

NSFC Delegation Visits Russia

A NSFC delegation led by Prof. Shen Wenqing, NSFC's Vice President, paid a scientific visit to Russia during June 8th through 13th, 2009, at the invitation of Prof. Vladislav Ya. Panchenko, President of the Russian Foundation for Basic Research (RFBR). During the visit to RFBR, the delegation was cordially received by Prof. Panchenko, Prof. Aleksei M. Zheltikov, RFBR's Vice President, and Dr. Alexander N. Sharov, Head of International Relations Department, RFBR.

Recalling the satisfying achievements in China-Russia bilateral cooperation during the past few years, both sides exchanged views and experience with respect to the management of science fund on the one hand, and explored new orientation of the future cooperation and related novel approaches on the other. In-depth discussion was also conducted concerning the renewing of the Memorandum of Understanding and its annex between NSFC and RFBR.

While in Russia, the delegation visited the Joint Institute for Nuclear Research and Ioffe Physico-Technical Institute, with a view to gaining a comprehensive understanding of the status quo of basic research in Russia by visiting related academic research labs.

The fruitful visit was assured by the unflinching support and coordination by the Chinese Embassy in Moscow, especially by Mr. Yu Minduo, Minister-Counselor for Science and Technology, and Mr. Lin Xi, First Secretary for Science and Technology. Members of the delegation include Prof. Ji Peiwen, Executive Director-General of the Department of Mathematical and Physical Sciences, Ms. Bai Ge, Deputy Director-General of the Bureau of International Cooperation, Dr. He Jie, Division Director of the Department of Information Sciences, and Wei Qin from the Bureau of International Cooperation.



NSFC delegation visits RFBR

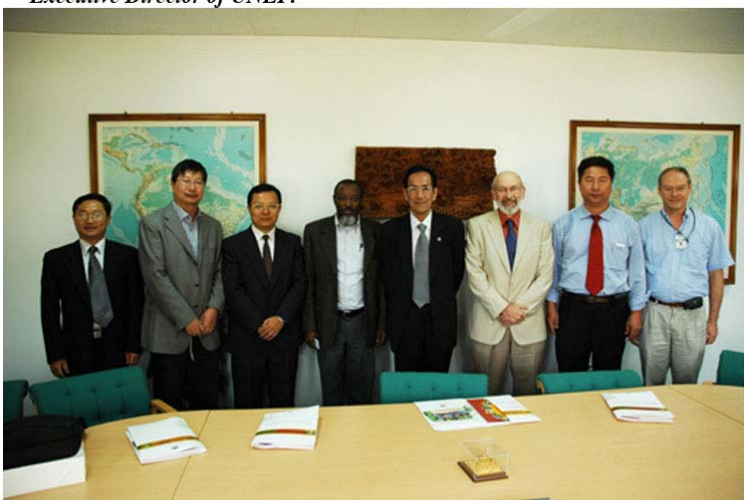


Prof. Shen Wenqing, Vice President of NSFC, in discussion with President of RFBR.

NSFC President Visits UNEP and ICRAF



Prof. Chen Yiyu, NSFC President, met with Mr. Achim Steiner, Executive Director of UNEP.



Prof. Chen Yiyu, NSFC President, visited ICRAF.

Invited by Mr. Achim Steiner, Executive Director of the United Nations Environment Programme (UNEP) and Dr. Dennis P. Garrity, Director General of World Agroforestry Center (ICRAF), a delegation led by Prof. Chen Yiyu, NSFC President, visited UNEP and ICRAF from September 4 to 8, 2009. Members of the delegation include Prof. Han Jianguo, Director General of the Bureau of International Cooperation, Prof. Feng Feng, Deputy Director General of the Department of Medicine Sciences, etc.

