the business.

Reconciliation between operating profit and profit before income tax and adjusted profit from continuing operations

	Operating profit/(loss)			Profit/(loss) before income tax		
	Half year to 30 Sep 2017 £m	Half year to 30 Sep 2016 £m	*Year to 31 Mar 2017 £m*	**Half year to 30 Sep 2017 £m**	Half year to 30 Sep 2016 £m	*Year to 31 Mar 2017 £m*
Statutory measure from continuing operations	**12.6**	9.3	*(20.7)*	**12.7**	(0.6)	*(26.2)*
Acquisition related costs	**—**	0.3	*0.3*	**—**	0.3	*0.3*
Restructuring costs	**0.3**	—	*0.4*	**0.3**	—	*0.4*
Restructuring costs – relating to associate	**0.3**	0.1	*0.4*	**0.3**	0.1	*0.4*
Loss on disposal of subsidiary	**—**	—	*0.4*	**—**	—	*0.4*
Unwind of discount in respect of contingent consideration and acquisition related accruals	**—**	—	*—*	**—**	0.2	*0.2*
Non-recurring and acquisition related items	**0.6**	0.4	*1.5*	**0.6**	0.6	*1.7*
Impairment of acquired intangibles	**—**	—	*33.8*	**—**	—	*33.8*
Impairment of investment in associate	**—**	—	*8.0*	**—**	—	*8.0*
Impairment of capitalised development costs	**—**	0.7	*0.7*	**—**	0.7	*0.7*
Impairment of capitalised software costs	**—**	—	*2.2*	**—**	—	*2.2*
Amortisation of acquired intangibles	**5.6**	6.0	*12.5*	**5.6**	6.0	*12.5*
Mark-to-market (gain)/loss in respect of derivative financial instruments	**—**	—	*—*	**(2.6)**	6.4	*(1.2)*
Adjusted measure from continuing operations	**18.8**	16.4	*38.0*	**16.3**	13.1	*31.5*
Share of taxation	**—**	—	*—*	**(3.6)**	(2.8)	*(7.8)*
Adjusted profit for the period from continuing operations	**18.8**	16.4	*38.0*	**12.7**	10.3	*23.7*

Acquisition related costs comprise professional fees incurred in relation to mergers and acquisitions activity and any consideration which, under IFRS 3 (revised), falls to be treated as a post-acquisition employment expense.

Restructuring costs comprise one-off costs in respect of cost reduction programmes in the US Healthcare and Asylum businesses. Restructuring costs relating to the Group's associate relate to exceptional costs incurred by the associate arising from the merger of the Scienta and Omicron businesses.

In order to assist with comparability between peers, adjusted profit excludes the non-cash amortisation and impairment of acquired intangible assets and goodwill and the unwind of discounts in respect of contingent consideration relating to business combinations.

The Group reports ineffectiveness of its hedging as an adjusting item. In the prior year, this included losses on certain contracts relating to the hedging of the Japanese Yen which were not required for ordinary trading and which were re-allocated for use against the remittance of net income of the Group's Japan operations. Additionally, under IAS 39, all derivative financial instruments are recognised initially at fair value. Subsequent to initial recognition, they are also measured at fair value. In respect of instruments used to hedge foreign exchange risk and interest rate risk the Group does not take advantage of the hedge accounting rules provided for in IAS 39 since that standard requires certain stringent criteria to be met in order to hedge account, which, in the particular circumstances of the Group, are considered by the Board not to bring any significant economic benefit. Accordingly, the Group accounts for these derivative financial instruments at fair value through profit or loss. To the extent that instruments are hedges of future transactions, adjusted profit for the year is stated before changes in the valuation of these instruments so that the underlying performance of the Group can be more clearly seen.

Notes on the Half Year Financial Statements (continued)
Half year ended 30 September 2017 – unaudited

2 NON-GAAP MEASURES *continued*

In the prior year:

- the Group settled various claims totalling £0.4m relating to the disposal of its Omicron business in 2015;
- the Group recognised an impairment of £8.0m relating to its equity accounted associate investment;
- the one off impairment of capitalised development costs related to a specific internal systems project that was stopped as the Group focused and directed resources so as to accelerate projects; and
- the one off impairment of capitalised software costs was carried out following a reassessment of the future value expected to be derived from internally developed software.

3 SEGMENT INFORMATION

The Group has ten operating segments. These operating segments have been combined into three aggregated operating segments to the extent that they have similar economic characteristics, with relevance to products and services, type and class of customer, methods of sale and distribution and the regulatory environment in which they operate. Each of these three aggregated operating segments is a reportable segment.

