

## The logo for METALYSIS consists of a red square containing a white letter "M", followed by the word "METALYSIS" in a bold, red, sans-serif font.

### **Metalysis powers up first industrial scale plant**

#### **HIGHLIGHTS**

- First industrial scale metal alloy powder production facility based on Metalysis' process, offering a new U.K. source of supply for global end-users;
- Supports demand-driven delivery of high performance niche and master alloy powders for advanced manufacturing, 3D printing, battery, magnet, aerospace and automotive applications; and
- Signifies business transition to commercial production after more than a decade of technology development.

Metalysis (or "the Company"), the U.K. technology company with a solid-state process to produce valuable alloy powders, is powering up the world-first commercial plant at its Materials Manufacturing Centre in Wath upon Dearne, South Yorkshire, U.K.

The Generation 4 ("Gen4") project was mechanically completed on time in Q4 2017. It has since undergone hot commissioning, trial runs, optimisation and handover to Operations. The handover signifies Metalysis' transition into commercial production following more than a decade of phased technology development.

Gen4 is the first facility to take Metalysis' solid-state, modular, electrochemical process to industrial scale and can produce tens-to-hundreds of tonnes per annum of high value, niche and master alloys. It creates a new U.K. source of supply for global end-users in advanced manufacturing disciplines including aerospace, automotive, batteries, light-weighting, magnets, mining and 3D printing consumables.

A standout benefit of Metalysis' technology is its multi-metal capability, which enables the Company to produce alloy 'recipes' that comparable processing routes cannot. Where conventional technologies are unable to elegantly combine elements with melting and density differentials, this technology can because it is a solid-state process.

Gen4 enables Metalysis to commercially produce a demand-driven product mix of titanium alloys; master alloys including Scandium-Aluminide, which continues to pose excellent launch product potential as announced on 11 June 2018; compositionally complex alloys including High Entropy Alloys; magnet materials; high temperature materials; and Platinum Group Metal alloys.

The modularity of the technology offers further benefits. Unlike most supply sources for niche alloys, Metalysis' Gen4 plant can offer a wide range of order quantities. Throughout phased expansions, the technology has also presented opportunities to reduce all-in costs and environmental footprints compared to traditional, melting production routes. Gen4 expresses the modularity benefits at industrial scale.

September 2018

## **M**ETALYSIS

*“In powering up and operating our industrial plant, Metalysis is poised to achieve its target to generate significant profits from our new South Yorkshire production facility,” Dr. Dion Vaughan, Chief Executive Officer, said.*

*“Ours is a true British success story with international implications. Metalysis has grown from the ‘lightbulb moment’ at Cambridge University in the late-1990s, relocated to South Yorkshire to benefit from regional excellence in operational skillsets in the early-2000s, and now onwards towards a bright commercial future.”*

*“We share this achievement with a number of partners, notably our plant-builder, K Home International, and our shareholders who have supported the journey.”*

On 28 March, the Company announced that it had raised GBP£12m to fund state-of-the-art post-processing facilities, feedstock and provide working capital to support the rollout of Gen4. Overall, approximately £25m has been raised to fund the project to completion.



*Metalysis' Generation4 industrial plant – source: Metalysis Ltd.*

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