

No. 5, November 2011

#### **News**

## Toyohashi Tech commemorates its 35th anniversary with guests from the international community

Events were held on November 16 to commemorate the 35<sup>th</sup> anniversary of Toyohashi University of Technology. In a commemorative speech Toyohashi Tech president Yoshiyuki Sakaki looked back on the successes of the University's 35 year history as well as introducing new initiatives including the Electronics-Inspired Interdisciplinary Research Institute (EIIRIS), the Research Center for Collaborative Area Risk Management, and the Research Center for Human-Robot Symbiosis Research. President Sakaki emphasized the importance of these new research facilities for the development of new fields, including medicine, nursing care, and disaster prevention.

President Sakaki also spoke about the importance of enhancing international collaboration by strengthening existing contacts with universities in Asia, as well as the creation of new partnerships with institutes in other regions of the world. Finally, President Sakaki asked for the continuous support of the guests for Toyohashi Tech in the 21<sup>st</sup> century.

On this occasion President Sakaki awarded the University's first honorary doctorates to Professor Dr. Nguyen Ngoc Bihn, Rector of Vietnam National University, Hanoi, and University of Engineering and Technology, and Mr. Nobuo Kamino, Senior Adviser of Chubu Gas Co., Inc.

Prof. Dr. Nguyen Ngoc Bihn was the first international student from Vietnam to study at Toyohashi University of Technology and he is currently the President of Vietnam National University, Hanoi, and the University of Engineering and Technology. He is also the Chairman of the Association of Vietnamese students studying in Japan.

The day's events also included a symposium—"The Future of International Cooperation in Engineering Education—Toward Strengthened Inter-University Networking"—commemorating the 10th Anniversary of ICCEED (International Cooperation Center for Engineering Education Development), with invited talks by researchers from partner universities in Indonesia, Malaysia, and Vietnam.

The main events to commemorate the 35th anniversary of Toyohashi University of Technology:

15 November 2011

13:30–18:30: Symposium in Commemoration of the 10th Anniversary of International Cooperation Center for Engineering Education Development (ICCEED)

http://icceed.tut.ac.jp/forum10e.html

18:40-20:20: International Exchange Day

http://www.cir.tut.ac.jp/students/pdf/Int%27IExchange2011Nov.pdf

16 November 2011

13:30–16:15: Memorial ceremony and commemorate lecture by Akira Fujishima, President of Tokyo University of Science on his research on the photo-catalytic properties of tungsten oxide.

http://www.tut.ac.jp/docs/111116 prestige.pdf

17–18 November 2011

Asia-Pacific Interdisciplinary Research Conference 2011

http://www.apirc.jp/

13:00–17:00: Lab tours as part of the Toyohashi Tech Academic-Industry collaboration Day. http://www.tut.ac.jp/35th/pdf/sangaku\_day.pdf

18:30-20:00: Response to massive damage caused by an earthquake in the Tokai region.

19-20 November 2011: The Japan Joint Automatic Control Conference

http://rengo54.me.tut.ac.jp/

http://www.jstage.jst.go.jp/browse/jacc

19 November 2011

13-15–14:15 : Seven years of the 'Hayabusa' space flight-from launch to landing back on earth.

http://www.tut.ac.jp/cooperation/docs/h23kokaikoza-hayabusa.pdf



Invited speaker for AP-IRC 2011 -Prof. Sandra Hirche, Technische Universitat Munchen, Germany



Invited speaker for AP-IRC 2011 -Prof. Quentin Pankhurst, Director of Research, The Royal Institution of Great Britain, UK



Dr. Nguyen Ngoc Binh, Rector, University of Engineering and Technology, Vietnam National University gave a special speach during the ICCEED symposium



More than 200 people participated to the ICCEED symposium.
(President Sakaki gave a speach to the participants)



During the 35th Commemoration Ceremony, Toyohashi Tech gave honorary doctorate for the first time to the Dr Nguyen Ngoc Binh, and Mr Nobuo Kamino, Advisor to Chubu Gas Co.

### The 9th International University Students Exchange Program in Indonesia

12 students of Toyohashi Tech with 2 students from technical colleges visited Bandung, Indonesia to participate the  $9^{th}$  International University Students Exchange Program.

Toyohashi Tech launched this project to provide opportunities for interaction with foreign universities in order to cultivate international understanding. This year Toyohashi Tech students visited Bandung in Indonesia to take part in lectures and discussion on the theme of 'Aiming at a safer and more sustainable future'.

For last two years the seminars were held in Toyohashi, but this year the workshops were held at Institut Teknologi Bandung (ITB) in Indonesia. Participants included 12 Toyohashi Tech students, 2 technical college students and 25 students from ITB, and 3 high-school students from the local Madania high school, one of the top high schools in Indonesia.

On each day, after lectures on a theme given by the instructors from ITB, the students discussed issues related to natural disasters that have occurred in both Japan and Indonesia. Active discussions resulted in a broadening of mutual understanding. The discussion was followed by presentations on how engineers may be able to address natural disasters.

After the four-day workshop, both Japanese and Indonesian students visited a traditional Indonesian farming village.. This visit enriched their view of traditional ways in which people live with in harmony with nature.

