

French Minister-Delegate for International Trade François Loos visits AIST

Mr. François Loos, French Minister-Delegate for International Trade, attached to the Minister for the Economy, Finance and Industry, visited AIST Tsukuba on February 24, accompanied by Mr. Bernard de Montferrand, French Ambassador to Japan, and other officials. Mr. Loos exchanged views with AIST executives, including Senior Vice-President Kisaburo Kodama, Vice-President Yoshikazu Tanabe, Director-General for International Affairs Takayuki Matsuo, and Director of the Intelligent Systems Research Institute Shigeoki Hirai. The topics of this lively discussion ranged from Japan-France cooperation in science and technology and the role of AIST in Japan's science and technology policy to AIST reform.

Mr. Loos then visited the AIST-CNRS Joint Robotics Laboratory, a joint Japan-France lab where he watched a



humanoid robot demonstration and interacted with French researchers. Mr. Loos also paid a visit to the AIST science museum, Science Square Tsukuba, where he attentively inspected AIST research achievements in such fields as measurement standards, robotics, the environment, solutions for the aging population, and medical engineering. These achievements, as well as the museum itself, drew praise from Mr. Loos.

The Director of Life Sciences from the French Atomic Energy Commission visits AIST Tsukuba

AIST Tsukuba welcomed a visit by Dr. André Syrota, Director of Life Sciences at the French Atomic Energy Commission, on February 25. Dr. Syrota talked with Vice-President Kazutoshi Tanabe, Research Coordinator Hiroshi Kuriyama, Director of the Institute for Human Science and Biomedical Engineering Shinya Saida, and Director of the Neuroscience Research Institute Harumasa Okamoto. After Dr. Syrota was given an introduction to the research institutes, he participated in a discussion on the differences between Japan and France in their approaches to life science and their expectations for bilateral cooperation in this field.

Dr. Syrota also had a chance to talk with life science

researchers at AIST when he inspected the AIST laboratories that are working on cerebral information processing involving working memory and developing fiber-optic sensing technology for nerve metabolism.



Winter Institute Program for FY2004 completed



The 2004 Winter Institute Program, designed to support research efforts by South Korean graduate students in science and technology, came to an end with a completion

ceremony and reporting session on February 18.

This program invites junior researchers (postgraduate and doctoral students) to Japan for a period of about seven weeks and offers them the opportunity to pursue technical research and learn about Japanese language and culture. The goal is

to deepen their understanding of science and technology in Japan and promote bilateral partnerships in this field. This program is conducted by the Japan International Science and Technology Exchange Center (JISTEC) under contract with the Japan-Korea Industrial Technology Co-Operation Foundation (JKF).

A total of 40 participants came to Japan on January 5 to participate in this program, which is in its 12th year. After an orientation session, classes started on January 11 at their respective host research institutes (totaling about ten). Sixteen researchers were hosted at AIST: fourteen were assigned to AIST Tsukuba, one to AIST Tokyo Waterfront, and one to AIST Hokkaido.

2004 JICA Course in Research on Standards, Material Reference and Evaluation for Industry

A course in Research on Standards, Material Reference and Evaluation for Industry started on February 7. This course, which runs until December 15, is one of three JICA group training courses offered by AIST.

This course allows students to acquire skills in advanced standardization and basic evaluation and cultivates their research skills through on-the-job training. The overall objective of this program is to support the development of basic skills in standardization and evaluation in developing countries through human resources development, networking in relevant fields, and the sharing of knowledge and technology with Japan. It is hoped that this course will lead to joint research projects between AIST and key research institutes in ASEAN countries.

Of the three students participating in the course, two will be assigned to AIST Tohoku for metal surface evaluation and material features evaluation. The other will learn about evaluating biodegradable plastics at AIST Kansai for the first five months and at AIST Tsukuba for the second half of the course.

The other two courses, Research on Environmental Technology and Asia Pacific Legal Metrology System, are described on the following web page:

<http://unit.aist.go.jp/internet/tojyou.html>



Photo: Participants in the JICA Course in Research on Standards, Material Reference and Evaluation for Industry

AIST and HKUST hold joint nanotechnology workshop in Hong Kong

The HKUST-AIST Joint Workshop on Nano Science and Technology was held at the Hong Kong University of Science and Technology (HKUST) on March 3 and 4, 2005.

Over 100 people participated in the workshop, including HKUST President Paul Chu and 13 participants from AIST. Participants from both HKUST and AIST made presentations on topics that centered around the industrialization of nanotechnology. They also discussed possibilities for personnel exchange and joint research projects.

