



**Press Review Taiwan
Science, Technology and Education**

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In the biomedical field, a solution was found to make artificial muscles out of onion cells; the use would mainly be for robots. A possibility for renewable energies lies in the South China Sea, where the power of waves could have a potential to provide 75% of the electricity used in Taiwan. Once more in the clean energy field, a Taiwanese team developed a method of making biofuel from microalgae at a very low cost; the solution could also be used in other fields such as health supplements and cosmetics.

In Education, President Ma is aiming at an increase of foreign students in Taiwan via scholarship programs as a soft-power tool. Taiwanese pupils succeeded very well, again, in a world-wide ranking in mathematics and sciences. In vocational high schools, students started to develop on-campus businesses to give them a practical experience linked to the studied subjects.

In e-commerce, Yahoo Taiwan is developing a way to use photos for shopping online. Starting 2017, the government will introduce smart data in ID cards, such as driver license, health insurance data and, maybe later, digital certification, electronic voting, mobile payment and tax collection.

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Science

Taiwanese study sheds light on opioid tolerance treatment (Central News Agency, 06 05 2015)

Taiwanese researchers have recently identified the key compound for the development of opioid tolerance, bringing hope to prescription opioid users who suffer from increasing tolerance levels to the point where they have to take more pain killers to get the same level of effect.

Taiwan researchers make artificial muscles out of onion cells (Central News Agency, 06 05 2015)

A new study by Taiwan scientists has discovered that gold-plated onion cells can be used to make artificial muscles, the Los Angeles Times reported. The results were achieved by a research team led by Shih Wen-pin, a professor at National Taiwan University's Department of Mechanical Engineering, and have been unveiled in Applied Physics Letters, a weekly peer-reviewed scientific journal that is published by the American Institute of Physics.

Irregular sleep patterns raise osteoporosis risk: association (China Times, 10 05 2015)

The Formosa Plastics Group, the Wang Jan-Yang Charitable Trust (WJYTRUST) and the Taiwanese Osteoporosis Association are cooperating to promote research on five groups at high risk for osteoporosis, according to a press release of the WJYTRUST. Persons at high risk for developing osteoporosis are those who work the night shift at least three days a month, have insomnia or stay up for more than 24 hours at a time, sleep for less than 7 hours each day or sleep for over than 3 hours in the daytime.

Giant waves in South China Sea show their power (Central News Agency, 13 05 2015)

Internal waves in the South China Sea can generate power equivalent to about 75 percent of Taiwan's current electricity generation capacity, local researchers said, citing the recent findings of a study in which they participated. An international research team found that internal waves in the South China Sea can reach 500 meters in height before breaking, the local researchers said at a press conference in Taipei.

Taiwan develops method of making biofuel from microalgae (Central News Agency, 19 05 2015)

Taiwanese researchers have developed a system that uses microalgae cultivated in partially treated wastewater as a feedstock for biomedicine and biofuel production, providing huge business opportunities. It took the research team five years to develop the microalgae cultivation and biodiesel production system. The technology has also begun attracting attention from the academic and business sectors from home and abroad.

Taiwan-led team makes astrophysics find (Taiwan Today, 21 05 2015)

A research team led by Taipei City-based Academia Sinica recently made a breakthrough in astrophysical research, shedding new light on understanding of the upper end of stellar molecular core mass functions. Based on observations via the Atacama Large Millimeter/submillimeter Array, the team discovered the luminous OB cluster-forming massive molecular clump G33.92 plus 0.11, unveiling the fine molecular gas structures deeply embedded in the center of the parent molecular cloud. OB-type stars often exhibit signatures of activity, with associated variability and structure on a range of temporal and spatial scales.

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Education

Ma eyes more exchanges via scholarship program (Taiwan Today, 11 05 2015)

ROC President Ma Ying-jeou said May 8 that he expects Taiwan to transform into a hub for higher education and Chinese language studies on the back of the country's scholarship programs. "Expanded internationalization in tertiary education has been instrumental in broadening the global perspective of local students," Ma said at a farewell function in Taipei City for Taiwan and Huayu Enrichment scholarship recipients. According to the president, he is optimistic the latest batch of academic ambassadors will put what they have learned in Taiwan to good use in the service of their countries while helping deepen bilateral ties.

