

**NECTEC JOINS HANDS WITH THAI OPTICAL ON THIN-FILM PROJECTS >> 4B**

Nectec joins hands with Thai Optical on thin-film projects

MOVE AIMS TO
PROMOTE R&D SO AS
TO BE ABLE TO MEET
INDUSTRIAL DEMAND

JIRAPAN BOONNOON
THE NATION

THE NATIONAL Electronics and Computer Technology Center (Nectec) has signed a memorandum of understanding with Thai Optical Group (TOG) to set up a Sputtering project.

With the aim of improving the knowledge base of local researchers and utilising research and development from the laboratories to a commercial outcome, the project will assist with research and development in thin-film technology and optical coating thin-film technology to support the commercial market.

The corporation will also launch the product in the market within two years.

Under the five-year Sputtering project, the corporation in the first step will develop the lotus leaf effect for lens, water repellent lens and improve the mould process in order to reuse mould block filter to reduce eye problems.

Thin-film technology is one of most technologically advanced fields for thin-film designs, fabrications, and





applications. The technology is most utilised worldwide in research and development for high-end products, which include touch screens on smart-phones, camera lens, microchips, hard-disk drives, medical devices and laser components.

Meanwhile, the optical coating thin-film technology, especially in physical vapour depositions with evaporation or sputtering techniques, can be used to fabricate a wide range of thin films, for example metallic films, alloys, glass, ceramics, and semiconductors. These techniques can accurately control the film thickness, as well as the desired characteristics of such films during the depositions.

Torn Prachartam, managing director of TOG said that under the collaboration, the firm would spend Bt2 million each year for five years until 2020 to catch up with technology and also develop new technology to support its business.

He said the firm also has plans to utilise new technology to develop electronic lens designed for smart devices in the future.

"I think the collaboration will promote local development and technology to support the domestic and international markets. It will also reduce the import cost as well as cut the cost of production and licensing by around 15 per cent," Torn said.

Sarun Sumriddetchkajorn, Nectec's director, said the partnership will create a knowledge base in the country and will be able develop research and development so as to support industrial demand.

It is also an initial step to develop human resources to support industry and catch up with new technology, to develop local technology and innovative products for the markets as well as improve peoples' quality of life.

Pongpan Chindaudom, research unit director of intelligent device and systems research unit at Nectec, said the corporation would promote local technology development and provide direct support from laboratory to the creation of new products for the commercial market and support local industry.

"It is a good opportunity to arrange matching from the laboratories to the commercial market. The firm and Nectec have worked together for 18 years on a lens reflection project and lens design before they set up the Sputtering project this year," said Pongpan.

Torn added that the firm last year developed and provided about 30 million units of glass lenses to support the local and global markets. It exported about 95 per cent of output to seven countries, including Sweden, Britain, Russia, New Zealand and Australia. The firm this year expects to make about 37.5 million glass lens units for the market.