# **ASX ANNOUNCEMENT**

17 December 2019







# NEOMETALS AWARDED CRC GRANT TO COMMERCIALISE ZEOLITE PROCESS

# HIGHLIGHTS

- Neometals secures joint funding from IMCRC to accelerate the development of zeolite production from waste products of Australian lithium production
- Zeolite manufacture from lithium refinery residue could eliminate waste disposal challenges from lithium refining and generate significant co-product revenue
- Collaborative research is being led by Queensland University of Technology to build zeolite manufacturing pilot plant

Project development company, Neometals Ltd (ASX: NMT) ("Neometals" or "the Company"), is pleased to announce that the Innovative Manufacturing CRC ("IMCRC") has agreed to co-fund a \$2.57 million collaborative research project with Queensland inversity of Technology ("QUT") to set up a synthetic zeolite manufacturing plant (the "Pilot Project").

Neometals' has been optimising its patent pending process ("**NMT Technology**") for the conversion of lithium refinery residue into an advanced material known as synthetic zeolite. Zeolites are microporous, aluminosilicate minerals commonly used as molecular sieves, commercial absorbents and catalysts in gas, water purification and other green chemistry applications.

According to Markets and Markets (2017), the global zeolite market was approximately 2.4Mtpa with a total estimated value in excess of US\$13B per annum.

tithium refinery residue is topical at present and the potential to convert the largest waste stream into a valuable by-product makes not only economic sense, but more importantly, mitigates significant environmental challenges in disposal. Neometals' work to date with QUT has provided highly encouraging bench scale results and a range of zeolite products have been successfully manufactured (*see Neometals' ASX Announcement dated 24<sup>th</sup> June 2019*). QUT will make in-kind contributions valued at approximately \$730,000 and will lead the research into the two-year Pilot Project, which will be established at QUT's Banyo pilot plant facility. The Pilot Project is scheduled to commence in February 2020 with commissioning in September 2020.

The CRC grant is significant as it supports the timely commencement of Pilot Project activities to follow delivery of a Class 4 Engineering Cost Study ("Class 4 ECS") which is nearing completion. Commercial product evaluation will be undertaken in parallel with the Pilot Project, with product sent to zeolite manufacturers and end-users for independent product endorsement. The NMT Technology has successfully processed residues from multiple feedstock sources to support the potential to commercialise with third party lithium refiners. Successful Pilot Project outcomes will drive a subsequent Class 3 Engineering Cost Study.

Authorised on behalf of Neometals by Christopher Reed, Managing Director.

#### **ENDS**

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### **About IMCRC**

The Innovative Manufacturing CRC (IMCRC) has a vision for Australian manufacturing to be thriving, relevant and globally integrated. As a not-for-profit, independent cooperative research centre, the IMCRC helps Australian companies increase their relevance through collaborative, market-driven research in manufacturing business models, products, processes, and services. More at <a href="https://www.imcrc.org">www.imcrc.org</a>

#### **About Neometals Ltd**



Neometals innovatively develops opportunities in minerals and advanced materials essential for a sustainable future. The strategy focuses on de-risking and developing long life projects with strong partners and integrating down the value chain to increase margins and return value to shareholders.

Neometals has three core projects:

- Lithium-ion Battery Recycling a proprietary process for recovering cobalt and other valuable materials from spent and scrap lithium batteries. Pilot plant testing currently underway with plans established to conduct demonstration scale trials with potential JV partner SMS Group;
- Lithium Refinery Project Progressing plans for a lithium refinery development to supply lithium hydroxide to the battery cathode industry with potential JV partner Manikaran Power, underpinned by a binding life-of-mine annual offtake option for 57,000 tonnes per annum of Mt Marion 6% spodumene concentrate; and
- Barrambie Titanium and Vanadium Project one of the world's highest-grade hard-rock titanium-vanadium deposits, working towards a development decision in mid-2021 with potential JV partner IMUMR.