Both AIST and HKUST are leaders in the field of nanotechnology in the region. AIST organizes the Asia Nano Forum to promote partnerships in the Asia-Pacific region as part of its work in international cooperation. HKUST serves as the center for the research, development, and industrialization of nanotechnology in Hong Kong. Its Nano R&D Center was established with the support of both the

Innovation and Technology Fund of the Government of the Hong Kong Special Administrative Region and the industrial community in Hong Kong. HKUST also serves as a contact point for mainland China—the world's factory.



Thailand and Japan hold a research cooperation follow-up meeting

Last November, AIST signed a comprehensive research cooperation agreement with two national research entities in Thailand: the National Science and Technology Development Agency (NSTDA) and the Thailand Institute of Scientific and Technological Research (TISTR). Plans for this follow-up meeting were initiated at the joint workshop in Bangkok that preceded the signing ceremony. A number of specific cooperation projects were also proposed at the workshop.

More than 20 people from Japan (representing AIST, organizations affiliated with the Ministry of Agriculture, Forestry and Fisheries, corporations, universities, and associations) and Thailand (NSTDA and TISTR) participated in the follow-up meeting held at AIST Tsukuba on March 22 and 23, 2005. They screened the proposed cooperation projects in such fields as biomass and other renewable energy sources, environment conservation, nanotech, bio-sensing and IT from a strategic point of view. The participants also entered into extensive discussions on steps that should be taken in order to reach their goals.

More than ten Thai researchers stayed with AIST host researchers for up to two weeks, including the period when

the follow-up meeting was being held. These researchers further examined the cooperation projects.



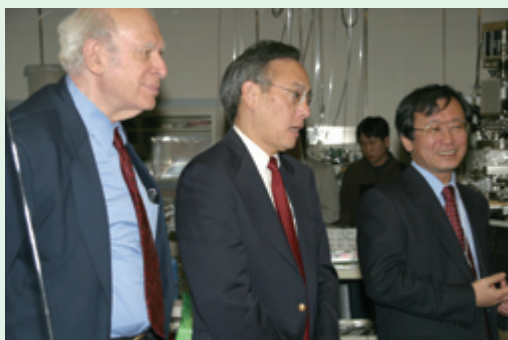
Photo: NSTDA President Sakarindr Bhumiratana (right) and AIST Senior Vice-President Kisaburo Kodama

Two Nobel laureates in physics visit AIST Tsukuba

On April 22, two Nobel Prize-winning physicists, Dr. Steven Chu* and Dr. Jerome Isaac Friedman**, visited AIST Tsukuba, accompanied by Lower House member Koji Omi. AIST President Hiroyuki Yoshikawa and Senior Vice-President Kisaburo Kodama guided the two scientists around the AIST laboratories and other facilities.

At both the spinelectronics and correlated electronics units, unit leaders and researchers discussed their achievements with the Nobel laureates. This was followed by a question and answer period and discussions about the principles, performance and prospects for the practical

application of these technologies. The Nobel Prize winners then inspected the advanced technological capabilities of the AIST laboratory equipment.



Dr. Chu was awarded the 1997 Nobel Prize for Physics for the development of a technique to cool atoms to an extremely low temperature using laser light. He is the director of the Lawrence Berkeley National Laboratory.



Dr. Friedman received the 1990 Nobel Prize for Physics for his investigations concerning deep inelastic scattering of electrons on protons and bound neutrons. He is a professor at the Massachusetts Institute of Technology.

AIST exhibits at Hannover Messe

The Hannover Fair 2005 was held in Germany from April 11 to 15. German Chancellor Gerhard Schroeder hosted the opening ceremony of the fair—one of the largest specialized trade fairs in the world—and Russian President Vladimir Putin was also in attendance. A total of 6,090 exhibitors from 65 countries participated, which was an increase from the 5,085 exhibitors at the 2004 fair. There were over 200,000 visitors, up 20% from the previous year. More than 40% of the visitors were from outside Germany, and over 1,000 people came from Japan. Some 6,000 journalists covered the event, also an increase from a year earlier.

The Hannover Fair is a gathering of specialized trade shows held at a single venue. The 2005 fair included 11 trade shows. AIST exhibited six technologies at the “Research & Technology” show as part of its efforts to promote technology transfer. The six technologies were: low-temperature film forming (Aerosol Deposition [AD] Method), gas-barrier clay film (Claist), a gold catalyst method for low-temperature CO oxidization, piezoelectric aluminum nitride thin films, stress luminescent materials, and a target-oriented drug delivery system (DDS).