During the visit to UNEP, the delegation was cordially received by Mr. Steiner and his colleagues. He made a special arrangement for one-hour discussion with the delegation. Prof. Joe Alcame, Chief Scientist of UNEP, senior staff from the Division of Early Warning and Assessment (DEWA), Division of Environmental Policy Implementation (DEPI), and Regional Director for UNEP in Africa and scientists from African scientific community also met with the delegation, respectively. Their discussions enhanced the understanding between each other, and both sides agreed to seek approaches to collaboration in the fields of environment

and global climate changing.

During the visit to ICRAF, Prof. Chen met with Dr. Dennis P. Garrity, Dr. Tonny Simons and other scientists from ICRAF, and visited their laboratories. Both sides had fruitful discussions on the cooperation mode, research fields, etc, and decided to organize a number of bilateral workshops to initiate joint research in related research disciplines

NSFC President Visits South Africa



Invited by Dr. Albert S. van Jaarsveld, President and CEO of the National Research Foundation (NRF) of South Africa, Prof. Chen Yiyu paid an official visit to South Africa from September 8 to 12, 2009. The delegation was cordially received by Dr. Albert S. van Jaarsveld. Both sides introduced general information about the present situation of development, funding mechanism, strategic planning and international cooperation of their own organizations. As a concrete result of the visit, both sides decided to establish formal bilateral cooperative

relationship soon to support jointly the cooperation between scientists of the two countries in mutually interested strategic and priority areas.

The delegation also visited the University of Pretoria and the University of Cape Town.

** **

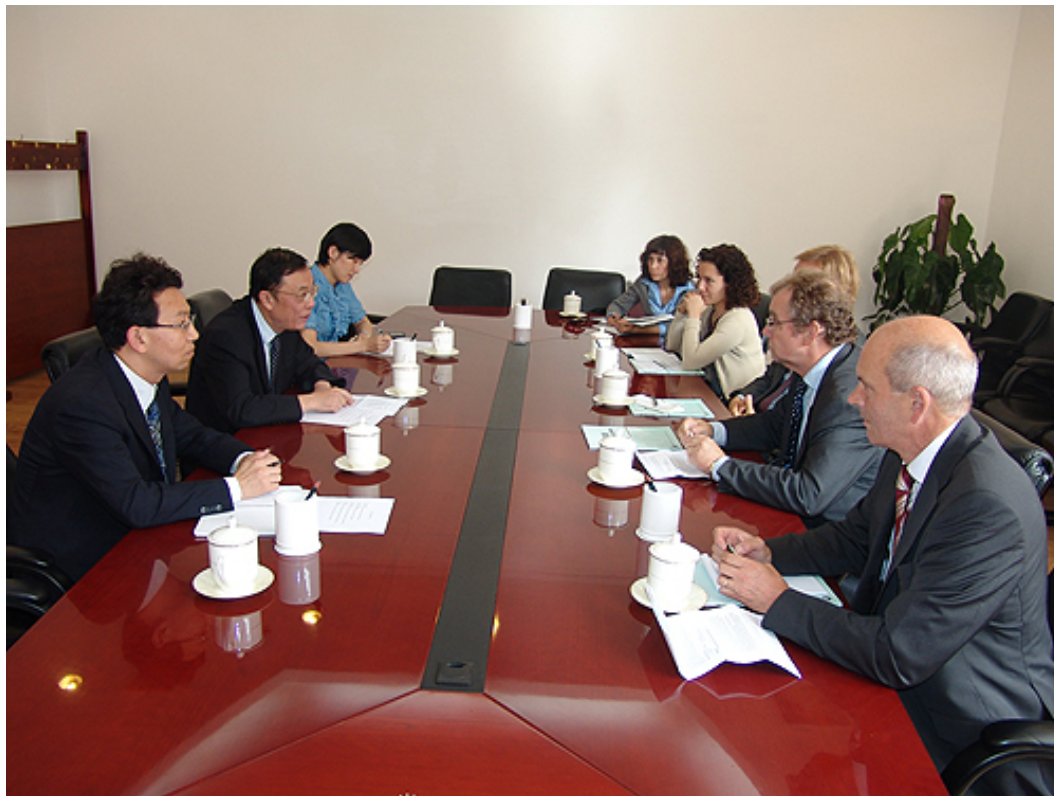
Evaluation results for applications to the National Natural Science Fund programs in 2009 released

---- 17,858 proposals approved, 72,964 declined

During the concentrated application acceptance period for 2009, NSFC received 93,893 proposals. According to stipulations of the “Regulations of National Natural Science Fund” and results of expert evaluation, NSFC decided to support 17,858 projects, and decline 72,964 proposals. The rest proposals are still in the review process.

