

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, 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, post-event CD of slides and 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 **£185 (£110)**

plus VAT per person. Lower price applies if paid earlier than October 17 2005.

Selected Speaker Biographies

Dr David Fyfe CEO Cambridge Display Technology - David spent his career before CDT in the UK and US chemical industries, for the last 20 years in chief executive roles. He is a member of the UK's Chemistry Leadership Council and a frequent speaker at international display industry conferences.

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.

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.

Hermann Hauser Co-founder Amadeus Capital Partners - Hermann was awarded an Honorary CBE for "innovative service to the UK enterprise sector". He is probably best well known for co-founding Acorn. He has founded and sold many companies including the Active Book Company, ATM, and NetChannel.

Bill Williams CEO Hethel Engineering Centre - Before becoming CEO of HEC, Bill Williams was Head of Strategy for Group Lotus plc with responsibility for business and operating strategy for the global operations of the organisation. Bill has an MBA from Cranfield and is a member of the CIM.

Mike McCreary CIR Associate - Mike has experience at Aeroflex plc's (formerly IFR and Marconi Instruments) as 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.

Geoff Clark Commercial Director Patterning Technologies Ltd - Geoff Clark has 30 years international business experience, primarily in the technology sector. Most recently he has been working with PTL in developing its commercial proposition to promote the adoption of its proprietary inkjet processes.

Paul Rewrie CEO Cambridge Biostability - Mr. Rewrie has worked in transport, property and technology. He is a Chartered Management Accountant and has set up a financial services and accountancy company. He holds a number of financial directorships.

Nick Brayshaw Chairman CBI National 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.

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

About the Platinum Sponsor

East of England Development Agency (www.eeda.org.uk)

The East of England Development Agency (EEDA) is the driving force behind economic growth and regeneration in the East of England, the ideas region - a diverse area already established in the UK as a beacon of creativity and innovation. As a fast growing region, the East of England is making a significant contribution to the UK economy. EEDA will present the region's new manufacturing strategy to the conference.

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.

i10 (www.i10.org.uk)

A new collaboration between the region's universities and colleges, i10 offers businesses access to the huge combined resources of knowledge and expertise of Anglia Polytechnic University, University of Cambridge, Cranfield University, the University of East Anglia, Essex University, University of Hertfordshire, Luton University, Norwich School of Art & Design, the Open University and Writtle College. i10 works towards fostering a culture of innovation, encouraging technology transfer and knowledge-sharing, and providing specific support for the manufacturing sector, as one of the region's clear strengths.

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.

Institute for Manufacturing (www.ifm.eng.cam.ac.uk)

The Institute for Manufacturing (IfM) is part of the University of Cambridge, Department of Engineering. Our activities encompass industrial services, research, education and courses that aim to provide a clear understanding of the challenges facing manufacturing today. The IfM works closely with industry at a regional, national and international level and across all sectors.

About the Session and Silver Sponsors

NatWest RBS (www.natwest.com)

NatWest is delighted to have the opportunity to sponsor this high value manufacturing conference. By harnessing the strengths of The Royal Bank of Scotland and NatWest, The Royal Bank of Scotland 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 for businesses of all sizes, with 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.

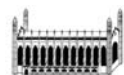
YTKO (www.ytko.com)

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.

Associates:



Kings College
Chapel Foundation



maseast
the dti manufacturing advisory service



Klebos
Limited



Greater Cambridge
Partnership



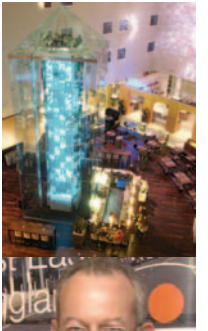
The Papworth Trust
Unlocking the potential of disabled people



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

www.hvm-uk.com

4th HIGH VALUE MANUFACTURING CAMBRIDGE & THE EAST OF ENGLAND A CIR CONFERENCE NEW HALL, CAMBRIDGE FRIDAY, NOVEMBER 11, 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.



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Cambridge Resolution

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A CIR Conference
Conference Online:
www.hvm-uk.com

4th HIGH VALUE MANUFACTURING CAMBRIDGE AND THE EAST OF ENGLAND A CIR CONFERENCE, NEW HALL, CAMBRIDGE, FRIDAY, NOVEMBER 11, 2005

Conference Programme - HVM-UK: East 2005

0845-0900 Registration with refreshments

0900-1100 **SESSION 1: GROWTH – Platinum Sponsor EEDA**

ISSUE: GROWING HIGH VALUE MANUFACTURING BUSINESSES FROM HIGH COST REGIONS

- 0900 **Mike Gregory**, Head, IfM, Cambridge University – Chairman's Outlook
 0905 **George Kieffer** – Deputy Chairman, EEDA, **Platinum Sponsor Address**
 0915 **Justin Hayward**, Managing Director, CIR Ltd, – "Introduction to HVM-UK"
 0920 **Mike McCreary**, CIR Associate, formerly VP Europe Aeroflex plc – "HVM: the future"
 0930 **Bill Williams**, CEO, Hethel Engineering Centre, formerly Head of Strategy Lotus – "Innovate; Market; Earn; Reinvest: the virtuous cycle"
 0940 **Matthew Bullock**, Chairman, i10, Gold Sponsor – "How companies interact with universities: models and limitations"
 0955 **Bill Baxter**, CEO, Inca Digital - a presentation from a successful HVM growth company
 1010 **Ben Alexander**, Close Brothers Private Equity – "Growth through private equity"
 1015 **Philip Martin, Partner**, Marks and Clerk, Gold Sponsor - "Adding value using Intellectual Property"
 1030 **PANEL 1:** Mike Gregory, George Kieffer, Matthew Bullock, Bill Williams, Mike McCreary, Bill Baxter

