

Technology Strategy Board
Driving Innovation

Investing in the future



Herbert von Bose (fifth from right) and Andrea Gentili (third from right) with the High Value Manufacturing TIC team in London recently

Focus on EU Framework Programmes

An important role for the HVM TIC will be acting as a focal point for funding opportunities within the EU Framework Programme and as a catalyst for consortium building for funding bids. In the broad area of manufacturing, the Manufuture and the SusChem programmes are the platforms for work on this theme and more background can be found at <http://www.manufuture.org/> and at <http://www.suschem.org>. These platforms in turn promote some major programmes, such as KBBE – Knowledge-Based Bio-Economy - and other manufacturing-related programmes in specific technology areas (e.g. Plastic electronics). All Work Programmes can be quickly downloaded from http://cordis.europa.eu/fp7/wp-2012_en.html.

Funding of collaborative research and development projects through the Manufuture Platform has been available in each of the last two years to the value of €160m in each year - €200m this year - and this is likely to increase in the future. Whilst UK academic organisations have been relatively successful in winning funding from these programmes, UK industry has not secured the share to which it might aspire. Hence, one of the aims of the Technology Strategy Board is to secure more UK industrial participation in EU-funded collaborative research and development programmes. At the same time, TSB is investing effort in influencing

and steering the direction of future funding priorities.

To this end, a UK Manufuture Steering Committee has been running for some time, involving the Research Councils, academia and industry (GSK, Rolls-Royce, and TWI). For more information, contact will.barton@tsb.gov.uk, who chairs this activity. This team met a senior EU group in London on 19th July, made up of Herbert von Bose, who is Director of Industrial Technologies in the Research & Innovation Directorate in the European Commission, and his colleagues Andrea Gentili and Lorenzo Valles. They regard the UK as a very pragmatic partner in the industrial technology programme and are interested to listen to our views. The immediate aim now is to maximise our participation in the latest €200m call which has just opened.

There is an opportunity to participate in the annual Manufuture conference which this year will be on 24th/25th October in Wroclaw, Poland. The conference is open to all - see <http://www.manufuture2011.eu/>.

Finally, a recent and very interesting high level group report on Key Enabling Technologies has concluded that world-class Advanced Manufacturing is one of the key pillars of the European Community's economic development over the next decade and is likely to feature strongly in the next framework programme, Horizon 2020.

Welcome to the third newsletter in the current series. In October 2010, the Prime Minister announced that over £200m will be invested in a network of elite technology and innovation centres, to be established and overseen by the Technology Strategy Board. These centres will be an important part of the UK's innovation system. They will allow businesses to access equipment and expertise that would otherwise be out of reach.

They will also help businesses access new funding streams and point them towards the potential of emerging technologies. The new investment will further bridge the gap between universities and businesses, helping to commercialise the outputs of Britain's world-class research base. This newsletter keeps you informed about the development of the first of these centres and provides details of one of its constituent members—the Centre for Process Innovation (CPI), based in the north-east of England at Wilton and Sedgfield..

Partner Spotlight: The Centre for Process Innovation (CPI)

From Innovation to Commercialisation



The Centre for Process Innovation (CPI) is a technology innovation centre serving the chemicals, pharmaceuticals, food & beverage, biotechnology, printable electronics and energy markets. It uses its market knowledge and technology understanding to develop and prototype products and processes, quickly and efficiently, with minimal risk to its public and private sector partners. The unique £55m asset base allows our partners to test, develop and prove their products and processes cost effectively.

CPI has national centres in Industrial Biotechnology, Printable Electronics and Anaerobic Digestion and is considered to be a world leader in these areas. The company employs over 170 scientists, engineers and commercial staff, including over 45 PhDs, with over 1700 years of commercial experience.

CPI works on:

Industrial Biotechnology
Industrial Biotechnology is a vital sector to the future of the world's chemical industry. CPI works with its partners to develop alternatives to traditional chemical processing. It creates cleaner and more sustainable manufacturing processes using its open access facilities to take processes from laboratory to 10,000 litre pilot production.