Results of the evaluation have sent to relevant host institutions through letters. The notification of approved proposals, notifications of declined proposals and expert review recommendations will be sent to the applicant by e-mail. Managers of research in host institutions may find them on the internet at NSFC’s project management information system at <https://isis.nsfc.gov.cn>.

Prof. Shen Meets Guests from the Netherlands



On September 9, 2009, Prof. Shen Wenqing, NSFC Vice President, met with Prof. Jos Engelen, Chairman of the Netherlands Organization for Scientific Research (NWO), and Prof. Robbert Dijkgraaf, President of the Royal Netherlands Academy of Arts and Sciences (KNAW).

Prof. Shen introduced NSFC and its international cooperation to the guests, including the bilateral collaboration between NSFC and NWO. Prof. Engelen and Prof. Dijkgraaf also made introductions about their own organizations. During the meeting, both sides believed that they have many things in common such as the position in their respective countries, the funding schemes and the future development strategies. They also expressed satisfaction with the actual collaboration as well as their wishes for further development of bilateral relations in the future.

NSFC and NWO signed the Memorandum of Understanding (MoU) on Scientific Cooperation in 1992. They signed in August this year the addendum to MoU concerning the Joint Calls for Joint Research Projects and will start from next year to co-fund joint research projects in related scientific fields between the researchers from the two countries.

The 12th Joint Committee Meeting of the Sino-German Center Held in Germany



The 12th Meeting of the Joint Committee for the Sino-German Center for Research Promotion was held in Freiburg, Germany on September 23, 2009. The meeting approved the annual work report, financial report and audit report for 2008, discussed and passed the budget for 2010. Planned arrangements for the celebration of the 10th anniversary of the Center in 2010 were also discussed during the meeting.

Among the attendees were Prof. Shen Wenqing and Prof. Wang Jie, Vice Presidents of NSFC, Prof. Zhu Zuoyan and Prof. Xu Zhihong from the Chinese Academy of Sciences, Prof. Han Jianguo, Director General of NSFC's Bureau of International Cooperation, and DFG's Vice Presidents Prof. Dr. Ferdi Schueth and Prof. Dr. Dorothea Wagner, Secretary General Ms. Dorothee Dzwonnek, Deputy Secretary General Dr. Harald von Kalm and Head of International Affairs Division Dr. Joerg Schneider.

The Sino-German Center for Research Promotion was co-founded by NSFC and DFG in 2000. Its main task is to promote cooperation among scientists, especially young scientists, of both countries in natural sciences through support for bilateral workshops, joint research projects, cooperation groups, personnel exchanges, publications, etc.

NSFC-CIHR Workshop on Health Sciences held in Beijing



Prof. Shen Yan, Vice President of NSFC, delivering a speech at the workshop.



The China-Canada Joint Health Research Program Scientific Workshop in Progress.

On Sept. 27-28, 2009, the China-Canada Joint Health Research Program Scientific Workshop presided by NSFC's Vice President Shen Yan and President Alain Beaudet, CIHR was held in Beijing. The China-Canada Joint Health Research Program was set up by NSFC and CIHR and 53 joint projects have been supported so far. In order to understand better the progress of the projects jointly funded and enhance the exchanges among collaborators, PIs of the first round granted projects from both sides as well as their trainees were invited to participate in the workshop. Cooperative research results were displayed through presentations, discussions and poster sessions during the workshop, with collaborators enhancing their mutual understanding and communication. Both CIHR and NSFC will continue to keep a close eye on the granted programs and to strengthen further the support for substantial cooperation in the coming years.

