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Award



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Taipei Tech Team Develops Advanced Green Energy Fuel Cell

By Jenny Chen



In steps with the school vision of being a green university, the Taipei Tech research and development team, led by Taipei Tech Vice President Sea-Fue Wang, announced a new kind of green and sustainable fuel cell. Following closely behind the US, Australia and Japan, Taipei Tech has also successfully developed a much more efficient and green fuel cell for household use.

Taipei Tech developed a new kind of solid oxide fuel cell (SOFC), which generates electricity through chemical reactions: solid oxide (or ceramics) combines with natural gas and air to produce electricity and hot water. This production process is noiseless, because it doesn't require combustion or a mechanical motor. The only two outputs from the SOFC are electricity and hot water (pure H₂O). The pure hot water can be used for showering and drinking. Consequently SOFC is very effective and green for the environment, since it produces zero pollution and noise. This new SOFC can produce up to 85% of electricity. It is very proficient in comparison to the old fashioned thermal powered battery which produces only 30% of electricity, and the nuclear powered one, which produces only 40% of electricity.

The size of the SOFC can vary depending on one's need. It can be conveniently sized for remote locations that electric wires do not reach. A properly sized SOFC can produce enough electricity to support a factory or even a small community. Another advantage is that the SOFC can generate power 24 hours a day, 7 days a week; a characteristic unlike that of other green fuel cells that are restricted to solar and wind power.

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SOFC research and development team leader, Taipei Tech Vice President Sea-Fue Wang also stated that, "Due to the greenhouse effect caused by pollution, more countries and institutions are leaning towards a greener solution for electric power. Therefore the importance on the development of a green SOFC is gaining dominance." Vice President Wang also pointed out that compared to other countries' high temperature fuel cells, Taipei Tech's SOFC is categorized as medium temperature. As a result Taipei Tech's SOFC is more efficient at energy conversion.

Taipei Tech's SOFC was domestically produced; everything from materials to assembly was done in Taiwan. In addition, household SOFC can be commercialized in the near future. This shows that Taiwan already has the advanced technology and technique to export these SOFC batteries. Thus, this new mechanics has a large market potential for economic growth as well.



ESTIA French Exchange Students at Taipei Tech

By Jenny Chen



Taipei Tech's MOU with ESTIA, the Institute of Advanced Industrial Technologies in France has proved fruitful as 3 French students, Kevin Bichelot, Anthony Bidard, and Kevin Puylaurent are now studying at Taipei Tech as exchange students.

While on their exchange, the three French exchange students are required to take 5 courses at Taipei Tech. These courses can go towards their credits at ESTIA for graduation. Since they do not know Chinese well, it was mandatory for them to be on standard timetable. The standard time table at Taipei Tech offers a variety of English taught courses. Even though the courses are fixed, they are thrilled to have the opportunity to study subjects other than engineering (ie, management), and expand their knowledge base.

There are a few learning styles they are adjusting to at Taipei Tech as well. Anthony Bidard point out that the classes are smaller in Taipei Tech compared to France. Taipei Tech classrooms can accommodate approximately 15 to 20 students only, therefore creating a more intimate learning environment which he finds beneficial. Bidard also said that although the classes run longer in Taipei Tech, they do much of the learning in class. Consequently, they have more time after school for extra-curricular activities.

All three French students showed great interest in Taiwan before their exchange at Taipei Tech. They have done their research on the Asian culture and community. However, the friendliness of the Taiwanese people took them by surprise. Kevin Bichelot said "Taiwanese people are the friendliest people I have ever met!" Bichelot recalls that whenever he looked confused, strangers would come up to him and offer assistance without him even asking for help.



(continued on p.3) "ESTIA exchange students and class"

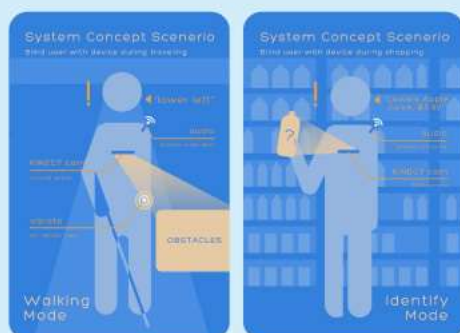
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Since the three French students were friends before they arrived at Taipei Tech, they often explore the city together. They find that the MRT and public transits in Taipei are very easy to navigate. Taiwan is popular for the wide selection of delicious food. Having tried so many different kinds, all three French students have come to a unanimous conclusion that their favorite food is the onion pancake at Taipei Tech's food court. With the good food and great culture, they are sure to recommend fellow French exchange students to study at Taipei Tech.