On September 25, the participant invited many people who had taken part in this program to attend an event featuring the performance of traditional Japanese and Indonesian dances.

In spite of the limited time available for this program, participants from both Japanese and Indonesian students had an extremely fruitful time.



Students of Toyohashi Tech and ITB are having discussion for their presentation.





Field studies in Cikapundung river area, near ITB campus



All the participants for this program





Field trip to traditional Indonesian village.

#### **International Exchange Day**

The fifth International Exchange Day was held on 15 November 2011 as part of events to celebrate Toyohashi Tech's 35th anniversary

The International Exchange Day was launched in 2010 to enhance understanding between international and Japanese students. This year students welcomed distinguished guests and alumni from overseas who had been invited to other events to commemorate Toyohashi Tech's 35<sup>th</sup> anniversary. Folk dances, songs, and martial arts performances by both international and Japanese students entertained guests while they were renewing the old friendships.

Among the alumni included were Dr. Nguyen Ngoc Binh (Rector, University of Engineering and Technology, Vietnam National University Hanoi), Dr. Phan Dinh Tuan (Vice Rector, Vietnam National University Ho Chi Minh City University of Technology), and Dr. Samsul Rizal (Vice Rector, Syiah Kuala University, Indonesia).

The event highlighted the University's strong links with the international community.



Toyohashi Tech alumni Dr. Nguyen Ngoc Binh gives an opening speech welcoming participants to the International Exchange Day.



International students from Malaysia dressed in traditional costumes.



President Yoshiyuki Sakaki and his wife enjoying a conversation with international students.



The Toyohashi Tech Budou-Bu, give a demonstration at the International Exchange Day

# Asia-Pacific Interdisciplinary Research Conference 2011: Scientists, engineers, entrepreneurs, and policy makers gather at the first truly interdisciplinary conference held in Asia-Pacific.

The first Asia-Pacific Interdisciplinary Research Conference 2011 was held at Toyohashi University of Technology (Toyohashi Tech) on 17–18 November 2011. The conference is a forum for enhancing mutual understanding between scientists, engineers, policy makers, and experts from a wide spectrum of pure and applied sciences to resolve the daunting global issues facing mankind

This inaugural gathering attracted 280 participants including delegates from France, Germany, India, Indonesia, Korea, Malaysia, Russia, Sweden, UK, Vietnam, and USA. The AP-IRC 2011 was chaired by Dr Yoshiyuki Sakaki, the president of Toyohashi Tech, who opened the proceedings by stressing the importance of an interdisciplinary approach to research to resolve global scientific and technical issues. And, recalling his own experience as the leader of Japan's efforts in the Human Genome Project, Sakaki encouraged participants make an effort to try to understand the sometimes difficult concepts and terminology of other areas of research.

Highlights of AP-IRC 2011 included a firsthand account of the damage caused by the massive earthquake in March 2011 to experimental facilities at Tohoku University by Masayoshi Esashi; the fascinating world of bees and the inborn numerical competence of humans and animals, by Hans J. Gross; research on robots and cognition-enabled technical systems at Technische Universität München by Sandra Hirche; the history of events leading to the invention of world's strongest NbFeB magnet by Masato Sagawa; novel method for the synthesis of graphene using bacteria extracted from a riverside near Toyohashi Tech campus; and Hideomi Koinuma described ambitious plans on harvesting energy by laying massive numbers of solar cells in North Africa as part of the 'Sahara Solar Breeder (SSB) Plan' for global clean energy superhighway.

Sakaki concluded his opening address by announcing that this conference will be held annually at the same time of year, with AP-IRC 2012 scheduled for 15–16 November 2012 at the Irago Sea-Park & Spa Hotel in Aichi Prefecture.

In addition to the technical sessions, the conference banquet included a short session during the invited speakers described notable trends in research and policy in their part of the world. The short speeches led to animated discussion between the delegates, especially young scientists and graduate students, who were able to talk directly with veteran researchers for a firsthand view of the issues raised during the day's presentations.

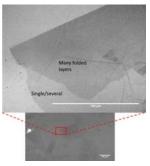
Refereed papers will be published in the Institute of Physics *Journal of Physics* Conference Series (http://iopscience.jop.org/1742-6596).

Further information

AP-IRC 2011 website: http://www.apirc.jp/invited.html
Institute of Physics Journal of Physics Conference Series

http://iopscience.iop.org/1742-6596

Irago Sea-Park & Spa Hotel: http://www.irago.net/



Toyohashi Tech Graphene Group reported on the use of microorganisms to reduce graphene oxide flakes (photograph) to yield graphene.

Sahara Solar Breeder (SSB) Plan directed towards global clean energy superhydrolly (Cc) proposit gold a landers meetig in Runs. Sec. 2000.

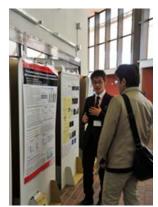
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Hideomi Koinuma described the launch and goals of the SSB Plan (http://www.ssb-foundation.com)



Quentin Pankhurst describing his work at University College London.



The poster session



Delegates at the first Asia-Pacific Interdisciplinary Research Conference 2011 held at Toyohashi University of Technology 17–18 Nov. 2011.