President Chen Yiyu Meets With Dr. Alain Beaudet

On Sept. 28th, 2009, NSFC President Chen Yiyu met with Dr. Alain Beaudet, President of the Canadian Institutes of Health Research (CIHR). The purpose of Dr. Alain Beaudet's visit to China is to participate in the China-Canada Joint Health Research Program's Joint Selection Committee Meeting, Planning Meeting, and the scientific workshop, which are all jointly organized by CIHR and NSFC. Both Prof. Chen and Dr. Beaudet expressed their satisfaction with the NSFC-CIHR collaboration and the China-Canada Joint Health Research Program in the past few years, and exchanged views on how to further extend the research fields and enhance the level of future bilateral operation. Both sides expressed that the collaboration in frontier fields of common interests will be encouraged and supported in the future. They all agreed to renew the MoU between CIHR and NSFC signed in 2010.



Prof. Chen Yiyu, President of NSFC, met with Dr. Alain Beaudet



Prof. Chen Yiyu, President of NSFC, met with CIHR visitors

NFSC-FRSQ Joint Workshop on Genomics Held in Beijing



Prof. Shen Yan, Vice President of NSFC, NSFC staff and President and Vice President of FRSQ of Canada delivered a speech at the workshop

On Oct.12-16, 2009, NFSC-FRSQ Joint Workshop on Genomics and Proteomics was held in Beijing. NSFC Vice President Shen Yan delivered a speech at the workshop. A 14-person Canadian delegation led by FRSQ's President Yves Joannette and Vice President Howard Bergman, and 11 Chinese scientists participated in the workshop. Mr. Joannette and Mr. Bergman paid a visit to NSFC after the meeting and were received by Prof. Feng Feng, Deputy Director-General of the Department of Health Sciences. Both sides exchanged views on future cooperation, and expressed wishes to co-fund joint research projects, scientific workshops and exchange activities by scientists from both countries.



Group photo of NSFC's participants to the workshop and some foreign participants

President Chen Meets with Dr. Fidel Castro Diaz-Balart



NSFC President Chen Yiyu and Vice President Shen Wenqing cordially met with the Cuban delegation led by Dr. Fidel Castro Diaz-Balart, scientific advisor to the State Council of Cuba on Oct. 13th, 2009. President Chen pointed out that Cuba and China have maintained sound and brotherly relationship and it is a common wish to strengthen the scientific and technological cooperation between the two countries. Dr. Fidel Castro Diaz-Balart expressed his willingness to strengthen the exchanges and cooperation in the fields of nano-science and biotechnology. Mr. Hector Conde Almeida, first secretary of the Embassy of Cuba, and NSFC officials including Dr. Meng Xianping, Director-General of the Bureau of Planning, Ms. Bai Ge, Deputy Director-General of the Bureau of International Cooperation, and Ms. Chen Huai, Division Director of the Bureau of International Cooperation, attended the meeting.

During his stay in China, Dr. Fidel Castro Diaz-Balart also visited MOST, CAS and other organizations.

NSFC Vice President Attends the 13th U.S.-China Joint Commission Meeting on Science and Technology Cooperation



On October 15, Prof. Shen Wenqing, President of NSFC, delivering a speech meeting

A NSFC delegation led by Vice President, Prof. Shen Wenqing attended the 13th U.S.-China Joint Commission Meeting on Science and Technology Cooperation (JCM) from Oct. 14th to 19th, 2009. During the JCM, Prof. Shen delivered a speech entitled New Progress in the Bilateral Cooperation between NSF and NSFC under the Framework of the Protocol on Basic Research, introducing the latest advancement and achievements obtained in the cooperation between the U.S. National Science Foundation (NSF) and the National Natural Science Foundation of China (NSFC), and proposing several suggestions on the future bilateral substantial collaboration between the U.S. and China in basic sciences.

