



# **MEDIA RELEASE**

A\*STAR INSTITUTE OF MICROELECTRONICS AND PICOSUN ANNOUNCE A JOINT INITIATIVE TO DEVELOP ADVANCED ATOMIC LAYER DEPOSITION TECHNOLOGY FOR NEXT GENERATION MEMORIES AND SOLAR CELLS

#### Singapore, 27 March 2012-

A\*STAR Institute of Microelectronics (IME) and Picosun Oy, a Finland-based global manufacturer of Atomic Layer Deposition (ALD) equipment, have announced a partnership to develop advanced ALD techniques to enable continuing growth in the areas of next generation memories and solar cells.

With this collaboration, IME and Picosun will jointly develop innovative ALD and plasmaenhanced ALD (PEALD) processes for novel dielectrics and metals for applications in resistive switching non-volatile memories (NVM), multilayer metal-insulator-metal (MIM) capacitors, solar cells, and advanced complementary-metal-oxide-semiconductors (CMOS). Enabling integration of the processes with the devices for industrial applications will be the core objective of the joint research project.

"IME is continually engaging with strategic partners to enable breakthroughs in novel technologies," says Prof. Dim-Lee Kwong, Executive Director of IME. "Picosun's state-of-the-art ALD technology and unparalleled expertise in the field will complement our expertise to spearhead new technologies and bring the results of our R&D to our partners rapidly."

"We are excited to partner with IME to speed up the R&D of novel, groundbreaking semiconductor, IC and renewable energy technologies. Establishing the IME-Picosun partnership ties closely also to the recent opening of Picosun's first Asian subsidiary, Picosun Asia Pte. Ltd. in Singapore," states Mr. Kustaa Poutiainen, CEO of Picosun. "As the demand for Picosun's ALD equipment is booming in Asia, the presence of local subsidiary along with local R&D partners and demo facilities equipped with PICOSUN™ ALD tools will be of immense help to provide always first class customer service, rapid demonstrations and product deliveries, and timely after sales and field service operations."

## **About the Institute of Microelectronics (IME)**

The Institute of Microelectronics (IME) is a research institute of the Science and Engineering Research Council of the Agency for Science, Technology and Research (A\*STAR). Positioned to bridge the R&D between academia and industry, IME's mission is to add value to Singapore's semiconductor industry by developing strategic competencies, innovative technologies and intellectual property, enabling enterprises to be technologically competitive, and cultivating a technology talent pool to inject new knowledge to the industry. Its key research areas are in integrated circuits design, advanced packaging, bioelectronics and medical devices, MEMS, nanoelectronics, and photonics. For more information, visit IME at: <a href="http://www.ime.a-star.edu.sg">http://www.ime.a-star.edu.sg</a>.

## **About the Agency for Science, Technology and Research (A\*STAR)**

The Agency for Science, Technology and Research (A\*STAR) is the lead agency for fostering world-class scientific research and talent for a vibrant knowledge-based and innovation-driven Singapore. A\*STAR oversees 14 biomedical sciences, and physical sciences and engineering research institutes, and seven consortia & centre, which are located in Biopolis and Fusionopolis, as well as their immediate vicinity. A\*STAR supports Singapore's key economic clusters by providing intellectual, human and industrial capital to its partners in industry. It also supports extramural research in the universities, hospitals, research centres, and with other local and international partners.

## **About Picosun Oy**

Picosun Oy is a Finland-based, globally operating Atomic Layer Deposition (ALD) equipment manufacturer with a world-wide sales and service organization. The inventor of ALD, Dr. Tuomo Suntola, is a Board Member of Picosun, and Picosun CTO Sven Lindfors has designed state-of-the-art ALD tools continuously since 1975, so today Picosun represents almost 40 years of pioneering, dedicated and exclusive ALD system development. Picosun Oy has its headquarters in Espoo, Finland, its production facilities are located in Kirkkonummi, Finland, its U.S. headquarters in Detroit, Michigan, and its Asian headquarters in Singapore. Today, PICOSUN™ ALD systems are in daily use in various high profile industries, universities, and research institutes on four continents. For more information, visit Picosun at: http://www.picosun.com.

#### For Picosun

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