

## **Orgatronics: European centre for organic semiconductor technology development opens for business**

Orgatronics, based in Eindhoven (The Netherlands), was officially opened on 11 October 2005. **cintelliq** was one of the invited guests at this event, which was well attended with around 80 representatives from a range of European companies including OTB, Philips Lighting, Polymer Vision, Huntsman, Merck, Ciba, Solvay, Degussa, and DuPont.

Orgatronics is part of a cluster of institutions based in Eindhoven enabling a complete 'knowledge-to-application' chain:

- **DPI:** performing fundamental research to develop understanding of processes and device performance, (typically focused six to ten years from market)
- **Holst Centre:** a recently announced joint venture between TNO and IMEC of Belgium, undertaking applied research in generic technologies, (three to five years from market) with two main programmes:
  - Wireless autonomous microsystems - such as sensor tags
  - System-in-foil - large areas devices with sensing/active surfaces
- **Orgatronics:** performing commercial research with industrial partners focused on product development within one to two years of the market.

Orgatronics aims to provide research and development infrastructure, access to process expertise and product development services to industrial partners in order to accelerate the development of organic electronic products and reduce the time to market. It offers access to an advanced polymer electronics R&D line, the Orgatron.

The equipment, based on OTB's inline P-OLED production system, consists of two ink-jet printers with multi-nozzle printheads from Pixdro, a rapid vacuum deposition system and thin film encapsulation process linked by a robot handling system. The system is designed to handle substrates up to 14 inches. Although the in-line process was developed for P-OLEDs, the system retains flexibility required for the production of other organic devices.

The equipment will be operated by TNO and DPI personnel. About half of the time on the line will be used for research by DPI with the remainder available for process development, demonstrator or pilot scale production and product qualification with commercial customers. Initial work includes two projects to showcase printed electronic technology:

- A local consortium, D3, producing an undisclosed demonstrator product

- A gameboard demonstrator in collaboration with partners in the VDMA Organic Electronics Association.

No details of funding levels or customers were disclosed.

The venture is a result of collaboration between equipment manufacturers OTB group, the research organisation TNO and the Dutch Polymer Institute (DPI).

[www.orgatronics.com](http://www.orgatronics.com)   [www.polymers.nl](http://www.polymers.nl)   [www.tno.nl](http://www.tno.nl)   [www.holstcentre.com](http://www.holstcentre.com)   [www.otb-group.nl](http://www.otb-group.nl)