The Group's internal management structure and financial reporting systems differentiate the three aggregated operating segments on the basis of the economic characteristics discussed below:

- the Materials and Characterisation segment comprises a group of businesses focusing on applied R&D and commercial customers, enabling the fabrication and characterisation of materials and devices down to the atomic scale;
- the Research and Discovery segment comprises a group of businesses providing advanced solutions that create unique environments and enable measurements down to the molecular and atomic level which are used in fundamental research; and
- the Service and Healthcare segment provides customer service and support for the Group's products and the service, sale and rental of third party healthcare imaging systems.

Reportable segment results include items directly attributable to a segment as well as those which can be allocated on a reasonable basis. Inter-segment pricing is determined on an arm's length basis. The operating results of each are regularly reviewed by the Chief Operating Decision Maker, which is deemed to be the Board of Directors. Discrete financial information is available for each segment and used by the Board of Directors for decisions on resource allocation and to assess performance. No asset information is presented below as this information is not presented in reporting to the Group's Board of Directors.

Results from continuing operations
Half year to 30 September 2017

	Materials & Characterisation £m	**Research & Discovery £m**	**Service & Healthcare £m**	**Total £m**
External revenue	**50.1**	**47.9**	**34.1**	**132.1**
Inter-segment revenue	—	**0.1**	—	
Total segment revenue	**50.1**	**48.0**	**34.1**	
Segment operating profit from continuing operations	**7.2**	**4.2**	**7.4**	**18.8**

Results from continuing operations
Half year to 30 September 2016

	Materials & Characterisation £m	Research & Discovery £m	Service & Healthcare £m	Total £m
External revenue	45.3	55.4	31.7	132.4
Inter-segment revenue	—	—	—	
Total segment revenue	45.3	55.4	31.7	
Segment operating profit from continuing operations	4.2	7.0	5.2	16.4

Notes on the Half Year Financial Statements (continued)

Half year ended 30 September 2017 – unaudited

3 SEGMENT Information *continued*

Results from continuing operations
Year to 31 March 2017

	Materials & Characterisation £m	*Research & Discovery £m*	*Service & Healthcare £m*	*Total £m*
External revenue	*104.1*	*125.2*	*70.9*	*300.2*
Inter-segment revenue	*—*	*0.1*	*—*	
Total segment revenue	*104.1*	*125.3*	*70.9*	
Segment operating profit from continuing operations	*10.9*	*13.8*	*13.3*	*38.0*

The adjusted result after tax of £nil (2016/17 half year: £0.4m loss; full year: £0.8m loss) from the Group's associate is reported within the Research & Discovery segment.

Reconciliation of reportable segment profit

Half year to 30 September 2017	**Materials & Characterisation £m**	**Research & Discovery £m**	**Service & Healthcare £m**	**Unallocated Group items £m**	**Total £m**
Operating profit for reportable segments from continuing operations	**7.2**	**4.2**	**7.4**	**—**	**18.8**
Restructuring costs	**(0.1)**	**—**	**(0.2)**	**—**	**(0.3)**
Restructuring costs – relating to associate	**—**	**(0.3)**	**—**	**—**	**(0.3)**
Amortisation of acquired intangibles	**(1.3)**	**(3.8)**	**(0.5)**	**—**	**(5.6)**
Financial income	**—**	—	**—**	2.7	**2.7**
Financial expenditure	**—**	—	**—**	(2.6)	**(2.6)**
Profit before income tax from continuing operations	**5.8**	**0.1**	**6.7**	**0.1**	**12.7**

Half year to 30 September 2016	Materials & Characterisation £m	Research & Discovery £m	Service & Healthcare £m	Unallocated Group items £m	Total £m
Operating profit for reportable segments from continuing operations	4.2	7.0	5.2	—	16.4
Acquisition related costs	—	(0.3)	—	—	(0.3)
Restructuring costs – relating to associate	—	(0.1)	—	—	(0.1)
Impairment of capitalised development costs	(0.7)	—	—	—	(0.7)
Amortisation of acquired intangibles	(1.4)	(3.7)	(0.9)	—	(6.0)
Financial income	—	—	—	0.1	0.1
Financial expenditure	—	—	—	(10.0)	(10.0)
Loss before income tax from continuing operations	2.1	2.9	4.3	(9.9)	(0.6)

