

## Nanocube Memory Ink Program

Strategic Elements (ASX: SOR) is pleased to report testing has now commenced on a memory ink prototype for the response speed, operation voltage, endurance and other functions to determine performance and enable comparison with world leading commercialised printed memory technologies.

- A successful result would showcase the global disruptive potential of the Nanocube memory ink.
- The Company believes there is no commercialised printable memory technology with the potential of the Nanocube technology.
- Exact testing completion date is uncertain but will occur within three weeks.

## Nanocube Ink

The Nanocube technology has potential in traditional segments of the memory market, but development is at first strategically focusing on memory applications that leverage a liquid solution - our core differentiator.

Printed Electronics (PE) is currently a multi-billion dollar market and is set to grow to USD 78 Billion by 2023. This number will increase rapidly if other industries such as the building industry, textiles, military etc. are able to incorporate electronics into existing products for the very first time.

As ink is the blood of the printing industry, the development of high performance memory ink would revolutionize it. The Nanocube ink has been designed to use a type of technology (RRAM) that can enable memory to operate at extremely fast speeds whilst requiring less power.

The test results being delivered at any time over the next three weeks will also report on some RRAM aspects of the Nanocube ink. Prototypes have been fabricated via drop coating at UNSW. Additional tests are also being conducted to determine whether the Nanocube ink can be printed onto silicon, glass and plastic materials using an inkjet printer.

## Background

100% owned Australian Advanced Materials (AAM) has an exclusive global licence for the technology from UNSW and has contracted the materials group at the UNSW School of Materials Science and Engineering to assist in developing a nanocube memory prototype, improving the technology and creating new intellectual property.

- Nanocube memory technology is based on RRAM, the type of memory technology forecast to replace flash memory, which is reaching its limits.
- RRAM allows faster, less power hungry, more reliable, cheaper and more scalable memory.
- There are many companies developing different RRAM memory solutions including Micron and Sony.
- However the Nanocube technology has significant points of difference it is flexible, transparent and can be fabricated into a liquid solution at room temperature outside expensive high-vacuum chambers.
- The obvious fit is Printed Electronics (PE) where chemical, printing and electronic industries have collaborated to create a multi-billion dollar market that will be the future of electronics.
- PE can create flexible, transparent electronics which current semiconductors cannot. PE can also be manufactured using cheap printing methods unlike current electronics made in expensive fabrication plants.
- This creates opportunities to (a) allow device manufacturers to produce flexible products and (b) place electronics in places and on products that have never been able to use electronics before – e.g new forms of displays, curve of a soldiers helmet.

## ASX Listed Strategic Elements Ltd

The Company has a special registration from the Federal Government as a Pooled Development Fund. Most shareholders pay no capital gains tax when they sell their shares in ASX listed Strategic Elements (ASX: SOR).

All enquiries please contact: Managing Director: Charles Murphy Phone: +61 08 9278 2788 Email: admin@strategicelements.com.au