

Background to this Conference

CIR created the leading forum for high-value manufacturing (HVM) in 2002, which aims to turn around UK manufacturing and find our lasting strengths in HVM. We seek an independent discussion of smart content, and practical use for delegates: analytical but clear; we aim also to build the self-awareness of the high-value manufacturer community. CIR sees the HVM sector within manufacturing as the main long-term future for manufacturing in high cost areas.

Defining High Value Manufacturing

CIR uses the phrase 'High Value Manufacturing' or 'HVM' rather than the phrase 'high value-added manufacturing'. This was a deliberate 'misnomer' by CIR in 2002, which has now taken root. CIR believes the recipe for HVM is not simply about linear 'value-add': it is a more wholesome function of time-to-market, IP and reinvestments, among other factors.

CIR developed a working definition of HVM: "HVM is manufacturing where there is relatively high value created in the supply chain segment involved. In a corporate setting, HVM is usually characterised by higher-than-average expenditure on R&D as a proportion of sales, and/or is highly innovative with respect to product development, and/or is associated with above-average levels of intellectual property (IP).

HVM often applies to newer markets, where design or manufacturing processes may be fast-moving, new, unfamiliar, or not well tried and tested; and where prototyping, demonstration and lower volume production are all still valuable. Selected business sectors where this is often realised are: electronics and semiconductors; printing and displays; medical devices and biotechnology; aerospace; automotive and motorsport; new energy; new materials and nanotechnology; and communications technology."

Attend HVM-UK

- ❖ Acquire, understand, keep clients
- ❖ Grow, transform, and evolve your business
- ❖ Get a snapshot of this new sector
- ❖ Meet advanced manufacturers and distinguished business leaders
- ❖ Compare national and regional manufacturing strategies with the issues of real HVM companies
- ❖ Join a well-grounded, successful event series, supported by the DTI, Lord Sainsbury, the RDAs, leading academic institutions and the Manufacturing Advisory Services

Plenary Sessions

Session No 1: Growth - Issue: Growing high value manufacturing businesses from high cost regions

Session No 2: Macro - e.g. machines, vehicles, instruments and large devices

Issue: creating value from complex or assembled products

Session No 3: Micro - e.g. sensors, actuators, small devices, materials, bio or nanotechnology

Issue: creating value from small or component products

Session No 4: Actions - A distinguished, high-level, multi-stake-holder session.

Issue: what are the UK's HVM strengths and what actions must we take to ensure HVM flourishes?

Who should attend?

All those who wish to understand better current commercial issues in manufacturing and be part of a growing, forward-looking, refreshing, exciting, competitive business growth movement with a long-term view and future.

Be part of HVM-UK; be inspired!

HVM-UK half price for manufacturers AND early booking discount prices for all before October 14!

AND multiple booking discount prices, even if buying single tickets at multiple HVM-UK events

(e.g. Cambridge and Oxford)!

£250/£200 (£125/£100 manufacturers) per non-sponsoring company delegate (includes report, proceedings and post-event discussion summary by CIR. Lower price applies if paid earlier than October 17 2005.

Organisations sending multiple delegates benefit from special prices:

2 delegates **£470/£380 (£235/£190 manufacturers)** plus VAT; Additional delegates please add **£220/£170**

(£110/£85 manufacturers) plus VAT per person. Lower price applies if paid earlier than October 17 2005.

Selected Speaker Biographies

Lord Sainsbury of Turville - Lord Sainsbury was appointed Parliamentary Under-Secretary of State for Science and Innovation in July 1998, with responsibility for the Office of Science and Technology, Research Councils and space matters.

Jonathan Flint CEO Oxford Instruments - Jonathan is an experienced MD with an established career in the technology sector, spanning communications, aerospace instrumentation and satellite technology.

Professor Mike Gregory Head IfM - Professor Gregory is Head of the Manufacturing & Management Division and the Institute for Manufacturing at Cambridge University. He chaired the 2001 UK Research Assessment Exercise for General Engineering, and sits on the DTI Basic Technologies Advisory Group.