Year to 31 March 2017	*Materials & Characterisation £m*	*Research & Discovery £m*	*Service & Healthcare £m*	*Unallocated Group items £m*	*Total £m*
Operating profit for reportable segments from continuing operations	*10.9*	*13.8*	*13.3*	*—*	*38.0*
Acquisition related costs	*—*	*(0.3)*	*—*	*—*	*(0.3)*
Restructuring costs	*—*	*—*	*(0.4)*	*—*	*(0.4)*
Restructuring costs – relating to associate	*—*	*(0.4)*	*—*	*—*	*(0.4)*
Impairment of capitalised development costs	*(0.7)*	*—*	*—*	*—*	*(0.7)*
Loss on disposal of subsidiary	*—*	*(0.4)*	*—*	*—*	*(0.4)*
Impairment of investment in associate	*—*	*(8.0)*	*—*	*—*	*(8.0)*
Impairment of capitalised software costs	*—*	*—*	*—*	*(2.2)*	*(2.2)*
Amortisation of acquired intangibles	*(2.9)*	*(7.7)*	*(1.9)*	*—*	*(12.5)*
Impairment of acquired intangibles	*(22.6)*	*—*	*(11.2)*	*—*	*(33.8)*
Financial income	*—*	*—*	*—*	*1.4*	*1.4*
Financial expenditure	*—*	*—*	*—*	*(6.9)*	*(6.9)*
Loss before income tax from continuing operations	*(15.3)*	*(3.0)*	*(0.2)*	*(7.7)*	*(26.2)*

Notes on the Half Year Financial Statements (continued)

Half year ended 30 September 2017 – unaudited

4 RESEARCH AND DEVELOPMENT

The total research and development spend by the Group is as follows:

	Half year to 30 Sept 2017 £m	Half year to 30 Sept 2016 £m	*Year to 31 March 2017 £m*
Research and development expense charged to the consolidated statement of income	**11.4**	12.1	*24.3*
Less: depreciation of R&D related fixed assets	**—**	—	*(0.1)*
Add: amounts capitalised as fixed assets	**0.1**	0.1	*0.2*
Less: amortisation and impairment of R&D costs previously capitalised as intangibles	**(1.6)**	(2.2)	*(4.5)*
Add: amounts capitalised as intangible assets	**3.1**	3.0	*5.9*
Total cash spent on research and development during the period	**13.0**	13.0	*25.8*

5 INVESTMENT IN ASSOCIATE

The Group's share of loss in its equity accounted associate, Scienta Scientific AB ("Scienta"), for the period was £0.3m (2016/17 half year: £0.5m loss; full year: £1.2m loss). The Group did not receive any dividends from the associate in the current or prior periods.

During the 6 months to 30 September 2017 the Group invested a further £2.1m in its equity accounted associate.

During the prior year the Group settled various claims totalling £0.4m relating to the disposal of its Omicron business during 2015/16 and recognised an impairment charge of £8.0m in respect of its investment in Scienta.

Notes on the Half Year Financial Statements (continued)

Half year ended 30 September 2017 – unaudited

6 DISPOSAL OF SUBSIDIARY AND DISCONTINUED OPERATIONS

On 3 July 2017 the Group disposed of its Industrial Analysis business for a final consideration of £82.8m. On 17 November 2016 the Group disposed of its Superconducting Wire business for a final consideration of £14.0m.

Effect of disposal on the financial position of the Group	**Industrial Analysis 2017/18 £m**	Superconducting Wire 2016/17 £m
Goodwill	**(4.3)**	—
Acquired intangibles	**(0.1)**	—
Other intangibles	**(4.7)**	—
Property, plant and equipment	**(2.4)**	(3.1)
Inventory	**(11.3)**	(12.6)
Trade and other receivables	**(16.4)**	(6.5)
Cash and cash equivalents	**(6.0)**	(0.3)
Trade and other payables	**14.9**	6.6
Provisions	**0.8**	0.1
Tax balances	**(0.1)**	—
Net assets divested	**(29.6)**	(15.8)
Consideration receivable	**82.8**	14.0
Deferred consideration	—	(1.0)
Refund due in respect of finalisation of working capital adjustment	**0.6**	—
Consideration received, satisfied in cash	**83.4**	13.0
Cash disposed of	**(6.0)**	(0.3)
Transaction expenses	**(4.4)**	(0.5)
Net cash inflow	**73.0**	12.2
Carrying value of net assets disposed of (excluding cash and cash equivalents)	**(23.6)**	(15.5)
Deferred consideration	—	1.0
Refund due in respect of finalisation of working capital adjustment	**(0.6)**	—
Recognition of provisions on disposal	**(2.8)**	(0.2)
Currency translation differences transferred from translation reserve	**4.8**	5.7
Gain on disposal	**50.8**	3.2
Tax (charge)/credit on gain on disposal	**(3.8)**	0.9
Gain on disposal net of tax	**47.0**	4.1

