

## Media Release

---

### **ADVANCED MANUFACTURING GROWTH CENTRE COMMITS \$250,000 TOWARD AUSTRALIAN MANUFACTURING COMPETITIVENESS IN GRAPHENE**

The Advanced Manufacturing Growth Centre (AMGC) announces a significant commitment of \$250,000 toward manufacturing competitiveness-specific graphene projects accelerating Australia's leadership in commercialising graphene at high production scale.

Australian manufacturers are taking a leadership position globally in the commercialisation of large scale applications that utilise graphene. Graphene is a supermaterial. It is the world's first 2-dimensional material, stronger than steel, harder than diamond, and the most electrically and thermally conductive material discovered, more conductive than copper wire.

The potential applications for graphene are growing exponentially as the 'Internet of Things' (IoT) continues to gather pace. Graphene is extraordinarily difficult to manufacture at scale with predictability, but can improve the functionality of materials in a way that no other material can achieve. The extremely low amount of graphene that is required to change the functionality of composite materials will massively improve productivity in manufacturing and in finished commodities.

Dr Jens Goennemann, Managing Director, AMGC, affirms his Centre's support, 'I view our commitment as a signal to Australian industry that this new generation of materials is where we can boost our impact in global competitiveness. It presents a true manufacturing pay-off for those producing and integrating this substance into commercial applications.'

The use for graphene-based materials is limitless. 'Smart graphene coated geotextiles that are used to line dams and report on leaks are already being used in Australia. These are the tip of the iceberg. Imagine how much more competitive the mining industry will be as these smart textiles become part of massive real-time sensing network, able to report on the structural integrity of a dam wall', Dr Goennemann adds.

Further uses of graphene include its application in medical devices to accurately test blood levels for diabetes. It can be mixed into resins, inks, paints and fibres. Geotextiles that are coated with graphene are being developed to enable smart-roads that monitor traffic flows, and aircraft wings resistant to lightning strikes without the weight of conventional copper.

Chris Gilbey, CEO, Imagine Intelligent Materials, states, 'this funding commitment for the acceleration of graphene manufacturing competitiveness comes at an apposite time for Australian manufacturers. We are at an inflection point in the integration of graphene into manufacturing

processes. Australia is leading from the front. We believe that graphene is a game changer for the mass take up of IoT solutions, allowing for 'dumb' products and materials to become 'smart'. Its integration into products leads to manufacturers generating larger top line revenues, improved margin contributions and higher return on capital invested. Better still, the IP is being created in Australia, by Australians, for a global market.'

Brendan Swifte, CEO, Geofabrics (Australasia), concurs, 'Graphene is the magic mechanism by which we can accelerate IoT proliferation. This kind of technology, through all things mobile, with big data and cloud services, wasn't available five years' ago and with graphene it is fast becoming a reality. It's an exciting time for Australia to create value for international clients through new product offerings and differentiation. Graphene is the most forward-leading part of our firm's innovation agenda.'

The Hon. Craig Laundy MP, Department of Industry, Innovation and Science along with Dr Jens Goennemann, Managing Director of the AMGC, announced the Centre's commitment at Imagine Intelligent Material's new plant in Geelong North, Victoria.

**ENDS**

Notes to editors

### *About Advanced Manufacturing Growth Centre (AMGC)*

The AMGC is part of the Federal Government's \$248 million Industry Growth Centres Initiative, an industry-led approach to driving innovation, productivity and competitiveness through investing in key industry sectors.

<http://www.amgc.org.au>

#### **AMGC Media Contact**

Irene Godeau

0424 254 985