

# New lab, scholarships to boost electronics sector

NUS collaborates with US supplier on facility to spur creation of next-gen semiconductors

Tiffany Fumiko Tay

A new research laboratory that aims to help develop advanced semiconductors that are more efficient and cheaper was launched yesterday, along with \$1.5 million in scholarships to grow the pool of talent in the electronics sector.

The \$70 million lab is a collaboration between US equipment supplier Applied Materials and the National University of Singapore (NUS). The facility at NUS will focus on accelerating the discovery and commercialisation of new materials for manufacturing advanced semiconductors.

More than 50 researchers, engineers and doctoral students are expected to be trained at the lab over five years.

Applied Materials will also be sponsoring scholarships worth \$1.5 million for the doctoral students.

Speaking at the launch, Finance Minister Heng Swee Keat said that electronics remains a key pillar of



Professor Aaron Thean (left), co-director of the Applied Materials-NUS Advanced Materials Corporate Lab at NUS, showing Finance Minister Heng Swee Keat the exhibits displayed at the launch of the lab yesterday. With them was NUS president Tan Eng Chye. PHOTO: LIANHE ZAOBAO

Singapore's manufacturing sector. Singapore is now among the top locations for advanced semiconductor manufacturing, and more than half of the world's semiconductor companies have research and development, as well as manufacturing activities here, he said.

Mr Heng, who is also chairman of the National Research Foundation, said the foundation is supporting the setting up of corporate laboratories in universities to strengthen the link between research, innovation and enterprise.

The new lab "seeks to develop the next generation of semiconductors that are smaller, cheaper, faster and more power efficient", he said.

"It will also reinforce NUS' efforts in building research capabilities to ride the new waves of technological shifts in artificial intelli-

gence, semiconductor technology and the Internet of Things, which can then be applied in areas like autonomous vehicles, robotics and many others," he added.

NUS president Tan Eng Chye said that there is an ever-increasing amount of semiconductor technology used in devices such as smartphones, and the collaboration will allow NUS and Applied Materials to address industry challenges for which solutions do not currently exist.

Through the lab, there is also opportunity for the company to "incorporate the co-developed technologies directly into their new business offerings for advanced generation tools", which may be deployed around the world, Professor Tan added.

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RIDING NEW WAVES OF TECH

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**FINANCE MINISTER HENG SWEE KEAT**, who is also chairman of the National Research Foundation, on the new laboratory.

\$1.5m

Value of scholarships for doctoral students to be sponsored by US equipment supplier Applied Materials.

\$70m

Cost of the new research lab, which will be used to train more than 50 researchers, engineers and doctoral students over five years.