Microsoft Imagine Cup 2013: Taipei Tech Student Teams Win Champion and Runner-up Award

by Kimberly Lee



The Imagine Cup is a skill-based competition held by Microsoft with the object to create innovative and original software applications. It includes three competitions and provides multiple challenges to students around the world. At the regional competitions, Taipei Tech student teams presented brilliant performances, winning a champion in Games Competition and a runner-up in World Citizenship Competition, software design. On behalf of Taiwan, Taipei Tech's champion team, "TOP" will be competing with international teams in the Worldwide Final hosted in Saint Petersburg, Russia in July.

Taipei Tech's student team, "TOP" won

the champion of Games Competition with a whipping top game that recalls childhood memories of numerous Taiwanese. They came up with an original game which interestingly combines the traditional Taiwanese toy "Tuo-Luo", a whipping top with beyblade which is originally from Japan and has gained extreme popularity among elementary school students in Taiwan. With the latest smartphone technology, players can use a gyroscope and an accelerator equipped in smartphones to control the spinning direction and duration of whipping tops. What's more brilliant is that students can add changeable aboriginal totems and patterns to the top design as the symbol of cultural preservation. In fact, this is one of the stunning elements that amazed the Taiwanese panel and eventually won "TOP" a gold medal.

The other Taipei Tech student team, "Prime Sight" won a second place in World Citizenship Competition with a motion-sensing assistive device. Pinned on the chest of a blind person, "Prime Sight" can detect obstacles with infrared rays, and notify users of road conditions

within 2 meters by sending signals to the Bluetooth earphone. In fact, "Prime Sight" was awarded Best Team last September in the Software Innovation Summer Seminar held by the Ministry of Education. Impressed by their outstanding performance, the Technology Development Association for the Disabled showed interest in co-working with "Prime Sight" on the motion-sensing assistive device. Members of the association participated in the device testing and development.

"Prime Sight" will be competing online with other student teams from all over the world. The result is expected in May, and will determine whether or not "Prime Sight" can make it to the Worldwide Final in Saint Petersburg. With the determination to improve the living quality of the blind, student members of "Prime Sight" wish to carry on the development regardless of the competition result. Significantly, "Prime Sight" intends to seek sponsors and commercialize the motion-sensing assistive device so it will be available for those in need.





Taipei Tech Shines at NMUN: Taipei Tech Student Was Elected the Chair of the Security Council

By Kimberly Lee

For more than 40 years, National Model United Nations (NMUN), held by the National Collegiate Conference Association (NCCA), provides the opportunity for university-level experimental learning that offers participants insights and perspectives on international issues. NMUN is a global platform that brings together the next generation of international leaders.

The largest NMUN conference takes place in New York annually, which gathers more than 5,000 university student delegates. Although most of the student participants are from the United States and other English speaking countries, some participants are from Taiwan, China, and Korea. Being one of the only three Taiwanese universities participating along with National Taiwan University and National Chengchi University, the Taipei Tech student delegation was honored to have one of its students, Link Nie, elected as Chair of the Security Council.

Link Nie, a senior from the English department of Taipei Tech, came out on top from a group of thousands as one of the most outstanding candidates, and was then elected as Chair of the Security Council. Last year he was co-chair in ECOSOC. Within the UN charter, the Security Council is the only division that has concrete power to take action. Thus, the session was relatively more dynamic, and sometimes challenging. Link recalls the experience as "very interesting, but so nerve-

racking it makes your palm sweaty."

This year, the Taipei Tech delegation represented our friendly ally, Gambia, with 13 exceptional student delegates from different departments assigned in seven respective committees. Unlike most participants that are in politics related majors, the Taipei Tech delegation started with little professional knowledge. Yet regardless of the challenging preparation beforehand, students acquired past experience from last year's participants, devoted themselves to the intensive training and finally presented an excellent performance in New York.

Kimberly Lee, head delegate of Taipei Tech delegation, also a senior from the English department, said that every delegate of Taipei Tech was fully engaged in their role as Gambian diplomats; wholeheartedly committed to the country's objectives during and even after meeting sessions, mingling, negotiating, and most importantly seeking allies. "We were not intimidated by native English speakers or experienced political science majors," said Kimberly, "We used our knowledge accumulated from our earnest preparation and contributed a great deal to our respective committees. We couldn't have done it better!"

Kimberly was in the Commission on the Status of Women and was one of the main sponsors of three resolutions. She made strong impression in delivering

effective speeches and finally pushed through an original resolution that focused on women's health care during political transition. She said that the experience was life-changing to every student of the Taipei Tech delegation that they have bonded with students from all over the world while cooperating with delegates from other countries, and somehow significantly promoting Taiwan.

Dr. Yun-Hua Yang, advisor of Taipei Tech delegation, noted that this is the sixth time that Taipei Tech participated in NMUN as the only vocational school doing so in Taiwan. The delegation was proudly awarded Honorable Mentioned. Student delegates voluntarily received training and had greatly enhanced their capacity in leadership, communication, negotiation and critical thinking. They surely are the future leaders of the international community.



Wish you have a great day ahead,

A handwritten signature in black ink, reading "Wenlung Li". The signature is written in a cursive, flowing style.

President

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