

August 3, 2020

Smartkem

SmartKem Introduces OTFT Materials for Mini-LED Backlights

Will showcase technology at DisplayWeek 2020

MANCHESTER, England, Aug. 3, 2020 /PRNewswire/ -- SmartKem the global leader in application specific organic materials for OTFT (Organic Thin Film Transistor) backplanes, today announced that the company has built backlight prototypes for full array local dimming (FALD) aimed at TV, Monitors and Signage applications.



OTFTs using SmartKem materials can be used to manufacture active matrix backplanes, driving arrays of thousands of individual mini-LEDs on a substrate, thereby delivering impressive high resolution images with perfect black levels. The ability to locally dim the backlight to only the areas that require it can also help to save energy, making FALD LED TVs more efficient in operation.

"Our mini-LED backlight prototype has caught the attention of the market" said Ian Jenks, Chairman and CEO of SmartKem Ltd. "We have best-in-class OTFT materials, suited for a variety of applications ranging from Electrophoretic, LCD, MicroLED and OLED displays."

SmartKem's approach in developing the organic semiconductor formulations was to design a series of high mobility polycrystalline small molecule(s) that are combined with matched, high permittivity semiconducting oligomer(s). The resultant OTFT devices have industry best performance and can be built using standard production equipment in existing factories.


SmartKem will showcase its technology at the [DisplayWeek 2020](#) symposium and exhibition during August 3 – 7, 2020.

About SmartKem

SmartKem is the global leader in application specific organic materials for organic thin-film transistors (OTFT) backplanes compatible with industry-standard production. SmartKem focuses on the design, development, industrialization, and technology transfer of low temp, solution-deposited organic semiconductors for transistor backplanes. SmartKem's technology aims to transform the \$110b electronic display industry.

<https://www.smartkem.com>

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