Discontinued operations

In the period to 30 September 2017 the Group's Industrial Analysis business was classified as a discontinued operation; and in the year to 31 March 2017 the Group's Superconducting Wire business was classified as a discontinued operation. They were considered major classes of business on the basis that they were previously operating segments and referred to in the Group Strategic Report.

The Group results have been re-presented to reflect the classification of the Group's Industrial Analysis and Superconducting Wire businesses as discontinued operations.

Notes on the Half Year Financial Statements (continued)

Half year ended 30 September 2017 – unaudited

6 DISPOSAL OF SUBSIDIARY AND DISCONTINUED OPERATIONS *continued*

Results of discontinued operations – half year to 30 Sep 2017	**Industrial Analysis £m**	**Superconducting Wire £m**	**Total £m**
Revenue	**16.8**	**—**	**16.8**
Expenses	**(16.1)**	**—**	**(16.1)**
Adjusted profit before tax	**0.7**	**—**	**0.7**
Income tax charge	**(0.4)**	**—**	**(0.4)**
Adjusted profit after tax	**0.3**	**—**	**0.3**
Adjusting items:			
Amortisation and impairment of acquired intangibles	**(0.1)**	**—**	**(0.1)**
One off costs arising as a result of disposal	**(2.2)**	**—**	**(2.2)**
Property sale costs	**—**	**(0.2)**	**(0.2)**
Income tax on adjusting items	**0.8**	**—**	**0.8**
Loss after tax	**(1.2)**	**(0.2)**	**(1.4)**
Gain on disposal	**50.8**	**—**	**50.8**
Tax on gain on disposal	**(3.8)**	**—**	**(3.8)**
Profit/(loss) from discontinued operations after tax	**45.8**	**(0.2)**	**45.6**

The one off costs arising as a result of the disposal comprise a £1.8 million impairment of capitalised development costs in respect of a project which was discontinued as a result of the sale of the Industrial Analysis division along with related on-going costs incurred in the current year.

The property sale costs relate to the ongoing sale of a surplus freehold property.

Results of discontinued operations – half year to 30 Sep 2016	Industrial Analysis £m	Superconducting Wire £m	Total £m
Revenue	20.8	18.3	39.1
Expenses	(19.3)	(17.2)	(36.5)
Adjusted profit before tax	1.5	1.1	2.6
Income tax charge	(0.3)	(0.4)	(0.7)
Adjusted profit after tax	1.2	0.7	1.9
Adjusting items:			
Amortisation and impairment of acquired intangibles	(2.1)	—	(2.1)
Acquisition related costs	(0.4)	—	(0.4)
Income tax on adjusting items	0.4	—	0.4
(Loss)/profit from discontinued operations after tax	(0.9)	0.7	(0.2)

Results of discontinued operations – full year to 31 Mar 2017	*Industrial Analysis £m*	*Superconducting Wire £m*	*Austin Scientific £m*	*Total £m*
Revenue	*48.3*	*22.2*	*—*	*70.5*
Expenses	*(43.8)*	*(20.9)*	*(0.2)*	*(64.9)*
Adjusted profit/(loss) before tax	*4.5*	*1.3*	*(0.2)*	*5.6*
Income tax charge	*(0.9)*	*(0.4)*	*—*	*(1.3)*
Adjusted profit/(loss) after tax	*3.6*	*0.9*	*(0.2)*	*4.3*
Adjusting items:				
Amortisation and impairment of acquired intangibles	*(2.4)*	*—*	*—*	*(2.4)*
Acquisition related costs	*(1.2)*	*—*	*—*	*(1.2)*
Restructuring costs	*(0.2)*	*—*	*—*	*(0.2)*
Income tax on adjusting items	*0.6*	*—*	*—*	*0.6*
Profit/(loss) after tax	*0.4*	*0.9*	*(0.2)*	*1.1*
Gain on disposal	*—*	*3.2*	*—*	*3.2*
Tax on gain on disposal	*—*	*0.9*	*—*	*0.9*
Profit/(loss) from discontinued operations after tax	*0.4*	*5.0*	*(0.2)*	*5.2*