Minister Wan Gang of the Ministry of Science and Technology of China and Mr. John Holdren, Assistant to the President for Science and Technology and Director of the White House Office of Science and Technology Policy, co-chaired the meeting, during which such topics as scientific and



Prof. Shen Wenqing, Vice President of NSFC, signing the Protocol on earthquake Research between China and USA

technological R&D investment, mechanisms in support of funding collaborative biomedical research, agriculture, energy and climate change, clean energy technologies, R&D in higher education, basic research and S&T innovation capacity building, ocean resource conservation and utilization, nuclear safety, measurement science and technology, biodiversity and bioinformatics, and so on were thoroughly addressed.

Participants of the 13th JCM came from the Ministry of Science and Technology, Ministry of Health, Ministry of Education, Chinese Academy of Sciences, State Oceanic Administration, China Earthquake Administration, General Administration of Quality Supervision, Inspection and Quarantine, China Meteorological Administration, NSFC, etc. on China's side, and the White House Office of Management and Budget, National Institutes of Health, NSF, Department of Agriculture, Department of Energy, National Academy of Sciences, National Oceanic and Atmospheric Administration, Nuclear Regulatory Commission, U.S. Geological Survey, National Institute of Standards and Technology, Smithsonian Institution, etc. on the U.S. side.

During the JCM, Prof. Shen held cordial talks and exchanged views with Dr. Arden Bement, Director of NSF in respect of recent achievement gained and the next-step bilateral collaboration between the two funding agencies.

NSFC delegates include Ms. Bai Ge, Deputy Director-General of the Bureau of International Cooperation.

*** *** *** *** *** *** *** *** *** ***

DFG Secretary General Visits NSFC

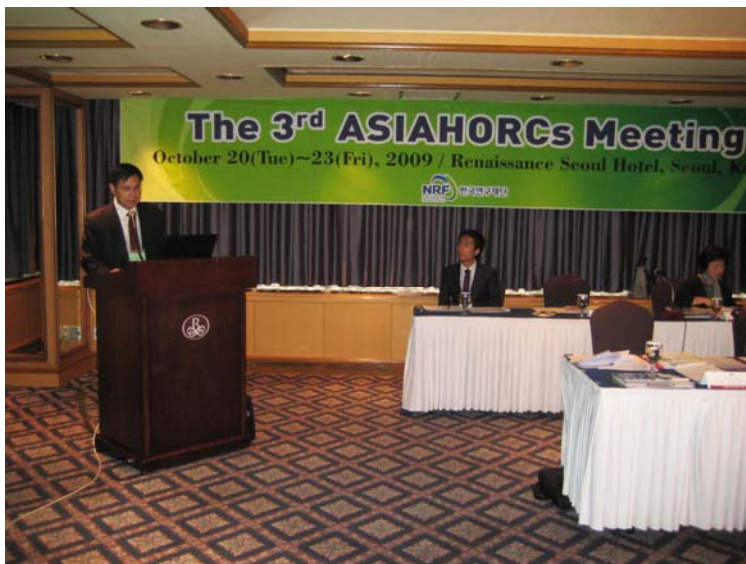


At the invitation of NSFC, a delegation headed by DFG Secretary-General Dr. Dorothee Dzwonnek visited NSFC and gave presentations to NSFC staff. Prof. Shen Wenqing met with the delegation and presided over the meeting with around 80 attendees from NSFC scientific departments and bureaus.

In their presentations, Dr. Dzwonnek and her colleagues introduced DFG's latest development and relevant thoughts ranging from continuation of the excellent initiative, flexibility and transparency for applicants, review process and modularization, to German Houses of Science and Innovation abroad, DFG and European Research Council and the European Framework 7 Program, etc.

