

April 15, 2025

Smartkem

## Smartkem to Premiere MicroLED Smart Backlight Demonstration for Next Generation LCD Displays in Automotive Industry

*MicroLED Smart Backlight demonstration can be found at Smartkem booth no. M505 at Touch Taiwan 2025.*

*Smartkem CEO Ian Jenks to Deliver Keynote Address on MicroLED Smart Backlight.*

MANCHESTER, England, April 15, 2025 /PRNewswire/ -- Smartkem (Nasdaq: SMTK), which is seeking to change the world of electronics with a new class of transistor technology, has unveiled at the Touch Taiwan 2025 conference, a demonstration of a MicroLED Smart Backlight that has the potential to drive a new generation of Liquid Crystal Displays (LCDs) that could transform display technology in the automotive industry.



Smartkem has developed the "MiP4", a package of four MicroLEDs connected using Smartkem's chip-first architecture and its unique interlayer dielectric semiconductor materials. A demonstration of the first application of the MiP4: a 12.3in MicroLED Smart Backlight, has now been unveiled at Taiwan's largest technical conference, Touch Taiwan 2025. The MicroLED Smart Backlight delivers higher brightness and better contrast in LCD screens that are frequently used in the automotive industry today.

Smartkem Chairman and CEO Ian Jenks said, "We are thrilled to be demonstrating the first application of our MiP4 here at Touch Taiwan. This microLED backlight demonstrates the capability our unique semiconductor materials to revolutionize existing display markets, including LCD displays used in the automotive industry. This market holds huge opportunity

for Smartkem as it is forecast to reach more than 25 million units by 2030<sup>1</sup>, each of which would use more than 500 MiP4s."

**Smartkem Chairman and CEO Ian Jenks will deliver a keynote address on Smartkem's MicroLED Smart Backlight on Wednesday, April 16, 2025, at 16:00 local time at Touch Taiwan 2025.**

**For more information or to schedule a meeting with Smartkem's leadership team during Touch Taiwan 2025, please contact:**

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### **About Smartkem**

Smartkem is seeking to change the world of electronics with a new class of transistors developed using its proprietary advanced semiconductor materials. Our TRUFLEX® materials can be used in a range of applications including next generation MicroLED, LCD and AMOLED displays, as well as advanced computer and AI chip packaging, and a new type of sensor.

Smartkem's MiP4 is designed to replace existing MiniLED packages in LCD backlights and signage applications. The MiP4 will offer higher brightness at lower power, lower production costs, and compatibility with existing MiniLED die bonding equipment. MiP4s are expected to ship -on-blue tape format for seamless industry adoption.

For MicroLED display applications, Smartkem's low temperature process allows its liquid transistors to be poured directly onto MicroLEDs, eliminating the need to use current high-cost, low-yield manufacturing processes. This innovation is expected to reduce defects and enhance yield, and to integrate seamlessly into existing manufacturing infrastructure, with the potential to make MicroLED displays more commercially viable across a number of sectors including smartphones, wearables, automobiles and digital signage.

Smartkem designs and develops its materials at its research and development facility in Manchester, UK and provides prototyping services at the Centre for Process Innovation (CPI) in Sedgefield, UK. It operates a field application office in Hsinchu, Taiwan, close to collaboration partner, The Industrial Technology Research Institute (ITRI). Smartkem is developing a commercial-scale production process and Electronic Design Automation (EDA) tools to demonstrate the commercial viability of manufacturing a new generation of displays using its materials.

The company has an extensive IP portfolio including 138 granted patents across 17 patent families, 16 pending patents and 40 codified trade secrets. For more information, visit our [website](#) or follow us on [LinkedIn](#).

### **Forward-Looking Statements**

All statements in this press release that are not historical are forward-looking statements, including, among other things, its market position and market opportunity, expectations and plans as to its product development, manufacturing and sales, and relations with its partners and investors. These statements are not historical facts but rather are based on Smartkem,

Inc.'s current expectations, estimates, and projections regarding its business, operations and other similar or related factors. Words such as "may," "will," "could," "would," "should," "anticipate," "predict," "potential," "continue," "expect," "intend," "plan," "project," "believe," "estimate," and other similar or related expressions are used to identify these forward-looking statements, although not all forward-looking statements contain these words. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties, and assumptions that are difficult or impossible to predict and, in some cases, beyond the Company's control. Actual results may differ materially from those in the forward-looking statements as a result of a number of factors, including those described in the Company's filings with the Securities and Exchange Commission. The Company undertakes no obligation to revise or update information in this release to reflect events or circumstances in the future, even if new information becomes available.

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<sup>1</sup> Omdia Report 2023

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