PHLEXCELL, NANOMALAYSIA & UNIVERSITI TEKNOLOGI PETRONAS INK MOU TO ADVANCE SOLAR TECHNOLOGY AND FLEXIBLE ELECTRONICS

KOTA KINABALU, 12 September 2024 — NanoMalaysia Berhad (NMB), Phlexcell Sdn Bhd, a subsidiary under NanoMalaysia Berhad (NMB), a company limited by guarantee under the Ministry of Science, Technology and Innovation (MOSTI), and Universiti Teknologi PETRONAS (UTP) announced today a tripartite collaboration to advance the development of solar energy and flexible electronics in Malaysia.

The collaboration was formalised through a Memorandum of Understanding (MoU), with an exchange ceremony held during the Eighth World Engineering, Science and Technology Congress (ESTCON) at the Sabah International Convention Centre today. ESTCON is a biennial congress organised by UTP to bring together researchers, policymakers, and industry leaders from across Asia, the Middle East, North America, and Europe to explore solutions for a greener tomorrow.

The objective of the collaboration is to establish a Centre of Excellence (CoE) focused on developing new technologies and solutions, such as photovoltaic solar cells, batteries, sensors, flexible devices, and electronic devices, through partnerships between industry and research institutions.

The CoE will also provide training and short courses in rigid and flexible solar technologies, offer consultancy services to the research and industrial ecosystems, and deliver comprehensive services, including characterisation, testing, and R&D in solar technology and flexible devices.

Additionally, the collaboration will build on the recently activated Product Development Project of the Dye-Sensitive Solar Cell-Photoelectrochemical Cell (DSSC-PEC) Tandem Self-powered Hydrogen Production Module. This project aligns with Malaysia's Hydrogen Economy and Technology Roadmap (HETR) and the National Energy Transition Roadmap (NETR), which aims to use 70% renewable energy sources by 2050.

The MOU's signatories were YBhg Prof Dato ’Ir Ts Dr Mohamed Ibrahim Abdul Mutalib, Vice Chancellor of UTP, and Mr Zaimizi Hamdani, Chief Strategy Officer of UTP. At the same time, NanoMalaysia was represented by its Chief Executive Officer, Dr. Rezal Khairi Ahmad, and PhlexCell by its director, Ts. Dr. Daniel Bien Chia Sheng.

NanoMalaysia Chief Executive Officer Dr Rezal Khairi Ahmad said: “This MOU represents a giant leap forward in commercialising local technology on clean hydrogen production by leveraging on solar energy through developing the DSSC-PEC system to offer an alternative path to Hydrogen Economy in the guise of small-sized and decentralised concept which will allow greater participation from the citizenry to mitigate the environmental impact of fossil fuels collectively. The market for such an energy source is growing due to a large population and rising demand for renewable energy and energy security within the region. In 2020, the historical market value of the DSSC-PEC in the Asia Pacific was estimated at US$5.32 billion and is forecast to reach US$25.64 billion by 2030.”

Mohamed Ibrahim said,” This tripartite collaboration marks a significant milestone in our journey towards a sustainable future. We aim to develop innovative solutions that contribute to Malaysia's energy transition goals by combining our expertise in solar energy, flexible electronics, and research. UTP is committed to contributing to a sustainable future through

our research and development efforts. This collaboration aligns with our vision of creating a greener and more resilient world."

The MOU supports the United Nations Sustainable Development Goal (SDG) 7: Affordable and Clean Energy, which ensures universal access to affordable, reliable, and sustainable energy. This includes improving energy efficiency, increasing the share of renewables, and further diversifying the energy mix while ensuring energy affordability for all. The MOU follows PhlexCell and UTP's announcement in March 2024 of the successful development of the Flexible Dye-Sensitised Solar Cell (Flexible DSSC).

-END-

About NanoMalaysia Berhad

NanoMalaysia Berhad was incorporated in 2011 as a company limited by guarantee (CLBG) under the Ministry of Science, Technology and Innovation (MOSTI). Through the NanoMalaysia Venture Builder Model, it is entrusted with driving the development of nanotechnology and EV components technology and spearheading the hydrogen economy in Malaysia.

About Phlexcell Sdn Bhd

PhlexCell Sdn Bhd, established in 2021, is a subsidiary of NanoCommerce Sdn Bhd, a commercialisation entity under the NanoMalaysia Group. Phlexcell focuses on developing and commercialising electronic and flexible devices, including technology materials, components, systems, and applications, and developing new intellectual properties.

For Media Enquiries: corporateaffairs@nanomalaysia.com.my