Dr Tim Cook MD ISIS Innovation - Tim Cook was appointed Managing Director of Isis Innovation Ltd in 1997. He has experience at Oxford Instruments Group and was later Managing Director of their subsidiary, Oxford Analytical Instruments. Tim founded Oxford Semiconductors and Oxford Asymmetry.

Mike McCreary CIR Associate - Mike was Aeroflex plc's (formerly IFR and Marconi Instruments) Manufacturing Director and was later General Manager. Mike is a Chartered Engineer, a Member of the IEE, a Member of the Institute of Operations Management and an Associate of the CMI.

Paul Reip MD QinetiQ Nanomaterials - Dr Paul Reip spent the early part of his career as research scientist in the EM Gun programme, and then moved on to various RF research programmes as Project Manager. He was Department Manager of Electro Optic Warfare. He founded QinetiQ Nanomaterials.

Nick Brayshaw CBI Chair Manufacturing Council - Nick Brayshaw is an Independent Member of the Business Group Board at the DTI. He has been advising the DTI on UK Manufacturing Strategy, incorporated in a recent report, published by the DTI in 2004.

James Brathwaite SEEDA Chairman - James became SEEDA Chairman in 2002. He founded Epic Interactive Media, which he built up to become one of Europe's largest multimedia companies, with 150 staff. He floated the company in 1996.

Pam Alexander joined SEEDA as CEO in 2004, having been involved in regeneration for nearly 30 years. Recommendations in her 2002 report for the Cabinet Office and Treasury 'Better Government Services: Executive Agencies in the 21st Century' are being implemented.

About CIR Ltd (HVM-UK Series founder and manager)

CIR Ltd offers unbiased market and investment research and financial and strategic consulting through dynamically formed, small teams of technology, business and financial analysts and sector-expert consultants. CIR's 30 partners are expert in printing, displays, electronics & semiconductors, biotechnology, new materials, energy and software sectors.

www.CambridgeInvestmentResearch.com

www.hvm-uk.com

About HVM-UK conference partner SEEDA

South East of England Development Agency (www.seeda.co.uk)

The South East England Development Agency (SEEDA) is responsible for the sustainable economic development and regeneration of the South East of England - the driving force of the UK's economy. Our aim is to create a prosperous, dynamic and inspirational region by helping businesses compete more effectively, training a highly skilled workforce, supporting and enabling our communities while safeguarding our natural resources and cherishing our rich cultural heritage.

About the Gold Sponsors

Marks & Clerk (www.marks-clerk.com)

Marks & Clerk is the UK's leading firm of patent and trade mark attorneys with an associated law firm - Marks & Clerk Solicitors. The firm specialises in all aspects of intellectual property - patents, trade marks, designs, copyright, domain names - and has an unrivalled depth of expertise in a full range of technical fields. Marks & Clerk Solicitors is also a leader in its field advising on all areas of IP law from litigation to commercial matters. Marks & Clerk has a network of 12 UK offices as well as offices in Europe, Canada and the Far East.

Manufacturing Advisory Service - South East (DTI) (www.mas-se.org.uk)

The MAS is committed to sourcing and providing information on best practice in manufacturing. MAS-SE provides a dedicated route to hands-on, total manufacturing support for businesses across the South East. In addition to providing a free helpline and telephone support to manufacturers, with information ranging anywhere between the start-up of businesses to sourcing suppliers or finding business partners, MAS-SE also operates a Knowledge Transfer Initiative, to train staff and teams in techniques of best practice.

Design Council (www.design-council.org.uk)

The Design Council improves prosperity and well-being in the UK by demonstrating and promoting the vital role of design, particularly by helping businesses be more competitive and by improving the effectiveness of public services. Its national design programme, being developed with the RDAs, is designed to help UK manufacturers to transform their bottom line and secure competitive advantage by using design to guide decision making and produce strongly differentiated products.

UK Trade & Investment South East (www.uktisoutheast.com)

UK Trade & Investment is the government organisation that supports UK companies wishing to develop their business overseas. For more information about our impartial local advice delivered by experienced exporters, practical help and how to use our global network, contact us on 08457 35 45 55 or visit our website.