Members of the DFG delegation included Prof. Elmar Weiler, President of Ruhr-University, Bochum, Dr. Robert Paul Königs, Head of Department I (Scientific Affairs), Dr. Klaus Wehrberger, Head of Research Centers Division, Dr. Annette Schmidtman, Head of Research Careers Division, Dr. Ingrid Krüßmann, Director of East Asia Section, and Ms. Ute Schmidt, Director of the Executive Office. During their stay in China, the delegation also visited the Ministry of Education, Chinese Academy of Social Sciences and Tsinghua University.

NSFC Vice President Attended the 3rd ASIAHORCs Meeting



The 3rd meeting of the Asian Heads of Research Council was held from October 20 to 23, 2009 in Seoul, Korea. At the invitation of the National Research Foundation of Korea (NRF), Prof He Minghong, Vice President of NSFC and Prof. Chang Qing, Deputy Director General of the Bureau of International Cooperation attended the meeting.

Representatives from eight member countries of the ASIAHORCs attended the meeting, including the President of Japan Society for the Promotion of Science (JSPS), President of the National Research

Foundation of Korea (NRF), vice Chairman of Indonesian Institute of Sciences (LIPI), Deputy Vice-Chancellors' Council of University Sains Malaysia (USM), Assistant Secretary of the Department of Science and Technology (DOST), Acting Secretary General of the National Research Council of Thailand (NRCT) and Director General of the International Cooperation of Vietnamese Academy of Science and Technology (VAST).

The theme of the meeting focuses on human resources development. All representatives gave their presentations and shared information and views on the current situations of human resources development and higher education in their respective countries. Prof. He delivered his speech entitled “NSFC Strategy for Identifying and Foresting Research Talent”.

A keynote speech entitled “New Directions for Higher Education in the 21st Century” was given by Dr. Young-Gil Kim, President of Handong Global University, Korea.

The draft visions and logo designs of the ASIAHORCs presented by NRF based on the proposals from all member states, as well as the membership, the venue and date of the next meeting were discussed and voted. During the meeting, JSPS presented its report on the 1st ASIAHORCs joint symposium held in 2009. It was agreed that the 4th ASIAHORCs meeting will be held in November, 2010 in Malaysia.

NSFC Vice President Visits Cuba and Canada



On October 25, Vice President Sun Jianguang met with Minister Jose M. Miyar Barrueco and Vice Minister Fernando Gonzalez of the Cuban Ministry of Science, Technology and Environment during his visit to Cuba.

The NSFC delegation led by Vice President Sun Jianguang paid a visit to Cuba and Canada from October 25th to November 2nd, 2009 at the invitation of the Cuban Ministry of Science, Technology and Environment and Ryerson University of Canada. Delegates included Han Yu, Director-General of the Bureau of Policy, Bai Ge, Deputy Director-General of the Bureau of International Cooperation, and Zhang Zhaotian, Deputy Director-General of the Department of Information Sciences.

During the visit to Cuba, the delegation was received by Minister Jose M. Miyar Barrueco and Vice Minister Fernando Gonzalez of the Cuban Ministry of Science, Technology and Environment. Better mutual understanding was achieved and common interests were expressed from both sides on future bilateral cooperation in the fields of biology and nanotechnology, through talks between the delegation and scientists from research institutions in Cuba.

While in Canada, the delegation visited Ryerson University and University of Toronto, with a view of understanding the latest progress and trend of development in the field of information sciences in Canada.

NSFC Vice President Attends Second China-Thailand Joint Workshop



NSFC Vice President Prof. Shen Yan attended the Second China-Thailand Joint Workshop on Natural Products and Drug Discovery held in Thailand between November 25th and 29th, 2009. Participants to the workshop include 22 Chinese scientists from Shanghai Institute of Organic Chemistry, Shanghai Institute of Materia Medica and Chengdu Institute of Biology of the Chinese Academy of

Sciences (CAS), Peking University, Tsinghua University, Nanjing University, Fudan University, Nankai University, Yunnan University, Xiamen University and Lanzhou University on the one hand, and 25 Thailand's scientists from 9 universities and institutes such as Prince of Songkla University Ramkhamhaeng University, Chulalongkorn University, Naresuan University, Mahidol University, Chulabhorn Research Institute, Khon Kaen University, Mae Fah Luang University, etc. on the other. On issues of natural products and drug research, 30 participants from both sides delivered presentations of their research during the workshop and thorough discussions on future bilateral collaboration were held. The joint workshop was cosponsored by the National Natural Science Foundation of China (NSFC) and Thailand Research Foundation (TRF). It was agreed during the workshop that the third China-Thailand Joint Workshop on Natural Products and Drug Discovery will be held in China in 2010.

