Improve your business with Printed Electronics

Printed Electronics offers tremendous opportunities to create new and exciting products using traditional printing tools to add electronic and bio-electronic functions to paper and plastics. Imagine the possibility of producing advanced functionalities on flexible substrates in reel-to-reel processes. RISE Acreo provides the technology for this in many fields of applications.

We focus on three application areas:

Packaging
Printed displays are a core competence at RISE Acreo and we supply different technologies to suit your needs in packaging applications:
• Electrochromic displays for low cost applications
• Printed electrochromic displays for smart card applications
• Printed electrochromic matrix addressed displays
• Printed electroluminescent displays for
  point-of purchase advertising

Internet of Things
One of the major obstacles for getting small things connected to each other and communicating over the internet is how to solve the power supply issue. RISE Acreo has developed a low-cost and all-printed energy harvesting system, comprising an antenna, a rectifying component with functionality up to several GHz and a display.

Health Care
Cells communicate with each other using ion currents at different frequencies, organic electronics can be used to translate signals into ionic signals and thereby communicate with cells. RISE Acreo is working together with Linköping University and Karolinska Institutet to develop a set of bio-electronic components and corresponding manufacturing routes.

Examples:
• Electronically switchable (bio-) surfaces for cell growth
• Ion pumps for cell communication

RISE Acreo Printed Electronics
Our competence spans from novel materials to integrated systems and manufacturing. We have established a Platform of Printed Electronics components – consisting of displays, transistors, diodes, and energy sources – which can be integrated into products creating innovative functionality. RISE Acreo is primarily focusing on Packaging, Internet of Things and Health Care. In our printing facility we develop prototypes and have small-scale production of components and integrated systems.

For more information visit:
www.acreo.se/expertise/printed-electronics