Notes on the Half Year Financial Statements (continued)
Half year ended 30 September 2017 – unaudited

6 DISPOSAL OF SUBSIDIARY AND DISCONTINUED OPERATIONS *continued*

Earnings per share from discontinued operations

	Half year to 30 Sept 2017 £m	Half year to 30 Sept 2016 £m	*Year to 31 March 2017 £m*
Adjusted basic earnings per share	**0.5**	3.4	*7.5*
Adjusted diluted earnings per share	**0.5**	3.3	*7.5*
Total basic earnings per share	**79.9**	(0.4)	*9.1*
Total diluted earnings per share	**79.5**	(0.4)	*9.1*

Cash flows from discontinued operations

	Half year to 30 Sept 2017 £m	Half year to 30 Sept 2016 £m	*Year to 31 March 2017 £m*
Net cash generated from operating activities	**2.4**	1.9	*6.1*
Net cash used in investing activities	**(0.5)**	(1.3)	*(2.5)*
Net cash used in financing activities	**—**	—	*—*
Net cash flows	**1.9**	0.6	*3.6*

7 TAXATION

The total effective tax rate on profits for the half year is 21.3% (2016/17: 16.7%). The weighted average tax rate in respect of adjusted profit before tax (see note 2) for the half year is 22.1% (2016/17: 21.4%). For the full year the Group expects the tax rate in respect of adjusted profit before tax to be 23.0%.

8 EARNINGS PER SHARE

a) Basic

The calculation of basic earnings per share is based on the profit or loss for the period after taxation and a weighted average number of ordinary shares outstanding during the period, excluding shares held by the Employee Share Ownership Trust, as follows:

	Half year to 30 Sept 2017 Shares million	Half year to 30 Sept 2016 Shares million	*Year to 31 March 2017 Shares million*
Weighted average number of shares outstanding	**57.3**	57.3	*57.3*
Less: weighted average number of shares held by Employee Share Ownership Trust	**(0.2)**	(0.2)	*(0.2)*
Weighted average number of shares used in calculation of earnings per share	**57.1**	57.1	*57.1*

Notes on the Half Year Financial Statements (continued)

Half year ended 30 September 2017 – unaudited

8 EARNINGS PER SHARE *continued*

b) Diluted

The following table shows the effect of share options on the calculation of both adjusted and unadjusted diluted basic earnings per share.

	Half year to 30 Sept 2017 Shares million	Half year to 30 Sept 2016 Shares million	*Year to 31 March 2017 Shares million*
Number of ordinary shares per basic earnings per share calculations	**57.1**	57.1	*57.1*
Effect of shares under option	**0.3**	0.1	*0.1*
Number of ordinary shares per diluted earnings per share calculations	**57.4**	57.2	*57.2*

9 DIVIDENDS PER SHARE

The following dividends per share were paid by the Group:

	Half year to 30 Sept 2017 pence	Half year to 30 Sept 2016 pence	*Year to 31 March 2017 pence*
Previous period interim dividend	**3.70**	3.70	*3.70*
Previous period final dividend	—	—	*9.30*
	3.70	3.70	*13.00*

The following dividends per share were proposed by the Group in respect of each accounting period presented:

	Half year to 30 Sept 2017 pence	Half year to 30 Sept 2016 pence	*Year to 31 March 2017 pence*
Interim dividend	**3.70**	3.70	*3.70*
Final dividend	—	—	*9.30*
	3.70	3.70	*13.00*

The final dividend for the year to 31 March 2017 was approved by shareholders at the Annual General Meeting held on 12 September 2017. Accordingly it is no longer at the discretion of the company and has been included as a liability as at 30 September 2017. It was paid on 19 October 2017.

The interim dividend for the year to 31 March 2017 of 3.70 pence was approved by the Board on 14 November 2017 and has not been included as a liability as at 30 September 2017. The interim dividend will be paid on 6 April 2018 to shareholders on the register at the close of business on 23 February 2018.

