

Metalysis delivers Graphene

Discovery offers new route to industrial scale production for today's technology 'wonder material'

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HIGHLIGHTS

- Metalysis has successfully synthesised Graphene at its Dearne Valley facility, South Yorkshire, using its electrochemical process;
- Graphene monolayers and kindred assemblies may unlock significant upside potential to the Company, and enable the exploitation of new, lucrative markets;
- Commercial capitalisation of the discovery, dependent on further detailed analyses and market outlooks, targeted during 2017; and
- Metalysis continues to cement its position as a world-class, cutting edge technology company delivering high grade Titanium and Tantalum powders, and ground-breaking metal and alloy research and development programs.

Metalysis Ltd. ("Metalysis" or "the Company"), the innovative South Yorkshire-headquartered company focused on commercialising its proprietary electrochemical metal powder manufacturing technology, announces that its research and development (or "R&D") function has successfully produced Graphene using the Company's process.

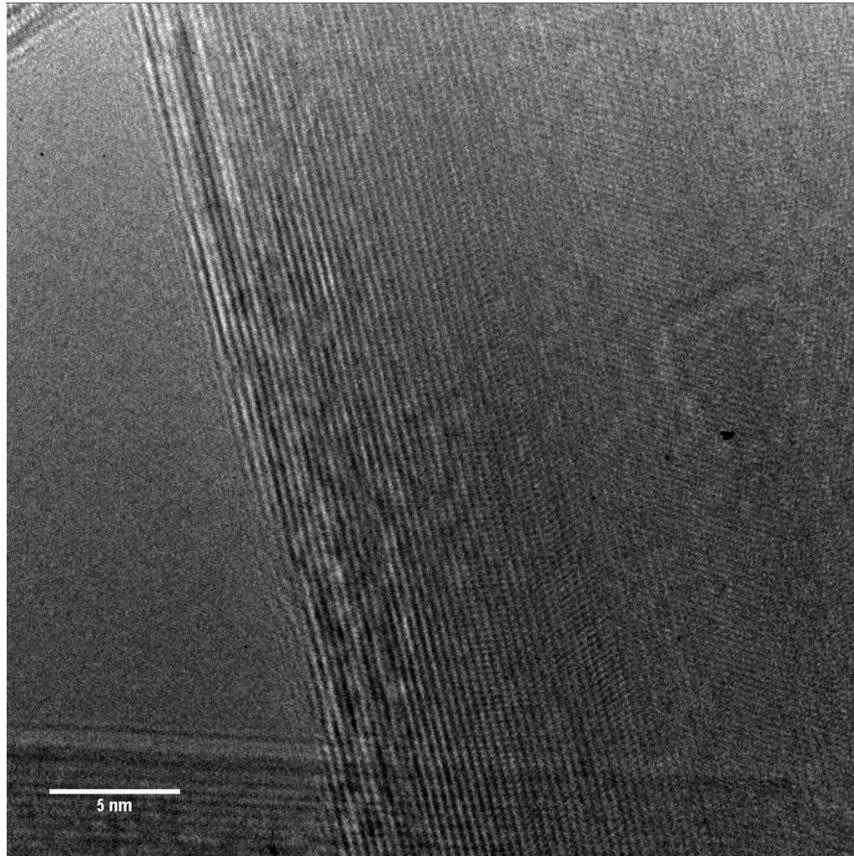
Single layer ("monolayer") sheets of Graphene have been synthesised at the Company's industrial processing facilities in the Dearne Valley, as well as bilayer and low multi-layer amalgamations. A collective of scientists continues to focus on differentiating and separating the single atom width, highly lucrative sheets. This comprises research teams from the University of Manchester, the University of Sheffield, the University of Kent and Camborne School of Mines. Metalysis filed for its Graphene breakthrough in February, 2016.

Among its attributes, Graphene is super strong, lightweight and highly conductive, exhibiting metallic-like properties in 2D form. Graphene is expected to revolutionise a host of future applications across a wide range of sectors including light materials (aerospace and automotive), semiconductors, energy electrodes, nanotechnology and printable inks.

While Graphene is traditionally known to incur high costs of production, Metalysis is able to produce the largely industrially inaccessible material at no additional production cost to its conventional operations. The Company is now focused on further process optimisation.

Subject to further detailed due diligence and market outlook, Metalysis will pursue commercial opportunities within the Graphene space during the coming calendar year.

Graphene production at Metalysis represents a valuable opportunity to pursue additive revenue to the core Titanium and Tantalum metal powder production business which primarily serves the 3D printing industry.



Metalysis' single monolayer Graphene platelet, courtesy of the University of Sheffield

Dr. Dion Vaughan, Chief Executive Officer of Metalysis, said:

"We are pleased to announce another exciting achievement on behalf of our technical team. Our proven technology can synthesise Graphene monolayers with no operational or production cost impacts on our core metal powder business.

"Producing Graphene could enable Metalysis to add new, lucrative markets to those it is already serving; markets in which our arrival could be highly disruptive when global product demand is considered against the sheer amount of Graphene we could produce in conjunction with our Gen 4, and later Gen 5 modular expansions. Gen 5, by way of illustration, envisages scaling up production capability for highly profitable niche multi-metal powders to thousands of tonnes per annum.

"We look forward to further optimising our process for Graphene production, and exploring opportunities for commercial collaboration within the coming calendar year."

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Notes to Editors

Metalysis Ltd. is a growing company with global rights to a disruptive solid state metal powder manufacturing technology, originally based on the Fray-Farthing-Chen ("FFC") Process invented at the University of Cambridge, UK; a low-cost and environmentally friendly process over traditional metal production methods.

The Company is committed to transforming the metals industry through the commercial exploitation of our patented process for producing Titanium, Tantalum, other metals and innovative alloy powders.

Based in South Yorkshire, Metalysis benefits from a highly supportive shareholder base which includes Iluka Resources, Woodford Funds and BHP Billiton. This has enabled the Company to raise substantial funds, including £22 m in CY2016 to increase productivity and carry out its Generation 4 ("Gen 4") expansion. Being modular, Gen 4 has the potential be scaled up to provide hundreds of tonnes per annum of valuable speciality metal alloy powders.

Metalysis achieved its Investor in People accreditation in 2015.