Smartkem Announces Technology Collaboration Agreement with the Industrial Technology Research Institute (ITRI) in Taiwan

Strategic agreement will accelerate ability to manufacture commercially ready products using Smartkem OTFT technology.

MANCHESTER, England, March 18, 2024 /PRNewswire/ -- Smartkem (OTCQB: SMTK), the developer of a disruptive type of organic transistor that has the potential to drive a new generation of displays, today announced that it has entered into a technology collaboration agreement with the Industrial Technology Research Institute (ITRI) in Taiwan to enable product prototyping on ITRI's equipment. This collaboration is part of Smartkem's commercialization strategy to allow global display manufacturers access to foundry services using Smartkem's technology.

Smartkem's organic thin-film transistor (OTFT) technology will be used on ITRI's Gen 2.5 hybrid pilot line (substrate size: 370mmx470mm), with the aim to develop low-temperature processed display backplanes. This multi-year technology collaboration agreement is part of Smartkem's commercialization strategy to enable customers to prototype products on ITRI's line using Smartkem's OTFT technology before transferring to their own lines or subcontracting to a third party.

The development of this commercial manufacturing process has the potential to accelerate the adoption of Smartkem's technology by display manufacturers in Taiwan and around the world, marking a significant step in enabling the manufacturing of commercially ready products using Smartkem's OTFT technology.

Smartkem Chairman and CEO, Ian Jenks, comments, "We're delighted to announce this collaboration with ITRI, a pioneer in the semiconductor industry that has nurtured many successful startups. This agreement will strengthen one of our three strategic pillars of materials, electronic design automation (EDA)tools and foundry services and is another step forward on the road to product commercialization.

"If successful, the collaboration with ITRI will give our customers access to foundry services for prototyping before transferring manufacturing to their own lines or subcontracting to a third party for mass commercialization. Coupled with best-in-class materials and EDA services through FlexiIC, the ITRI capability will allow customers to explore the potential of OTFT for new markets and product concepts."

ITRI's pilot line contains tools with a similar specification to display manufacturing lines and hence, once a process is established, it has the capability to deliver high quality demonstrators and provides a very good indication of the potential to manufacture on similar

sized or larger production lines, many of which are situated in Taiwan. Once qualified on ITRI's pilot line, the transition to manufacturing lines in Taiwan or other parts of Asia will be made much easier due to the reference process established at ITRI. Additionally, the support offered for technology transfer by ITRI and Smartkem's Taiwan engineering staff will help to accelerate the commercialization of Smartkem OTFT materials in the display industry. The ITRI pilot process once characterized will allow a rapid prototyping of a wider range of devices such as touch sensors, biosensors, logic circuitry in addition to the display products being developed in this first TCA (Technology Collaboration Agreement).

SmartKem's OTCQB information can be found on the OTC Markets website: www.otcmarkets.com/stock/SMTK/overview

About Smartkem

Smartkem is seeking to reshape the world of electronics with its disruptive organic thin-film transistors (OTFTs) that have the potential to drive the next generation of displays. Smartkem's patented TRUFLEX® semiconductor and dielectric inks, or liquid electronic polymers, can be used to make a new type of transistor that has the potential to revolutionize the display industry. Smartkem's inks enable low temperature printing processes that are compatible with existing manufacturing infrastructure to deliver low-cost displays that outperform existing models. The company's electronic polymer platform can be used in a number of display technologies including microLED, miniLED and AMOLED displays for next generation televisions, laptops, augmented reality (AR) and virtual reality (VR) headsets, smartwatches and smartphones.

Smartkem develops its materials at its research and development facility in Manchester, UK and its semiconductor manufacturing processes at the Centre for Process Innovation (CPI) at Sedgefield, UK, It has a field application office in Taiwan. The company has an extensive IP portfolio including 125 granted patents across 19 patent families and 40 codified trade secrets. For more information, visit: www.smartkem.com and follow us on LinkedIn www.linkedin.com/company/smartkem-limited and Twitter @SmartkemOTFT.

About Industrial Technology Research Institute (ITRI)

ITRI is a world-leading applied technology research institute with more than 6,000 employees. Its mission is to drive industrial development, create economic value, and enhance social wellbeing through technology R&D. Founded in 1973, it pioneered in IC development and started to nurture new tech ventures and deliver its R&D results to industries. ITRI has set up and incubated companies such as TSMC, UMC, Taiwan Mask Corp., Epistar Corp., Mirle Automation Corp., and Taiwan Biomaterial Co.

Forward-Looking Statements

All statements in this press release that are not historical are forward-looking statements, including, among other things, statements relating to the Smartkem's expectations regarding 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 elated 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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