**Futex Taipei 2019 Showcases AI and Electronics Innovations**

*Monolithic hybrid type quantum dots, wireless positioning, and AIoT smart aquaculture management systems*

**October 27th – Taipei, Taiwan –** Imagine improving the micro-light emitting diodes pixelation. It’s a monolithic hybrid type of quantum dots that offers full-color pixel arrays. This system fabricates nanometer-level etching technology which effectively shifts wavelengths from green to blue. The Green and Smart Agricultural System applies AI to optimize growth and medically functional compound quantity of Chinese Medical plants. By optimizing fertilization to predicted biosynthesis needs instead of focusing on soil nutrition, the plant growth time and medical compound concentration was increased significantly. These are among the new Artificial Intelligence, Electronics and Optoelectronics inventions and research that will soon be unveiled at the Futex Taipei 2019 exhibition. Futex Taipei 2019 runs from December 5 to 8, 2019 at the Taipei World Trade Center, Hall 1 in Taipei, Taiwan. The event organizer is the Ministry of Science and Technology (MOST) of Taiwan.

Futex Taipei 2019 focuses on meeting the needs of innovating tech through AI. This exhibition lets us learn about cutting edge research that is also practical, and helps ordinary people understand how science could change their lives. In addition, the event acknowledges and rewards the research teams from academia and institutions who are building these critical tools and technologies of the near future. Futex Taipei 2019 will show Taiwan's revolutionary breakthroughs in optoelectronics, electronics and artificial intelligence.

According to the World Economic Forum’s Global Competitiveness Report for 2019, in the "Innovation capability" category, Taiwan ranks fourth globally for the key competitive attribute behind Germany, the United States, and Switzerland. It claimed 12th place out of 141 economies overall.

**Tomorrow’s ideas today: SST-MRAM, Smart Aquaculture, Wireless Positioning and Tracking**

Researchers at National Tsing Hua University have been working on SST-MRAM. A sophisticated mechanism was created by a team working to improve semiconductor processing. The process boosts switching efficiency, create data failure data analysis records to increase the life of the device. The proposal aims to integrate all research resources with regards to MRAM and encourages MRAM research.

At the National Taiwan Ocean University, the team created an AIoT smart aquaculture management system. AI is used to optimize aquaculture management system to reduce the cost of feeding, reduce energy consumption and increase production. The concept is also to track the trajectory of fish and monitor for abnormal behavior.

National Tsing Hua University also showcases a biomedical theragnostic chip for neural disorders. It functions as an implantable device to treat Parkinson’s disease, depression, dementia, and monitor physiological signals. This device can accelerate pre-clinical data collection and verification.

Learn more about Futex Taipei 2019 at: www.futuretech.org.tw

**About Futex Taipei 2019**

Futex Taipei 2019 showcases Taiwan’s innovations – in the areas such as artificial intelligence, green energy, biotechnology, pharmaceuticals and nanomaterials – which are vital to people's livelihoods and to the development of society and an industrial economy. The annual event, which was first held in 2017, is organized by MOST.

To demonstrate Taiwan's ability to master key practical technologies for industry, selection criteria include industrial applicability as well as scientific innovation. Innovations are carefully selected from research institutes, science parks, and many other sources. By using this exhibition to share and publicize the practical creativity of Taiwan’s industry, academia and researchers, Taiwan is improving on its already strong position as a global source of innovative science and technology. Find out more at https://www.futuretech.org.tw

**About the Ministry of Science and Technology (MOST)**

Scientific and technological innovations are major driving forces of economic growth and national progress. The MOST spearheads Taiwan’s exploration and development of the latest technologies. It is the successor to the National Science Council (NSC) established in 1967. MOST promotes science and technology development, supports and encourages forward-looking academic research, and oversees Taiwan’s science parks – critical generators of innovation and science-industry cooperation that have made Taiwan a key provider of practical technologies used worldwide by billions of people. The ministry strives to harmonize science and technology with the humanities, as well as to promote Taiwan’s originality and international competitiveness. MOST provides top-level strategic guidance for national policy by drafting the National Science and Technology Development Plan. For more information visit https://www.most.gov.tw