About the Session and Silver Sponsors

NatWest RBS (www.rbs.co.uk/technology)

By harnessing the strengths of The Royal Bank of Scotland and NatWest, The Royal Bank of Scotland Group has become the largest UK Corporate bank - a Bank with true global capability, but one which retains its local expertise, with a network of Corporate offices and Relationship Managers committed to providing a focused service to businesses of all sizes, supported by a comprehensive range of products and services.

Cambridge Resolution Ltd (www.camres.co.uk)

Cambridge Resolution consists of specialists with extensive experience in technologies including MEMS (micro electro mechanical systems), medical devices and microfluidics. The company offers market research for technology companies such as investigating specialist markets, finding new applications or markets for an emerging technology, or determining effective routes to market. Key sectors include: Instrumentation, Microelectronics, Bioscience, Medical devices, IT, Nanotech, Microfluidics, MEMS.

CNA Executive Search (www.cnarand.co.uk)

Part of CNA International, we are a multi-disciplined consultancy specializing in the R&D function and all aspects of managing the innovation process and commercializing the resultant technology; we provide bespoke Executive Search services to the Cambridge Community and hi-tech industries through-out the UK and across Europe.

Invest Milton Keynes (www.investmiltonkeynes.com)

Located midway between Oxford and Cambridge, this modern, vibrant new town has been one of the fastest growing areas of the country for the past 25 years. And that growth is set to continue as the city plans to double in size over the next 25 years, making it the 12th largest urban area in the country. This population growth will be sustained by the realisation of an equally ambitious economic vision for Milton Keynes. Don't miss out on the opportunity to be part of the success story, contact Invest Milton Keynes.

YTKO (www.ytko.com)

YTKO is an enterprise development company, working with both large multinationals such as IBM, Analog Devices, QinetiQ and Nokia, and with fast-growth science- and technology-based companies, from start-up phase to international expansion. YTKO's long and varied experience in the high technology sector enables quick and efficient verification of innovation and the creation of new business opportunities, whether developed internally or offered from external sources.

Close Brothers Private Equity (www.cbpe.com)

Close Brothers Private Equity, ("CBPE") is a leading player in mid-market UK private equity, established in 1984, flexible and innovative in its approach.

Oxfordshire County Council (www.oxfordshire.gov.uk)

Bordered by the Cotswolds and the Chilterns and crossed by the River Thames and its tributaries, Oxfordshire is an area rich in history. Located at the northern edge of the South East region the County has strong economic links to both London and the Midlands. With its geographically central location in England, Oxfordshire has excellent transport links by both road and rail. The aim of Oxfordshire County Council is to encourage the development of a high wage, high skill, high value added economy which enhances and protects the quality of life of Oxfordshire's residents and enables them to fulfill their potential.

Oxford City Council (www.oxford.gov.uk)

Oxford City Council works in partnership with organizations in the public, private and voluntary sector to support and promote the development of businesses in Oxford. We believe that democratic local government can and should make a positive difference, and we are keen to help develop our diverse local economy, which includes manufacturing, bioscience, health, tourism, IT and publishing.

Oxford University Begbroke Science Park (www.begbroke.ox.ac.uk)

Among the first of a new generation of Science Parks designed to grow the technologies of tomorrow.

Associates:

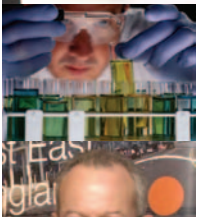


CIR Ltd, 1 Fenner's Lawn, Cambridge, CB1 2EH

www.hvm-uk.com

5th HIGH VALUE MANUFACTURING SOUTH EAST ENGLAND A CIR CONFERENCE

HARWELL INTERNATIONAL BUSINESS CENTRE FOR SCIENCE AND TECHNOLOGY, OXFORDSHIRE
THURSDAY, NOVEMBER 17, 2005



"I am delighted to be here to address this extremely important manufacturing conference... There are fundamental reasons why manufacturing and innovation today are becoming so important for our future."
Lord Sainsbury of Turville