Notes on the Half Year Financial Statements (continued)
Half year ended 30 September 2017 – unaudited

10 FAIR VALUE OF FINANCIAL INSTRUMENTS

The fair values of financial assets and liabilities together with the carrying amounts shown in the Consolidated Statement of Financial Position are as follows:

	Fair value hierarchy	**Carrying amount 30 Sept 2017 £m**	**Fair value 30 Sept 2017 £m**	Carrying amount 30 Sept 2016 £m	Fair value 30 Sept 2016 £m	*Carrying amount 31 March 2017 £m*	*Fair value 31 March 2017 £m*
Assets carried at amortised cost							
Trade receivables		**53.4**	**51.6**	69.2	69.2	*70.6*	*70.6*
Other receivables		**11.1**	**11.1**	6.4	6.4	*7.6*	*7.6*
Cash and cash equivalents		**14.3**	**14.3**	20.9	20.9	*27.2*	*27.2*
Assets carried at fair value							
Derivative financial instruments:							
– Foreign currency contracts	2	**2.3**	**2.3**	—	—	*0.6*	*0.6*
Liabilities carried at fair value							
Derivative financial instruments:							
– Foreign currency contracts	2	**(1.0)**	**(1.0)**	(10.9)	(10.9)	*(5.0)*	*(5.0)*
Liabilities carried at amortised cost							
Trade and other payables		**(54.1)**	**(54.1)**	(55.9)	(55.9)	*(82.4)*	*(82.4)*
Bank overdraft		**(0.6)**	**(0.6)**	(1.8)	(1.8)	*(1.4)*	*(1.4)*
Borrowings		**(59.2)**	**(59.2)**	(160.2)	(160.2)	*(148.6)*	*(148.6)*

The following summarises the major methods and assumptions used in estimating the fair values of financial instruments reflected in the above table.

Derivative financial instruments
Derivative financial instruments are marked-to-market using market prices.

Fixed and floating rate borrowings
The fair value of fixed and floating rate borrowings is estimated by discounting the future contracted principal and interest cash flows using the market rate of interest at the reporting date.

Trade and other receivables/payables
For receivables/payables with a remaining life of less than one year, the carrying amount is deemed to reflect the fair value. All other receivables/payables are discounted to determine their fair value. Advances received are excluded from other payables above as these are not considered to be financial liabilities.

Contingent consideration
The fair value of contingent consideration is estimated based on the forecast future performance of the acquired business over a timeframe determined as part of the acquisition agreement, discounted as appropriate. Key assumptions include growth rates, expected selling volumes and prices and direct costs during the period.

Notes on the Half Year Financial Statements (continued)
Half year ended 30 September 2017 – unaudited

10 FAIR VALUE OF FINANCIAL INSTRUMENTS *continued*

Fair value hierarchy

The table above gives details of the valuation method used in arriving at the fair value of financial instruments. The different levels have been identified as follows:

Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities;

Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

Level 3: inputs for the asset or liability that are not based on observable market data.

There have been no transfers between levels during the year.

Contingent consideration relates to amounts payable in respect of acquisitions. It is reassessed at the end of each year to its fair value.

Contingent consideration	**30 Sep 2017 £m**	30 Sep 2016 £m	*31 Mar 2017 £m*
Balance brought forward at beginning of period	—	6.6	*6.6*
Fair value of contingent consideration on acquisitions in the year	—	—	—
Unwind of discount in respect of contingent consideration	—	—	—
Contingent consideration paid	—	(6.5)	*(6.5)*
Increase in contingent consideration	—	—	—
Contingent consideration released to the consolidated statement of income	—	—	—
Effect of movement in foreign exchange	—	(0.1)	*(0.1)*
Balance carried forward at end of period	—	—	—

11 RELATED PARTIES

All transactions with related parties are conducted on an arm's length basis and in accordance with normal business terms. Transactions between related parties that are Group subsidiaries are eliminated on consolidation.

During the period, the Group supplied services and materials to its associate, Scienta Omicron Gmbh, on an arm's length basis. The following transactions occurred during the period:

Half year to 30 September 2017	**Revenue £m**	**Receivables £m**
Scienta Omicron GmbH	—	**3.6**

Half year to 30 September 2016	Revenue £m	Receivables £m
Scienta Omicron GmbH	0.1	3.6

Included in receivables is a non-current loan receivable of £2.1m (2016: £3.6m) and a current loan receivable of £1.5m (2016: £nil). The loan is repayable at the end of May 2020. During the period the Group received interest charged on the loan of £0.1m (2016: £0.1m).

Principal Risks and Uncertainties

The Group has in place a risk management structure and internal controls which are designed to identify, manage and mitigate risk.

In common with all businesses, Oxford Instruments faces a number of risks and uncertainties which could have a material impact on the Group's long term performance.

