### The 41st Science Advisory Committee of International Science and Technology Center

The 41st Science Advisory Committee (SAC) of the International Science and Technology Center (ISTC) was held from February 18 to 20 at AIST Tsukuba. The ISTC Secretariat is located in Moscow, and its objective is to support researchers of the former Soviet Union with contributions from such countries as Japan, the United States, the European Union, Canada and Korea. SAC is a committee that recommends proposed projects. Dr. Yutaka Murakami, Senior Research Scientist of AIST, is a cochairman, and 15 members of SAC and ISTC Secretariat participated.

On the first day, ISTC related officers of the Ministry of Foreign Affairs and the Ministry of Economy, Trade and Industry attended, and Vice-President Masakazu Yamazaki of AIST gave an opening speech. During the next two days, focusing on recommendation of proposed projects, SAC activities and future action policies were discussed. On the last day, the outline of AIST was presented, and views were exchanged on possibilities of collaboration with Russia. Lastly, there was a tour of the research centers of nanotechnology and photovoltaics, and the three day schedule came to a close.

This meeting was a step toward working effectively with ISTC Headquarters in promoting collaborative research between AIST and Russia in the future.



AIST Vice-President Yamazaki greeting the members

## A Visit by Thailand Minister of Science and Technology

On March 7, AIST Tsukuba and Tokyo Headquarters were visited by Mr. Wutipong Chaisang, Thailand Minister of Science and Technology, Minister's advisor, representatives of MOST (Thailand Ministry of Science and Technology), of NSTDA (National Science and Technology Development Agency) and TISTR (Thailand Institute of Scientific and Technological Research) both of which had signed comprehensive agreements with AIST, and of Royal Thai Embassy in Japan. There were a total of 26 people, including the press.

The Minister is highly interested in BTL (Biomass To Liquids), and although he had only recently become a cabinet member of Prime Minister Samak Sundaravej' s new administration, he strongly wished to visit AIST during his visit to Japan. At Tsukuba, after a welcoming speech by the then Senior Vice-President Tatsuo Katsura,



Minister Wutipong, President Yoshikawa, Vice-President Yamazaki and others (Tokyo Headquarters)

the Minister and the party moved to Biomass Technology Research Center and Research Center for New Fuels and Vehicle Technology, and keenly observed the research sites. At Tokyo Headquarters, a courtesy call was made to President Hiroyuki Yoshikawa, and strengthening of the future cooperative relations was expressed in environmental and energy fields especially related to Biomass. At the same time, the Minister expressed his gratitude to the President for his valuable advice as chairman of the NSTDA International Advisory Board. Special reference was made to NAC2008 (NSTDA Annual Conference) of March 24 to be attended by Her Royal Highness Princess Sirindhorn where the Minister looked forward to meeting the President again.

This AIST visit by Minister Wutipong was very significant in maintaining the relations of research cooperation between the two countries.



Minister Wutipong, then Senior Vice-President Katsura and others (Tsukuba)

# Report on "nano tech 2008" International Nanotechnology Exhibition & Conference

"nano tech 2008", International Nanotechnology Exhibition & Conference was held from February 13 to 15 at Tokyo Big Sight.

"Nanotechnology" taken as a core technology, and "the fascinating world of nanotechnology from cutting-edge technologies to newest products" being the catchphrase, numerous exhibits as Nano Bio Expo 2008, ASTEC 2008, METEC '08, neo functional material 2008 were simultaneously held. The closing time was especially extended for one hour to enable as many people to attend. According to the sponsor report, 522 enterprises including 198 from 23 foreign countries participated, with 884 booths. The number of visitors is increasing by the year, and there were over 49,000 visitors at this event, showing that it is not only good for information gathering but also serves as a place for business matching.

AIST exhibited 28 research results from leading research areas as nanomaterial, nano fabrication, nano metrology, nano sensor, nano bio, and social receptivity. During the



Awarding ceremony

exhibition, in order to deepen understanding of AIST, we not only presented our research results but also tried to actively e x c h a n g e in for mation with the visitors. In the afternoons, presentations of AIST technological seeds were made within the booths, in order to disseminate research results for more concrete collaboration among industry, academia and



AIST booth

government as in joint research and technological transfers.