"HVM is clean, exciting, networked, it's to strive for and it's something we are proud to see our children do." **Professor Mike Gregory**



"An excellent conference."
Dr Hermann Hauser

"In the face of increasing low-cost competition, firms will need to move up the value-added chain and embrace knowledge-intensive, high-skilled manufacturing to compete more on quality and less on price." **Dr Nick Brayshaw, CBI Chair Manufacturing, author of 2004 Government Strategy Review.**

In partnership with:

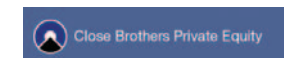
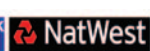


Gold Sponsors:

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A CIR Conference

Conference Online:
www.hvm-uk.com

5th HIGH VALUE MANUFACTURING, SOUTH EAST ENGLAND, A CIR CONFERENCE

HARWELL INTERNATIONAL BUSINESS CENTRE FOR SCIENCE & TECHNOLOGY, THURSDAY, NOVEMBER 17, 2005

Conference Programme - HVM-UK: South East 2005

0900-0915 Registration with refreshments

0910-1045 **SESSION 1: GROWTH - CIR HVM-UK: SE 2005 in partnership with SEEDA**

ISSUE: GROWING HIGH VALUE MANUFACTURING BUSINESSES FROM HIGH COST REGIONS

- 0910 **Mike Gregory**, Head, IfM, Cambridge University – Chairman's Outlook
- 0915 **Justin Hayward**, Managing Director, CIR Ltd, – "Introduction to HVM-UK"
- 0920 **Mike McCreary**, formerly VP Europe Aeroflex plc – "HVM: The future of manufacturing"
- 0930 **Mike Brady**, Director, Mirada Solutions Ltd; Professor of Information Engineering, Oxford University; MAS South East, Gold Sponsor
- 0945 **Harry Rich**, Deputy CEO, Design Council, Gold Sponsor
- 0955 **Ralf Hattler**, Director: Logistics, IT & Structure Planning, BMW "The New Mini at Oxford"
- 1010 **Gregor Grant**, Partner, Marks and Clerk, Gold Sponsor - "Maximising Value of your Intellectual Property"
- 1025 **PANEL 1:** Mike Gregory, Colin Whitehouse, Ross Bradley, James Brathwaite, Mike Brady, Ralf Hattler, Mike McCreary
- 1055 **James Brathwaite CBE**, SEEDA Chairman, **SEEDA** Address

1105-1130 Coffee Break

1130-1300 **SESSION 2: MACRO Sponsored by Natwest Royal Bank of Scotland**
Machines, instruments and large devices

ISSUE: CREATING VALUE FROM COMPLEX PRODUCTS

- 1130 **Tony Butcher**, Operations Director, Prodrive (Automotive/F1)
- 1145 **Nick Talbot**, Director, Seymour Powell (Energy, Product Design) – "Better by Design"
- 1200 **Andrew Kearsley**, CEO, Oxford Lasers Ltd (Laser Imaging) – "Lasers and market focus"
- 1215 **Richard Kirk**, Managing Director, Elumin8 (Materials, Displays – electronics) – "Creating New Markets in Lighting Technology – Automotive to Architecture"
- 1230 **PANEL 2:** Mike Gregory, Andrew Kearsley, Tony Butcher, Nick Talbot, Richard Kirk

1300-1400 Lunch Networking

1400-1530 **SESSION 3: MICRO Sponsored by Cambridge Resolution**

ISSUE: CREATING VALUE FROM SMALL PRODUCTS

- 1400 **Paul Reip**, CEO, QinetiQ Nanomaterials – "Production and Applications of Nanomaterials"
- 1415 **Roy Clampitt**, Founder and Managing Director, Oxford Applied Research – "Enabling Scientific Instruments"
- 1430 **Keith Errey**, CEO, Toumaz Ltd (devices – RF/semiconductors)
- 1445 **Peter Dobson**, Founder, Oxonica plc & Professor of Engineering, Director of Oxford University Begbroke Science Park – "Nanotechnology, the reality and the matching of expectations"
- 1500 **PANEL 3:** Mike Gregory, Paul Reip, Roy Clampitt, Keith Errey, Peter Dobson, Jason Wiggins

1530-1600 Afternoon Coffee Break

1600-1730 **SESSION 4: STRENGTHS AND ACTIONS Sponsored by CNA International**

ISSUE: WHAT WILL BE THE UK'S HVM STRENGTHS AND WHAT ACTIONS MUST WE TAKE?

