

Technology Strategy Board

Driving Innovation



Plastic electronics demonstrators

**COMPETITION FOR WORKSHOP PARTICIPANTS
DECEMBER 2009**

**ELECTRONICS, PHOTONICS AND
ELECTRICAL SYSTEMS TECHNOLOGY AREA**



The Technology Strategy Board is inviting applications for an interactive workshop to find end-use applications and their designs to use in commercially-focused plastics electronics demonstrators.

We are looking for business leaders, academics, researchers and technologists and particularly designers and end-users who may not be experienced in the field of plastic electronics.

We have allocated up to £3m to fund industry-led collaborative demonstrator projects arising from the workshop.

Plastic electronics demonstrators

COMPETITION FOR WORKSHOP PARTICIPANTS

We are inviting applications to an interactive workshop to find end-use applications and associated designs that can be used within plastic electronics and produce demonstrators with potential for real commercial value. The aim is to showcase the technology's capabilities across a wide range of sectors and provide the platform for future commercial exploitation.

The three-day interactive workshop will be held in London on 1st-3rd March 2010. The Technology Strategy Board has allocated up to £3m to fund industry-led collaborative demonstrator development projects arising from the workshop.

We would like leaders in business, academia and research and technology organisations to apply. We particularly welcome applications from designers and end-users – previous experience in the field of plastic electronics is not required – we are more interested new ideas and insight into user requirements and – unmet needs.

Plastic and printed electronics

Plastic electronics allows relatively low cost manufacturing by printing or patterning electronic materials. To avoid doubt, when we refer to plastic electronics, we include plastic and printed electronics using organic or inorganic materials on flexible or rigid surfaces. These new technologies provide the opportunity for the delivery of novel new product designs across many market sectors.



What is the challenge?

In our *Electronics, Photonics and Electrical Systems Strategy* (see www.innovateuk.org under Publications), we stated that in the field of plastic and printed electronics, the UK should target the major issues of 'identifying the applications with the greatest potential for exploitation, bringing together technology providers with the owners of the commercial and technical challenges, and engaging business innovators with the capacity to exploit the opportunities'.

The challenge of exploiting the potential of plastic and printed electronics to increase UK wealth requires an innovative and multidisciplinary approach. The aim of this workshop is to bring together a varied group of up to 40 individuals, who might be new entrants or existing players, from across the supply chain, who will be expected to work together to develop collaborative demonstrator projects.

The recently published *Plastic electronics: A UK national strategy* from the Department for Business, Innovation and Skills (www.bis.gov.uk) notes that: 'One of the key targets in demonstrating the benefits of plastic electronics technologies to end-users is the production of high-quality prototype products. These will be important in educating potential end-users and companies interested in using plastic electronics in their product design and development strategies.'

This demonstrator workshop will provide a way to help meet this challenge.

Where are the business opportunities?

The UK Plastic Electronics strategy notes that the global market for plastic electronics is currently less than \$2bn, but is forecast to grow at an astonishing rate to as much as \$330bn in 2027.

This forecast is based on an understanding and expectation of the capability that plastic electronics technology enables, leading to target markets which can be principally summarised as displays, lighting, photovoltaics and integrated smart systems. The exact market for the short and medium-term technology capability is currently unclear – this represents an opportunity for the UK to lead the market. In order to build an industry for tomorrow we need to start identifying the market opportunities that are ready for exploitation now.

This is why we want to attract new players into the technology area – rather than tell designers and end-users what the technology can achieve, this workshop will be based on a discussion of what is wanted, followed by an exploration of how plastic electronics could address these needs.

Who should attend?

Having the right mix of participants influences the success or failure of this type of workshop. We need a very broad range of disciplines to get the most out of it and applicants should not feel limited by conventional perceptions: the whole approach is about bringing people together who would not normally interact.

We're looking to attract new entrants to the field, especially end-users and designers in addition to the existing plastic electronics community spanning all industries from materials to printing. The application areas for plastic electronics range from healthcare and energy through modern built environment all the way to the creative industries. In this context, the end-user could vary from a large retailer interested in smart labels and displays, a fast-moving consumer goods (FMCG) or

pharmaceutical player interested in smart packaging, through to wearable electronics in fashion.

These are provided as examples only – if you feel you can contribute, please apply.

In fact, we want all end-users to apply. The very reason for this workshop approach is that we're not trying to second-guess the demonstrators we should be developing in advance, we want to explore them in the workshop. Suitable individual participants are welcomed from all levels within industry, business and academia. It is a requirement that you obtain the support of your employer/board/shareholder(s) as applicable before applying and ascertain the appetite in your organisation for R&D activity in this area.

How will it work?