Printable Electronics
The Printable Electronics Technology Centre (PETEC) is a design, development and prototyping facility for the emerging printable electronics industry. Its focus is on printable electronic materials, ultra-efficient lighting, displays, photovoltaics and integrated smart systems

Anaerobic Digestion

The Anaerobic Digestion Development Centre allows users to develop their processes and test technologies. It has a range of pre-treatment, digestion and post-treatment equipment that is rapidly reconfigurable to allow the development of novel and improved processes.

Thermal Technologies

A long-term collaboration between CPI and Tata Steel, the Thermal Technologies Centre carries out innovation into novel sources of fuel and energy, improved high temperature process efficiency, the recovery of raw materials and reductions in waste production.

Smart Chemistry

The Smart Chemistry facility has novel mixing and reaction technologies that improve chemical processes. It converts batch processes to continuous processes leading to >50% improvements in operating and investment costs. The facility is supported by CPI's knowledge of whole process design.

Sustainable Engineering

CPI's Sustainable Engineering group has unique experience that is applied to help partners reduce the risks of adopting innovative technology. The SE team links engineering, science, economics and systems design to improve whole processes so they become cleaner, greener and more sustainable.

Future Technology

CPI has a specialist team of experienced senior managers that helps partner organizations define practical technology based solutions to long term challenges associated with changing supply chains, resource availability, legislation and regulation.

Commercialisation support

CPI provides chemical process businesses with support services to help early-stage companies develop new products and processes in its Innovation Accelerator. The accelerator supplies serviced plug and play incubator space, organisational support, training and market intelligence combined with help on funding, IP management, technology and road mapping.

CPI has a specialist bid team with a proven track record in helping partners create international consortia to create unique skill sets and secure public private projects.



CONTACT CPI:

CPI Head Office
Wilton Centre
Wilton, Redcar
TS10 4RF
T: +44 (0) 1642 455 340
E: info@uk-cpi.com
www.uk-cpi.com

Enquiries on the High Value Manufacturing technology and innovation centre should be addressed to:
Margo Hutchison, margo.hutchison@strath.ac.uk or +44 (0) 141 534 5200
For enquiries about the overall programme of technology and innovation centres please contact
centres@tsb.gov.uk

Advanced Forming

Research Centre

Location: Glasgow

Key Competencies:

Billet Forging / Sheet Forming /

Precision Forging

Contact: Bill Ion

w.i.ion@strath.ac.uk

Advanced Manufacturing

Research Centre with Boeing

Location: Sheffield

Key Competencies:

Machining / Materials and

Component Testing / Hybrid &

Metallic Composites / Assembly

Contact: Keith Ridgway

k.ridgway@sheffield.ac.uk

Centre for Process Innovation

Location: Wilton, Sedgfield

Key Competencies:

Chemical Processing / Biotech-

nology / Printable Electronics

Contact: Nigel Perry

nigel.perry@uk-cpi.com

Manufacturing

Technology Centre

Location: Coventry

Key Competencies:

Automation & Tooling / Fabrica-

tion, Joining & Assembly /

Additive & Net shape / Process

Modelling

Contact: Clive Hickman

clive.hickman@the-mtc.org

National Composites

Centre

Location: Bristol

Key Competencies: Design &

Manufacture of Composites

Contact: Peter Chivers

peter.chivers@nccuk.com

Nuclear Advanced Manufactur-

ing Research Centre

Location: Sheffield

Key Competencies:

Fabrication of Civil Nuclear

Components

Contact: Stephen Court

stephen.court@namrc.co.uk

Warwick Manufacturing Group

Location: Coventry

Key Competencies:

Lightweight Product System

Optimisation /Energy Storage

and Management / Digital Veri-

fication and Validation

Contact: Dave Mullins

David.Mullins@warwick.ac.uk

A number of centres also offer competencies in: Measurement & Verification / Cost Modelling / Design & Manufacturing Systems / Materials Analysis