

Evonik and Ynvisible introduce technology demonstrator for printed electronics

May 26, 2020

- Printable battery materials from Evonik to be combined with electrochromic displays from Ynvisible
- Efficient design through shared use of common assemblies
- Combined system opens up new design possibilities for IoT applications

Specialized press contact
Holger Seier
Corporate Innovation
Phone +49 201 177 2222
holger.seier@evonik.com

Essen/ Vancouver. The Evonik specialty chemicals group and Ynvisible Interactive Inc. of Canada have agreed to collaborate in the field of printable electronics.

With a technology demonstrator, the two companies show what is possible together. It integrates the directly usable ink formulations for printable batteries from Evonik and Ynvisible's electrochromic displays into a combined system that consumes only minimal electricity, weighs little, and is highly flexible, transparent, and robust. Already during the development of the technology demonstrator, attention was paid to a particularly efficient design: Modules required by both the battery and the electrochromic display are only present once and are shared.

"Printable electronics are taking on a key role, as everyday items become increasingly interconnected through the Internet of Things," says Dr. Michael Korell with confidence. Korell works at Creavis, the strategic research unit at Evonik, where he is responsible for the development of printable battery materials (TAeTTOOz®). Products containing printed electronic components could one day be used in a number of applications. Logistics is a good example: here, smart sensors powered by printed batteries could be used in packaging to monitor supply chains of sensitive goods, such as food or vaccines. In this application, an electrochromic display would immediately return an easy-to-understand, visual signal whenever temperature or acceleration exceed threshold values.

Evonik Industries AG
Rellinghauser Straße 1-11
45128 Essen
Germany
Phone +49 201 177-01
Fax +49 201 177-3475
www.evonik.com

Supervisory Board
Bernd Tönjes, Chairman
Executive Board
Christian Kullmann, Chairman
Dr. Harald Schwager, Deputy Chairman
Thomas Wessel, Ute Wolf

“We’re very happy to have launched this joint development project with Evonik,” says Jani-Mikael Kuusisto, the CEO of Ynvisible. “We’re convinced that our two technology platforms complement each other perfectly. TAeTTOOz® looks particularly promising from our perspective: after all, it’s the only technology available on the market for producing rechargeable batteries entirely within the screen-printing process.”

To this Korell adds, “Ynvisible is the undisputed trailblazer when it comes to developing electrochromic displays. That’s why we’re happy to support the company and help this technology achieve a breakthrough on the mass market.”

Evonik and Ynvisible will present the cooperation and the technology demonstrator to the public in a joint webinar. Registration for this event is possible at www.ynvisible.com/webinar.

For more information on TAeTTOOz® and on Evonik activities in the field of printable electronics visit www.taettooz.com.

Company information

Evonik is one of the world leaders in specialty chemicals. The company is active in more than 100 countries around the world and generated sales of €13.1 billion and an operating profit (adjusted EBITDA) of €2.15 billion in 2019. Evonik goes far beyond chemistry to create innovative, profitable and sustainable solutions for customers. More than 32,000 employees work together for a common purpose: We want to improve life today and tomorrow.

Disclaimer

In so far as forecasts or expectations are expressed in this press release or where our statements concern the future, these forecasts, expectations or statements may involve known or unknown risks and uncertainties. Actual results or developments may vary, depending on changes in the operating environment.

Neither Evonik Industries AG nor its group companies assume an obligation to update the forecasts, expectations or statements contained in this release.