Furthermore, at this event, novel and pioneering forms of technology were selected among exhibitors and commended. AIST was honored with the nanotech Special Award and was given the award on the last day of the exhibition. The reason for the award was that "AIST succeeded in developing carbon nanotube ink that has three primary colors, by separating, with high purity, carbon nanotubes (CNTs) into metallic CNTs and semiconductor CNTs. This has led to great progress in electronic applications. The Institute has also succeeded in developing a mass synthesis approach for organic nanotubes composed of amphiphilic compound which serve as materials with new inclusive functions such as drug delivery systems (DDS), and this was a major step toward application in bioindustry."

4,200 printed pamphlets of all AIST exhibits were gone by the morning of the last day which shows the surprising number of visitors we had. Our staff was constantly kept busy responding to enquiries. We would like to thank all those who visited our booths.

### Thailand NSTDA International Advisory Board and NSTDA Annual Conference

The International Advisory Board meeting of NSTDA (National Science and Technology Development Agency), a core research organization of Thailand that has signed a comprehensive agreement with AIST, was held in Thailand from March 20 to 22, and President Yoshikawa chaired the meeting. There were discussions on a wide range of topics which are also of AIST concerns, as the balance between basic research and applied research, the matrix management of the organization and interdisciplinary research, strengthening of collaboration among industry, academia, and government, human capacity development, and special research topics of the future.

NSTDA Annual Conference was held at Science Park on March 24, and Her Royal Highness Princess Sirindhorn and Mr. Wutipong Chaisang, Minister of Science and Technology were present. President Yoshikawa gave a keynote lecture titled, "Science and Technology for Society", in which he presented the role and the direction that science and technology should take. Minister Wutipong had visited AIST on March 7 and had exchanged views with the President. NSTDA and AIST hold a workshop every year, and President Sakarindr Bhumiratana of NSTDA is a member of AIST Advisory Board. This Board meeting and conference helped to further strengthen the intimate research collaboration between the two organizations.



Members of the NSTDA International Advisory Board

#### **Exhibition at Hannover Messe 2008**

AIST exhibited at "Hannover Messe 2008", the world's largest trade fair held from April 21 to 25 at Hanover, Germany. At this Hannover Messe, as Japan was the official Partner Country, we exhibited 32 R&D results and products of technological-transfer venture corporations, a number 3 times that of last year.

During the official walk on the first day, Chancellor Angela Merkel of Germany visited the Japan Pavilion and viewed the humanoid robot HRP-2. Moreover, Japan Special Envoy, former Prime Minister Shinzo Abe, and Mr. Masashi Nakano, Senior Vice Minister of Economy, Trade and Industry (METI) visited AIST booth, and viewed the therapeutic robot, Paro, switchable glass / mirror, and claybased film, Claist.

During the fair, over 4,000 people visited the AIST booth, and there were over 400 technological consultations, and around 20 business negotiations concerning purchase of development devices and agency contracts.



AIST booth at Hannover Messe 2008

Symposiums were also held along with the exhibits.

Helmholtz-Gemeinschaft, the leading research association of Germany, Forschungszentrum Jülich and Forschungszentrum Karlsruhe, both members of the association, each signed a comprehensive agreement with AIST to promote research collaboration on 21 and 22. To commemorate this, "Germany-Japan Research Collaboration Workshop for Sustainability" was held on 22, and Senior Vice Minister Nakano gave a congratulatory speech.

In addition, co-sponsored with Japan External Trade Organization (JETRO), "Japanese-German Photovoltaic Energy Initiative Symposium" was held on 24, and there were reports and panel discussions by Japanese and German administrations, corporations and research institutes. There were over 180 participants, far exceeding expectations, which demonstrated the high interests of both countries in the field.

Furthermore, "Japanese-German Business Summit", "German-Japanese Roadmap Symposium", "1st German-Japanese Summit on Mobile Robots & Autonomous Systems" organized by other organizations were held, and they were attended by Senior Vice-President Akira Ono of AIST, Director Toshimi Wada of Collaboration Promotion Department, and Dr. Takanori Shibata and Dr. Osamu Matsumoto, Senior Research Scientists.

With the exhibition and symposiums, international technological transfer and research collaboration expansion in the future are anticipated.

**Cover Photos** Above: Minister Wutipong, President Yoshikawa, Vice-President Yamazaki and others (p. 18) Below: Bayan Obo, China (p. 19)



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