SPEECH BY MR TEO CHEE HEAN, CHAIRMAN OF NATIONAL RESEARCH FOUNDATION, AT THE LAUNCH OF KEPPEL-NUS CORP LAB, HELD ON MONDAY, 25 NOVEMBER 2013 AT 3.30 PM AT NUS ENGINEERING AUDITORIUM

Dr Lee Boon Yang, Chairman, Keppel Corporation

Mr Wong Ngit Liong, Chairman, Board of Trustees, National University of Singapore

Distinguished Guests

Ladies and Gentlemen

"Breaking New Ground, Investing in the Future"

Good afternoon. I am pleased to join you this afternoon at the launch of the Keppel-NUS Corporate Laboratory.

The Corporate Lab @ University scheme strengthens our innovation system by encouraging public-private R&D collaboration between Universities and Companies. It ensures that research conducted by Universities has impact by developing cutting-edge solutions for real problems faced by industry. Our students gain industrial experience, preparing them for employment in high value-add

sectors. We hope that the research supported by the Corporate Lab @ University scheme translates into business growth for companies, generates economic benefits for Singapore, and creates good jobs for Singaporeans.

The first Corporate Laboratory under this scheme was launched in July this year between Rolls-Royce and NTU. The Keppel-NUS Corporate Lab breaks new ground, because it is the first Corporate Lab involving a local company.

Today, the marine and offshore industry already contributes $13 billion, or 1.6%, to our GDP and hires some 20,000 Singaporeans and permanent residents, mainly in skilled jobs. Besides companies like Keppel and SembCorp, there are other companies such as offshore logistics provider Toll, and Halliburton, whose regional flagship Completion Tools facility I opened in March this year. The presence of many such companies helps to create a cluster of related activities in the marine and offshore sector which anchors higher value-added activities in Singapore, and creates good jobs for Singaporeans.

Keppel Corporation is a good example of how investing in R&D and innovation has paid off. It has built close to half of the world's jack-

up rigs since 2000. Keppel's rigs operate in waters as far as the North Sea and the Gulf of Mexico. They are able to operate in water 3,000 metres deep, drill 10,000 metres below the seabed, and withstand pressure of about 15,000 pounds per square inch (psi) – or about a thousand times the standard atmospheric pressure at sea level.

Keppel has decided to make this major R&D investment to sustain its lead in the marine & offshore industry and to advance its business position globally. This partnership involves 44 Principal Investigators (PIs), co-PIs and external collaborators; creates 54 new positions for research fellows and engineers; and trains some 30 PhD and Masters students in 5 years. The strong research capabilities of NUS, together with the industry know-how of Keppel, will combine to create a synergistic partnership for innovation.

The Keppel-NUS Corporate Laboratory will focus on the following research areas:

- One, develop Future Systems for oil and gas exploration and production in harsh conditions such as ultra-deep waters as well as the Arctic.

- Two, enhance productivity in the Future Yards, by introducing automated systems in Keppel's yards to mitigate the shortage of skilled labour.
- Three, explore Future Resources, including high-value deepsea polymetallic nodules, while minimising impact on the marine environment.

We expect these future-oriented areas of research to open up new commercial possibilities, create exciting job opportunities for Singaporeans, and add vibrancy to the marine and offshore industry in Singapore.

We hope the Keppel-NUS collaboration will encourage other local companies to forge strategic alliances with our research performers, to do future-oriented, practical research that creates economic value for Singapore, and good jobs for Singaporeans.

I commend the teams from Keppel Corporation, National University of Singapore and National Research Foundation, for their collective efforts and strong teamwork to realise this collaboration. We wish the Keppel-NUS Corporate Laboratory well, and look forward to

positive tangible outcomes from the team of experienced engineers and researchers soon.

Thank you.