You apply to participate in the event as an individual representing an organisation with an interest in the area – once your place is secured it is not transferable to anyone else. Getting into the workshop is competitive; therefore competition rules apply and are clearly noted in the Guidance for Applicants (available on the website under Current competitions, with this document). Once there you are expected to work with the other participants to explore and shape ideas to produce exciting collaborative proposals. You should not restrict your vision to preconceived solutions, but come with an open mind to develop new ideas with the people you meet at the event. Genuinely novel approaches tend to come from open ended discussion between people working in very different fields.

The workshop will be led by a Technology Strategy Board director whose role will be to assist in defining the topics and aid facilitated discussions. The director will be joined by a small number of mentors who will take full part in the workshop, with the primary role of helping to stimulate the development of novel ideas. They will not be eligible to receive research funding and part of their role is to act as impartial peer reviewers.

At the workshop, groups of participants will form around various ideas that are generated. These self-formed groups will then develop projects for funding which will be reviewed by the mentors and 'agreed in principle' on the final day, up to the limit of the available funding. The workshop will run over three days and your continued attendance is necessary for the entire duration. Projects agreed in principle will be converted into written proposals and plans by the project team. These will be assessed by the director and mentors within a specified timetable after the workshop – full details of this process will be given to participants at the workshop.

The intention is that demonstrator projects agreed at the workshop will receive funding after review, unless the written proposals and plans submitted have changed significantly from the proposal developed during the workshop. The final assessment and decision making process remains with the final independent review panel which will be conducted with the workshop director and mentors and will be concluded by 31st March 2010.

What about intellectual property?

It is essential that you can share your ideas freely at the workshop to explore business opportunities and future collaborations, so all participants will need to sign the non-disclosure agreement for this workshop before attending. This is to protect existing intellectual property and to allow full disclosure of expertise and capabilities at the event.

You will be required to sign this non-disclosure agreement if you are selected to participate in the workshop and submit it with your acceptance of our invitation. A draft of this document is available with the rest of this competition's documentation via our website – at www.innovateuk.org under Competitions, and we strongly recommend you review it before you apply.



What funding is available?

Up to £3m of Technology Strategy Board funding is allocated to collaborative demonstrator projects arising from the workshop that address the challenge indicated above and involve science-to-business or business-to-business interactions. Project teams are typically funded up to 50% of the total costs, although in justified circumstances, with approval by the director and mentors, this could be up to 75%.

Where and when will the demonstrator workshop take place?

The workshop will take place from Monday 1st March to Wednesday 3rd March 2010 in London. An application will be taken to mean availability for these dates, a commitment to attend for the full three days and acceptance of the non-disclosure agreement.

The environment will encourage free and open-minded thinking (with ample facilities for relaxing and recharging) which are vital for the purposes of this workshop. All accommodation, refreshments, breakfast, lunch and dinner costs will be met by the Technology Strategy Board. However, all travel expenses and incidental costs incurred must be met by you.

How to apply?

As outlined earlier, we would like to see applications from individuals in the private sector and academic research who can contribute to the workshop and the resulting demonstrator projects.

Anyone eligible to apply for funding from the Technology Strategy Board can apply.

By applying you are agreeing in principle to the non-disclosure agreement.

Application forms and the non-disclosure agreement can be downloaded from the Technology Strategy Board website at **www.innovateuk.org** under Current Competitions. Applicants should complete the short application form. Your answers to the questions will be used to assess your application and will need to convince us that you have the suitable skills and attitude to participate in this workshop. No further documentation will be allowed or accepted.

Key dates

Competition opens	7th December 2009
Deadline for receipt of applications	28th January 2010, noon
Decision to applicants	4th February 2010
Successful applicants accept place	11th February 2010
Successful applicants return non-disclosure agreement	11th February 2010
Demonstrator workshop	1st to 3rd March 2010

The deadline for applications is midday (12.00 noon) on Thursday 28th January 2010. Applications should be uploaded to the Competitions area of our website. Please note that late submissions will not be considered.

Applicants will be informed of their selection for the demonstrator workshop by end of business on Thursday 4th February 2010. If selected as a participant, your details in section 1 of the application form will be made available to other participants to facilitate networking at the event. Section 2 of the application form will remain confidential. You will need to sign and post the non-disclosure agreement to us when you accept your place – if selected – by Thursday 11th February 2010. This is available to download now.





Further information

For further information, advice or queries regarding the format of the event, the application procedure and details on how to register and apply please visit **www.innovateuk.org** under Current Competitions.

Competition helpline:
01355 272155

Email:
competitions@tsb.gov.uk

Publicity

The Technology Strategy Board frequently publicises the results of competitions and this includes engagement with the media. All applicants will be given a chance during the competition process to opt out of any publicity. Willing applicants will be asked to provide an agreed form of words for use in publicity material. E-mail pressoffice@tsb.gov.uk with any queries.

The Technology Strategy Board is a business-led executive non-departmental public body, established by the Government. Its role is to promote and support research into, and development and exploitation of, technology and innovation for the benefit of UK business, in order to increase economic growth and improve quality of life.

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