At the special “Tech Transfer” exhibition held in the same hall, AIST made a demonstration designed to introduce its exhibits. Thanks in part to this demonstration, many people from a wide range of corporations, universities and other research institutes visited the AIST booth. AIST staff traded business cards with people from over 100 corporations and discussed possible licensing agreements and laboratory sample provision with people from more than 20 of those businesses.

AIST's participation in the Hannover Fair 2005 was a significant step towards future technology transfer arrangements.



AIST participates in BioVison and BioSquare

The World Life Science Forum “BioVision” was held from April 12 to 15 in Lyon, France. This forum, known as the biological counterpart to the Davos Conference, attracted life science experts from all over the world. AIST staff members attended the forum and exchanged views with top-class researchers (including Nobel laureates), government officials, representatives from research institutes and industrial communities, as well as delegates from Lyon, Grenoble (Nanobio) and other Regional Clusters in Europe.

AIST also took part in “BioSquare,” which was held at the same time and is the largest business conference on biotechnology in Europe. Many Japanese people attended the event, including Lower House member Koji Omi (former Minister of State for Science and Technology Policy), officials from the Cabinet Office, the Ministry of Economy, Trade and Industry and other government offices, as well as the Japan Bioindustry Association and other private entities. Some 4,200 people attended BioSquare from Europe, North America and Asia and a total of about 3,500 business meetings were arranged within the two and a half days.

BioSquare has an efficient partnering system that allows conference participants to prearrange business meetings via its web site. AIST Innovations took part in the Japan booth (the first exhibition for Japan) organized by JETRO and presented an exhibition on biotechnology (including nanotechnology). AIST Innovations also arranged many

business meetings with various representatives, such as those from the Lyon Regional Cluster.

During the event, a number of bilateral talks were held, such as the Japan-EU Business Dialogue Round Table in Brussels, to facilitate dialogue between private and government organizations.

AIST continues to take advantage of the opportunities offered by such important international conferences and events, with a view to building personal connections, exchanging opinions, developing mutually beneficial partnerships, and putting its technological achievements on the global market.



AIST organizes the Computational Science Workshop 2005

The Computational Science Workshop (CSW) is an annual international gathering launched by AIST in 2000. This year's CSW was held in late March in the Network Meeting Room at AIST Tsukuba Headquarters and Information Technique Collaboration Research Center. This workshop, which was based on the theme of algorithm and software developments in nano-scale simulations, was attended by over 130 participants.

Lectures were given by seven speakers from abroad, including Prof. Priya Vashishta of the University of Southern California, a well-known expert in quantum computation, and another seven speakers from Japan, including non-Japanese researchers. In addition, as many as 30 people, including non-invitational participants from abroad, contributed to the poster presentations. Such participation

suggests that this workshop has become well established. Throughout this international gathering, AIST was given praise for its high-level research activities.



AIST participates in the WIPO Conference on Dispute Resolution in International Science and Technology Collaboration

In recent years, international cooperation in science and technology, such as that seen in the EU Framework Program, has become necessary and unavoidable. The drawback, however, is that international disputes over intellectual property rights are on the rise.

In response to this, the World Intellectual Property Organization (WIPO) Arbitration and Mediation Center organized a conference on Dispute Resolution in International Science and Technology Collaboration on April 25 and 26 at the WIPO Headquarters. WIPO is a Geneva-based United Nations agency which develops international rules to protect intellectual property rights and copyright. AIST sent participants from its International Affairs and Intellectual Property departments to the conference. The Deputy Director of the International Affairs Department Kunihiro Kitano participated as a panelist and explained the transformation of AIST from a national research institute to an independent administrative corporation. He also discussed AIST's partnerships with external institutions, which place special emphasis on technology transfer.



The conference had a number of sessions, including "Means of Structuring Collaboration," "Potential Areas of Dispute," and "Dispute Resolution Options." At each session, presentations by speakers were followed by questions and answers and the chairperson's summary.

Solutions to a dispute can include negotiation among the parties involved, mediation with the help of third parties, and arbitration or litigation. Yet the participants at the conference drew the rather sober conclusion that disputes can take myriad forms which defy standard solutions and must rather be settled on a case-by-case basis, relying on relationships of mutual trust and the help of experts. This conclusion highlighted the importance of securing experienced experts. In addition, many speakers and panelists were quick to point out that a key point in the dispute resolution process is in creating sound contracts from the outset. This conference made AIST reconsider the importance of creating clearly defined cooperation agreements with external institutions.