On pages 23 to 25 of its 2017 Annual Report and Accounts (a copy of which is available at www.oxford-instruments.com), the Company set out what the Directors regarded as being the principal risks and uncertainties facing the Group's long term performance and these are reproduced in the table below. Many of these risks are inherent to Oxford Instruments as a global business and they remain valid as regards their potential impact during the remainder of the second half of the year.

The impact of the economic and end market environments in which the Group's businesses operate are considered in the Half Year Statement of this Half Year Report, together with an indication if management is aware of any likely change in this situation.

ID	Specific Risk	Context	Risk	Possible Impact	Control Mechanisms	Mitigation
1	**Technical Risk**	The Group provides high technology equipment and systems to its customers.	Failure of the advanced technologies applied by the Group to produce commercial products, capable of being manufactured and sold profitably.	Lower returns through loss of market share & reduced profitability. Negative impact on the Group's reputation.	'Voice of the Customer' approach to drive the product development road map; Formal new product development stage gate process to manage R&D Product lifecycle management	Understanding customer needs / expectations and targeted new product development programme to maintain and strengthen product positioning. Stage gate process in product development to challenge commercial business case and mitigate technical risks. Operational practices around sales-production matching and inventory management to mitigate stock obsolescence risks.
2	**Routes to market**	In some instances the Group's products are components of higher level systems, sold by OEMs and thus the Group does not control its route to market.	Backward vertical integration by OEMs	Loss of a key route to market; new competitors; lower sales and profitability.	Customer intimacy to match product performance to customer needs; Positioning of OI brand and marketing directly to end users	Product differentiation to promote advantages of OI equipment & solutions; Strategic marketing with OEMs to sell performance of the combined system; Broadening the OEM customer base; Direct marketing to end users
3	**Economic environment**	Government expenditure may become constrained in key markets	Reduction in global research funding	Lower sales and profitability	Market intimacy and identification of alternative markets	Market diversification – increasing penetration into corporate customers not dependent on external funding

4	**Political risk**	The Group operates in global markets and can be required to secure export licences from governments.	Geopolitical changes resulting in sanctions and bar on exports to specific countries or unfavourable changes in tariffs / other controls on exports	Lower sales and profitability	Contract review and protection against breach in the event that export licence is withheld	Broad global customer base; contractual protection
5	**Brexit related risks**	The UK will leave the EU	Short-term decline in European research funding; Inflationary pressure on purchases and salaries; Possible changes to EU citizens' rights to work in UK impacting retention & recruitment.	Lower sales and profitability Salary inflation; Increased input costs; Loss of key skills / increased recruitment / salary costs	Market intimacy and identification of alternative markets Procurement strategy to reduce price volatility Product pricing strategy HR people strategy to facilitate recruitment & retention of staff with key skills	Market diversification – increasing penetration into corporate customers not dependent on external funding Long term pricing agreements for key suppliers Margin focused sales targets to mitigate potential increases in costs Renewal of UK work permit scheme to facilitate employment of non UK / EU nationals
6	**Supply chain risk**	The Group operates a strategic make or buy policy and outsources a significant proportion of the costs of production to benefit from economies of scale and natural currency hedges.	Supply chain disruption in particular for single source components leading to production delays and potentially lost revenue.	Disruption to customers. Lower sales and profitability Negative impact on the Group's reputation.	Procurement strategy to manage stock availability	Buffer stocks of key components; Where possible, dual source supply is sought
7	**People**	A number of the Group's employees have business critical skills.	Key employees leave and effective replacements are not recruited on a timely basis	Lower sales and profitability	HR people strategy for retention & recruitment of staff with key skills	Succession management plans; Technical career paths; Renewal of UK work permit scheme to facilitate employment of non UK / EU nationals
8	**IT risk**	Elements of production, financial and other systems rely on IT availability	Increasing risk of data loss / breach through cyber-attack, viruses or malware. "Zero-day" incidents, where new viruses or malware can spread before security vendors can respond represent a particularly high risk	Loss of business critical data and / or financial loss	IT security policy & associated standards and protection systems. Internal IT governance to maintain those protection systems and our incident response	On-going evolution of security levels in consultation with IT security partners to ensure changes are in-line with current threats. Inter alia, we deliver user education, improved configuration, internal testing and new tools where appropriate.
9	**Operational risk**	Business units' production facilities are typically located at a single site	Loss of all or part of a major production facility	Delayed shipments leading to lower sales and profitability	Business Continuity Plans in place Use of contractual protection to mitigate financial consequences of delayed delivery	Principal sites have detailed BCPs which include plans to restore or relocate production in the event of a major incident. Mechanisms such as clauses for limitation of liability / liability caps / exclusion of