- 1600 **Jonathan Flint**, CEO, Oxford Instruments plc – "Requirements for Effective HVM"
- 1620 **Nick Brayshaw**, CBI Chair Manufacturing Council – Government Manufacturing Strategy
- 1635 **Lord Sainsbury of Turville**, Conference Address
- 1650 **PANEL 4:** Mike Gregory, Jonathan Flint, Lord Sainsbury, Peter Dobson, Tim Cook, Nick Brayshaw
- 1720 **Pam Alexander**, SEEDA CEO, "Key messages for SEEDA"
- 1730 **Mike Gregory**, Chairman's Closing Remarks

1740 Drinks Reception at Venue

Themes of 5th CIR High Value Manufacturing Conference 2005 at Harwell in Oxfordshire

The conference series for the value-chain virtuous cycle

The acclaimed High Value Manufacturing Conference (HVM) created in 2002 by CIR, is now known for its candid industry-to-industry discussion and independence. This evolving, prestigious event now expands to cover the UK in 2005/6 as a national series: the HVM-UK conferences.

The conferences will:

- ❖ Define the new long-term, growth sector within manufacturing: HVM
- ❖ Develop the self-awareness of this new community
- ❖ Discover how to build HVM companies
- ❖ Create value for large-product HVM businesses
- ❖ Create value for small-product HVM businesses
- ❖ Draw together UK strengths in HVM and state actions
- ❖ Pioneer the turn around of manufacturing in the UK

HVM is the future of manufacturing in high cost regions. We must seek new ideas and opportunities, and exploit them more fully and at a faster rate, and then reinvest that success in further R&D. We must develop the 'recipes', the process and business know-how and keep commercial lines in place or we will ever be passing up value opportunities. The CIR HVM conferences are achieving some very desirable objectives:

- 1) They provide a unique forum for leading, technology-rich manufacturers to meet and discuss their value-propositions, business models, markets, objectives and issues. The senior managers who attend say how valuable this peer-to-peer opportunity is to them.
- 2) They enable policy makers, such as the DTI, related organizations, and service providers to hear first hand what drives HVM company delegates and so how best to support them.
- 3) They provide an opportunity to make delegates' voices heard directly by the DTI and related organisations about the needs of high value manufacturers.
- 4) They promote a bright and positive image for HVM in the UK, making it an area in which people want to work and invest

Key to these outcomes is the conference format, with senior managers from the companies making open plenary presentations and then taking questions and sitting on panels to debate in front of the audience.

HVM sectors lead the world in innovation: printing & displays; designing new and organic electronics & semiconductors; new, cleaner energy; new materials & nanotechnology; motorsport/F1; and pharmaceuticals, medical devices, & biotechnology. We want to see these sectors match or better the successes of our best export sectors, such as the City. International businesses, with customers and operations across borders, involve multiple business functions. The market is for products that are mobile across borders. As such, each business function should be done by the best people with the best resources, constrained by the need for certain close correspondences.

Lord Sainsbury, Under-Secretary of State for Science and Technology, will attend and address the conference. There is a dynamic of growth taking place in the high value, new technology sectors and a moderate decline in the traditional ones; a key question Lord Sainsbury has posed at the HVM-UK events is: 'how fast can you grow one, and move resources out of the other?'

Dr Nick Brayshaw, Chair, CBI Manufacturing Council, will update on his Government Manufacturing Strategy Review.

Oxford Instruments CEO, Jonathan Flint will give a seminal talk as a current leader of an HVM firm. Dr Paul Reip will talk about the QinetiQ Nanomaterials business, and Dr Richard Kirk about the innovative large-scale displays of his company, Elumin8.