During the visit to Thailand, NSFC delegation was cordially received by NRCT's President and the Acting Secretary-General of the National Research Council of Thailand (NRCT).

The First China-Thailand Joint Workshop on Natural Products and Drug Discovery was held in Chengdu, China in 2008. After the first joint workshop, a two-year cooperative program was launched between Chengdu Institute of Biology of CAS, Nanjing University, and Shanghai Institute of Materia Medica of CAS from China and Chulalongkorn University, Prince of Songkla University, Kasetsart University, and Eamkhamhang University from Thailand, as a result of the joint efforts by NSFC and TRF.

Top Ten Events in China's Basic Research in 2009 Unveiled

The annual top ten events in China's basic research for the year 2009 were unveiled on January 13th, 2010.

With a view to highlighting the news-oriented feature, the time span of the news reports recommended for the competition was redefined as January 1st to November 30th, 2009, based on the experience gained in previous years. The selection was organized by the Basic Research Service Center, Ministry of Science and Technology.

In accordance with the Interim Selection Provisions for Top Ten News on Basic Research in China, the emphasis of the selection activities was focused on such parameters as novelty, originality and social impact. The news sources for the selection were recommended by journals like Science and Technology Review, Science Foundation in China, Bulletin of the Chinese Academy of Sciences, and China Basic Research.

After the preliminary evaluation, 30 candidates were selected from the 184 recommended news reports. Then the 30 news reports were sent to Members of the Chinese Academy of Sciences and Chinese Academy of Engineering, experts of the "973" Program Advisory Group and Consultation Group, chief scientists of the "973" Program, directors of the State Key Laboratories and other experts for rating by means of anonymous voting.

According to voting results, the selected top ten events on basic research in China for the year 2009 was listed as follows:

Beijing Electron Positron Collider (BEPC) Major Renovation Project Passes State Acceptance Inspection

Identification of Carbon Balance in China's Terrestrial Ecosystem

Unveiling the Type A1 Brachydaetyly Pathogenesis

β -Inhibitory Factor -2 Complex Signaling Defect Found to Lead to Insulin Resistance

Experiments Confirm Developmental Totipotency of Induced Pluripotent Stem Cells

Metal Sodium Found to Change into Transparent Insulator Under High Pressure Conditions

Formation Mechanism of the Extreme Intensity of Nano-Twin Copper Clarified

Key Progress Obtained in the Research on Superconducting Mechanisms and Properties of High-temperature Copper-oxide Superconductors

Super-hybrid Rice Heterosis Related Potential Functional Genes Identified

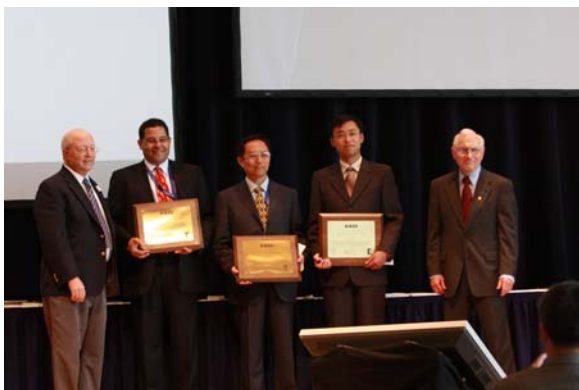
Some Key Evidences of the Origin of Birds Discovered

On the whole, the selected top ten events exhibited the following 6 characteristics:

Firstly, sustained increase in China's original innovation capacity becomes more evident. For instance, Chinese scientists have made outstanding contributions to high-temperature superconductor research in 2008. The important result of an iron-based superconductors research selected as one of the top ten events in basic research in China for the year 2008 was also listed by Science as one of the top ten S&T progresses in 2008. Another result in high-temperature copper-oxide superconductor research was selected again in 2009, which showed that after a long-term accumulation, a solid foundation and strong potential to demonstrate continuous innovation capability has been built up in high-temperature superconductivity research in China.