						consequential losses in sales contracts
10	**Pensions**	The Group's calculated pension deficit is sensitive to changes in the actuarial assumptions.	Movements in the actuarial assumptions may have an appreciable effect on the reported pension deficit.	Additional cash required by the Group to fund the deficit. Reduction in net assets.	Regular review of investment strategy. Liability hedging programme to mitigate exposure to movements in interest rates and inflation	The Group has closed its defined benefit pension schemes in the UK and US to future accrual. The Group has a funding plan in place to reduce the pension deficit over the short to medium term.
11	**Foreign exchange volatility**	The Group's sterling cost basis is higher than its sterling revenue sources meaning that a significant proportion of the Group's profit is made in foreign currencies.	Adverse foreign currency movements	Reduced profitability	Natural hedging to offset foreign currency sales through procurement in foreign currencies; Hedging programme	Strategic procurement in USD, Euros & Yen. Short-term exposure to volatility is managed by hedging programme (forward contracts)
12	**Legal / compliance risk**	The Group operates in a complex technological environment and competitors may seek to protect their position through intellectual property rights	Infringement of a third party's intellectual property	Potential loss of future revenue; financial compensation	Formal 'Freedom to Operate' assessment to identify potential IP issues during product development;	Confirmation of 'Freedom to Operate' during new product development stage gate process

Responsibility Statement of the Directors in respect of the Half Year Financial Statements

We confirm that to the best of our knowledge:

- the condensed set of financial statements has been prepared in accordance with IAS 34 Interim Financial Reporting as adopted by the EU;

- the interim management report includes a fair review of the information required by:

  (a) DTR 4.2.7R of the Disclosure Guidance and Transparency Rules, being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed set of financial statements; and a description of the principal risks and uncertainties for the remaining six months of the year; and

  (b) DTR 4.2.8R of the Disclosure Guidance and Transparency Rules, being related party transactions that have taken place in the first six months of the current financial year and that have materially affected the financial position or performance of the entity during that period; and any changes in the related party transactions described in the last annual report that could do so.

Ian Barkshire, Chief Executive Gavin Hill, Group Finance Director
14 November 2017

Independent review report to Oxford Instruments plc

Introduction
We have been engaged by the company to review the condensed set of financial statements in the half-yearly financial report for the six months ended 30 September 2017 which comprises the Condensed Consolidated Statement of Income, the Condensed Consolidated Statement of Comprehensive Income, Condensed Consolidated Statement of Financial Position, Condensed Consolidated Statement of Changes in Equity, Condensed Consolidated Statement of Cash Flows and the related explanatory notes.

We have read the other information contained in the half-yearly financial report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of financial statements.

This report is made solely to the company in accordance with the terms of our engagement to assist the company in meeting the requirements of the Disclosure Guidance and Transparency Rules ("the DTR") of the UK's Financial Conduct Authority ("the UK FCA"). Our review has been undertaken so that we might state to the company those matters we are required to state to it in this report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company for our review work, for this report, or for the conclusions we have reached.

Directors' responsibilities
The half-yearly financial report is the responsibility of, and has been approved by, the directors. The directors are responsible for preparing the half-yearly financial report in accordance with the DTR of the UK FCA.

The annual financial statements of the group are prepared in accordance with IFRSs as adopted by the EU. The condensed set of financial statements included in this half-yearly financial report has been prepared in accordance with IAS 34 *Interim Financial Reporting* as adopted by the EU.

Our responsibility
Our responsibility is to express to the company a conclusion on the condensed set of financial statements in the half-yearly financial report based on our review.

Scope of review
We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 2410 *Review of Interim Financial Information Performed by the Independent Auditor of the Entity* issued by the Auditing Practices Board for use in the UK. A review of interim financial information consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK and Ireland) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion
Based on our review, nothing has come to our attention that causes us to believe that the condensed set of financial statements in the half-yearly financial report for the six months ended 30 September 2017 is not prepared, in all material respects, in accordance with IAS 34 as adopted by the EU and the DTR of the UK FCA.

Greg Watts
for and on behalf of KPMG LLP
Chartered Accountants
One Snowhill, Snow Hill Queensway
Birmingham, B4 6GH

14 November 2017