Professor Mike Gregory, Head of the Institute for Manufacturing at Cambridge University, chairs the day in Oxfordshire and Cambridge 2005.

We will also hear from Dr Tim Cook of ISIS Innovation, the serial entrepreneur turned venture capitalist, Professor Colin Whitehouse of Rutherford Appleton Labs, and Ross Bradley of the Farnborough Aerospace Consortium.

And, of course, a wider group of excellent companies leads the debate with their experiences and strategies: during the day, there are twenty speakers in all, with highly interesting stories to tell! There is a newly structured programme based on business models rather than sectors, providing for a logical, cumulative flow of learning and a crescendo to the final top-level discussion. The talks are designed for sharing experience and knowledge across sectors.

We believe you will find the 5th CIR Conference at the Harwell International Business Centre for Science and Technology, Oxfordshire, an ideal place to be on Thursday, 17 November 2005.

20 speakers	4 sessions
5 network breaks	4 panels
4 years of events	1 full day

We welcome you to take part this year.
Please call Rosie and Helen at CIR
on 01223 421 476/477 to secure your places.

Conference Booking

Call: Rosie Whitaker/Helen Nierinck (CIR Event Marketing) 01223 421 476/477 or Justin Hayward (CIR Director) at 01223 303500 to discuss sponsorship of future HVM-UK events.

Please register (and optionally pay on-line) at:
www.hvm-uk.com

Or please complete this form and FAX to: 01223 421471
Or post to: CIR Ltd., 1 Fenner's Lawn, Cambridge CB1 2EH

Registration Form

Name: _____

Email: _____

Direct phone number: _____

Mobile number: _____

Title or Position: _____

Company or Affiliation: _____

Address: _____

Postcode: _____ Country _____

Delegate Booking (Please note the following manufacturer and early payment discount matrix):

Note: Manufacturing companies pay half price for HVM-UK events in 2005/6.

Complete pricing matrix for delegates	No of delegates	Manufacturers		Non-Manufacturers	
		Ex-VAT	with VAT	Ex-VAT	with VAT
Payment in full up to October 14, 2005	1	£100.00	£117.50	£200.00	£235.00
	2	£190.00	£223.25	£380.00	£446.50
Payment received on or after October 17, 2005	1	£125.00	£146.87	£250.00	£293.75
	2	£235.00	£276.12	£470.00	£552.25
	Additional tickets	£85.00 each	£99.87 each	£170.00 each	£199.75 each
	Additional tickets	£110.00 each	£129.25 each	£220.00 each	£258.50 each

Manufacturer/Other (please select one) _____

Number of delegates _____ (HVM-UK: South East (Oxfordshire))

_____ (HVM-UK: East (Cambridge))

NB: Multiple ticket discounts apply to delegates attending different HVM-UK events. E.g. One manufacturer individual buying before October 14, one ticket to the HVM-UK: East (Cambridge) and one ticket to the HVM-UK: South East (Oxfordshire) event, pays as if buying two tickets to one conference, i.e. £190 (plus VAT).

Payment before/after October 14 (Please select)

Number: _____ Total _____

Total Amount to pay: _____

Payment Details:

Please EITHER: Make bank transfer to:

Account name: CIR Ltd

Receipt bank account number: 42283891

Receipt international bank account number: GB90MIDL40160842283891

Sort code: 40-16-08.

Branch Identifier Code (BIC): MIDLGB22103J

Bank address: (HSBC Plc, PO Box 85, City Office, Cambridge CB2 3HZ, UK)

Please include the delegate name(s) in the transmission details

OR: Pay online at www.cambridgeinvestmentresearch.com/events/ by card

OR: Mail cheque payable to "CIR Ltd" at address:

1 Fenner's Lawn, Cambridge CB1 2EH.

We will confirm your delegate ticket when we have received your payment. We issue an invoice with the online booking. We do not refund cancellations, but you may substitute delegates at any time.

Thank you for your booking: we look forward to greeting you this year at the HVM-UK Conferences.