1100-1130 Coffee Break - Sponsored by i10

1130-1300 **SESSION 2: MACRO Sponsored by NatWest RBS**

Machines, instruments and large devices

ISSUE: CREATING VALUE FROM COMPLEX PRODUCTS

- 1130 **Harry Rich**, Deputy Chief Executive, Design Council, joint Gold Sponsor – "Role of design in a modern economy"
 1137 **Derek Ford**, Industrial Fellow, Institute for Manufacturing, joint Gold Sponsor
 1145 **Nick Talbot**, Director, Seymour Powell (Product Design) – "Better By Design"
 1200 **Mike Powell**, Managing Director, Pelikon Ltd (Displays) – "A Model for Displays"
 1215 **Graham Ford**, Chief Engineer, HelioDynamics Ltd (Energy) – "Small Firm HVM"
 1230 **Geoff Clark**, Commercial Director, Patterning Technologies Ltd (Inkjet Printing) – "Service Performance Competitive Edge from Inkjet Technology"
 1245 **PANEL 2:** Mike Gregory, Harry Rich, Derek Ford, Nick Talbot, Mike Powell, Geoff Clark, Graham Ford

1315-1400 Lunch Networking - Sponsored by i10

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

Sensors, actuators, materials and small devices

ISSUE: CREATING VALUE IN COMPONENT PRODUCTS

- 1400 **Phil O'Donovan**, Commercial Director & Co-Founder, Cambridge Silicon Radio (Electronics) – "CSR: Playing to UK Manufacturing Strengths"
 1420 **Greg McCray**, CEO Antenova (Communications Tech – RFID)
 1440 **Paul Rewrie**, CEO, Cambridge Biostability Ltd (Biotechnology) – "Ethical Innovation: Creating Stable Liquid Vaccines"
 1455 **John Halfpenny**, CEO, CMR Fuel Cells Ltd (Energy - Devices) - "High value fuel cells"
 1510 **PANEL 3:** Mike Gregory, Phil O'Donovan, Greg McCray, Paul Rewrie, John Halfpenny

1540-1610 Afternoon Coffee Break - Sponsored by i10

1610-1740 **SESSION 4: STRENGTHS AND ACTIONS Sponsored by CNA International**

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

- 1610 **David Fyfe**, CEO, Cambridge Display Technology – "Manufacturing process: key to the technology ecosystem"
 1630 **Nick Brayshaw**, CBI Chair Manufacturing Council – "Government manufacturing strategies"
 1645 **Hermann Hauser**, Director, Amadeus Capital Partners - Keynote talk
 1655 **Lord Sainsbury of Turville**, Conference Address
 1710 **PANEL 4:** Mike Gregory, Lord Sainsbury, Hermann Hauser, David Fyfe, and Nick Brayshaw
 1740 **Mike Gregory**, Closing Remarks, Conference Chairman

1745 Drinks Reception at Venue

Themes of 4th CIR High Value Manufacturing Conference 2005 in Cambridge

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 exploit them more fully and faster, and reinvest that success in 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 promote a bright and positive image for HVM in the UK, making it an area in which people want to work and invest.
- 4) They provide authoritative research - a summary of the latest CIR HVM research and conference CD summarizing the day's discussions and learning points will be sent to delegates.

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. There are no breakout sessions other than informal networking opportunities during the day.

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, Minister 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 question Lord Sainsbury posed at the HVM-UK events is: 'How fast can you grow one, and move resources out of the other?'

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

Dr David Fyfe, CEO of leading HVM firm Cambridge Display Technologies, will talk on its recent expansion into manufacturing processes, providing insights into the commercialization of basic science and IP that requires manufacturing solutions.

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

Nick Talbot of Seymour-Powell, John Halfpenny of CMR Fuel Cells and Graham Ford of HelioDynamics, discuss their prospects in the diverse, innovative and new areas of hydrogen vehicles; cleaner more efficient fuel cells for portable devices, and solar energy products.

Hermann Hauser, the serial entrepreneur and venture capitalist, and doyen of the Cambridge Phenomenon, will also give a keynote talk.

And, of course, a wider group of excellent companies will lead the debate with their experiences and strategies. Throughout the day, there are twenty speakers, 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 4th CIR Conference at New Hall, Cambridge an ideal place to be on Friday, 11 November 2005.

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

Conference Booking

Call: Helen Nierinck/Rosie Whitaker (CIR Event Marketing) 01223 421 477/476 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
	Additional tickets	£85.00 each	£99.87 each	£170.00 each	£199.75 each
Payment received on or after October 17, 2005	1	£125.00	£146.87	£250.00	£293.75
	Additional tickets	£235.00	£276.12	£470.00	£552.25
		£110.00 each	£129.25 each	£220.00 each	£258.50 each

Manufacturer/Other (please select one) _____

Number of delegates _____ (HVM-UK: East (Cambridge))

_____ (HVM-UK: South East (Oxford))

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 (Oxford) 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.