Taiwan among top five worldwide in math, science test (Taipei Times, 14 05 2015)

Taiwan and Japan tied for fourth place in a global math and science education ranking administered by the Organisation for Economic Co-operation and Development (OECD), with Asian nations taking the top five spots, the BBC reported. Singapore ranked best in the world, followed by Hong Kong, the BBC reported. South Korea took third in the OECD's biggest global school rankings to date. Taiwan and Japan tied in fourth place, the report said.

**Taiwan students build on-campus businesses (Taiwan Today, 22 05 2015)**

Students at vocational and technical colleges in northern Taiwan are starting on-campus businesses in record numbers, creating employment and spurring economic activity. Barbershops and beauty salons are some of the most popular ventures, especially at institutions specializing in such trades.

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Technology**82% of Taiwanese have used contactless payment: Visa survey (Central News Agency, 05 05 2015)**

Some 82 percent of Taiwanese have used contactless payment, reflecting growing familiarity among local consumers with the technology, according to a survey released by Visa Inc., the world's largest credit and debit card company. The results of the "Proximity Payment Consumer Behavior Survey" found that the top three reasons for using contactless payment are: "contactless payment is faster and more convenient than swiping a card" (79 percent); "it is convenient for small purchases that do not require a signature" (60 percent); and "it feels safer without handing the credit card to store staff" (29 percent).

Yahoo Taiwan introduces new photo-based shopping method (Central News Agency, 05 05 2015)

The Taiwan unit of Yahoo Inc. unveiled a new feature that allows buyers to search for and purchase a product, using a photo of it. The new feature called "Image Search" will be added to Yahoo's Super Mall app by the end of the year and will include products ranging from bottle drinks to clothing and health foods. Super Mall users will also be able to review movies and book tickets, using a photo of the movie poster. In addition, the Web portal is setting up an e-voucher platform that will go online later this month, allowing users to search and purchase e-vouchers that can be used to make payments in participating retail stores and restaurants.

ROC mulls switch to smart ID cards in 2017 (Central News Agency, 05 05 2015)

A plan incorporating smart technology into the ROC's seventh-generation identification cards by 2017 at the soonest is under consideration by the Ministry of the Interior. The measure enables an ID card to contain driver's license and National Health Insurance data. Personal information will be safeguarded by a state-of-art protection system and accessible only by relevant authorities.

Construction of Chunghwa Telecom-funded cross-Pacific cable begins (Central News Agency, 12 05 2015)

Construction has begun on a multi-terabit submarine cable system co-funded by Chunghwa Telecom Co., Taiwan's largest telecom operator, and other leading carriers in Asia. Spanning more than 13,000 kilometers, the New Cross Pacific (NCP) cable network will connect Hillsboro, Oregon in the United States, Chongming, Nanhui and Lingang in China, Busan in South Korea, Toucheng in Taiwan and Maruyama in Japan, Chunghwa Telecom said.

Taiwan develops first indigenous RSI for FORMOSAT-5 (Central News Agency, 12 05 2015)

The National Applied Research Laboratories (NARLabs) announced the first optical remote sensing instrument (RSI) completely made in Taiwan that will be part of the payload for the FORMOSAT-5 satellite, marking a milestone in the nation's space technology development.

PChome subsidiary taps digital mobile wallet service (Central News Agency, 13 05 2015)

A subsidiary of Taiwan-based Web portal PChome Online Inc. launched a digital wallet service, making it easier for local e-commerce sellers and buyers to carry out transactions via smartphones. The "Pi" mobile wallet was developed by Pi Mobile Technology Inc., a mobile payment arm established by PChome in January, with the service initially available among holders of credit cards issued by CTBC Bank.

Military unveils mobile mortar kit made in Taiwan (Taipei Times, 16 05 2015)

The military unveiled a new, locally developed mobile mortar system, along with other locally developed weapons systems and equipment, during a media tour to demonstrate its efforts to create self-reliant defense capabilities. The mobile mortar system comes in two versions: One is mounted to a vehicle and the other is designed to be set up on the ground.

COMPUTEX: Nine products clinch golden Best Choice Awards (Central News Agency, 27 05 2015)

Nine electronics products received golden Best Choice Awards from organizers of Computex Taipei, the world's second biggest computer trade show that honored their innovation, functionality and market potential. Reviewed and selected by experts from the technology industry, academic community, media groups, and government, the Best Choice Award recognizes distinctive products that set the future standard for the technology industry.

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