Secondly, mass breakthroughs continue to emerge. Though medical science has been a weak area in China, it gained rapid development momentum in recent years, with significant results of international influence emerging one after another. Three of the top ten events in 2009 came from medical research, showing that on the basis of accumulation over the years, mass breakthroughs in China's medical research were gaining momentum. Such trends are often indicative of significant revolutionary breakthroughs. (Continued on Page 49)

NSFC-RGC Funded Research Won IEEE Marconi Prize Paper Award



Supported by the National Natural Science Fund (NSFC) Project Theoretical Designing of Multi-Layer Cooperative Wireless Networks (Award No.: 60472027) and the NSFC-RGC (Research Grants Council of Hong Kong) joint research project Cooperation and Cross-layer Design in Cognitive Radio Systems (Award No.: 60731160013), the research findings obtained by Dr. Chen Wei and Prof. Cao Zhigang of Tsinghua University, Prof. Ben Letaief Khaled of Hong Kong University of Science and Technology, and Dr. Dai Lin of City University

of Hong Kong secured the 2009 IEEE Marconi Prize Paper Award in Wireless Communications and the 2008 Best Paper Prize by the IEEE Transactions on Wireless Communications. It is the first time that Chinese researchers have won the IEEE Marconi Prize Paper Award since its establishment in 2002. The 2007 and 2008 IEEE Marconi Prize Paper Awards were granted to scientists from Princeton University and Massachusetts Institute of Technology, respectively.

The IEEE Transactions on Wireless Communications, co-sponsored by the IEEE Communications Society and IEEE Signal Processing Society, is the only IEEE's academic journal that exclusively carries wireless communications research articles. Its average SCI Impact Factor value during the past 5 years scored 3.324, showing the fastest growth of SCI IF in the field of wireless communications. As one of the most prestigious academic awards in the field of wireless communications, the IEEE Marconi Prize Paper Award is granted on the basis of the multi-round evaluations jointly organized by the IEEE Communications Society and IEEE Signal Processing Society. One award is granted annually to an original paper in the field of Wireless Communications that features originality, utility and timeliness. Taking into account of the total number of articles published by the IEEE Transactions on Wireless Communications, the selection ratio of the IEEE Marconi Prize Paper Award is around 1/1000.

A research article entitled "A Unified Cross-Layer Framework for Resource Allocation in Cooperative Networks" by Dr. Chen Wei, Dr. Dai Lin, Prof. Ben Letaief Khaled and Prof. Cao Zhigang was published by the IEEE Transactions on Wireless Communications in August 2008 (2008, vol. 7, no. 8, pp. 3000-3012). The research team proposed in the article a unified theoretical framework that ensures the fairness and effectiveness of cooperative communications. Greatly enhancing the reliability of communications by adopting node cooperation in transmitting signals, cooperative communication is regarded as a key technique in the next generation of communications system. The proposed theoretical framework can be applied to various communication algorithms and protocols, bringing about simpler and more feasible cooperative transmission modes for future mobile communication. A protocol based on the philosophy of "More pay for more work" was proposed in the article, enabling independent coordination between all types of wireless equipment such as cell phones, PDA, laptops, wireless sensors and other self-organized-based devices. Accordingly, the communication interruption rate due to poor wireless signal will be decreased at least by a factor of 10. Wireless internet access and telephone communication will be guaranteed for people in regions with poor base station signal coverage. The research findings are also expected to lower power consumption so as to prolong the standby time of cell phones by 3 to 4 times.