The fostering of collaborative efforts serves to promote stronger interest and core expertise amongst multi-disciplinary researchers working on various strategic research areas. In this vibrant research environment, NTU creates extensive network of alliances to complement our very own international repute researchers. We have strong relationships with government agencies, world leading universities and renowned institutes as well as hospitals and industries.
NTU Partners Europe’s Largest Research Organization

The Centre National de la Recherche Scientifique (CNRS), the French National Research Centre for Scientific Research, has entered into a strategic partnership with NTU to collaborate on scientific programmes, joint projects and other research activities. The landmark agreement is the first between the two organizations. The partnership will pave the way for NTU to collaborate with the vast network laboratories under CNRS as well as its industrial partners, both within France and internationally, on research and industry-linked activities.

Collaboration between NIE and McGill University

A three-year Memorandum of Understanding (MOU) with McGill University provides a framework for National Institute of Education (NIE) to further develop areas of mutual interest with the Canadian varsity. One possibility is the exchange of academic staff where expertise can be tapped to teach relevant postgraduate programme modules in the respective institutions. This MOU, endorsed on 21 April 2005, seeks to synergistically enhance the professional and academic development of NIE and McGill University. This collaboration is yet another illustration of the Institute’s commitment to pave the way for further exchanges of intellectual knowledge between NIE and its overseas counterparts.
SGH-NTU Robot Improves Diagnostic and Treatment of Prostate Cancer

Jointly led by Dr Christopher Cheng, Head of Department of Urology, Singapore General Hospital (SGH) and Assoc Prof Ng Wan Sing from School of Mechanical and Aerospace Engineering (MAE), NTU, SGH and NTU have developed a Prostate Robotic System that will improve the diagnosis and treatment of prostrate cancer, the fifth most common cancer found in Singaporean men. The system is a robotic biopsy and potential radioactive seed treatment delivery system. The research team started developing this system in mid-2001, leveraging on SGH’s clinical knowledge of the disease and NTU’s engineering expertise in robotics technology. Meanwhile, the team has embarked on further enhancement on the Robotic System and has planned to incorporate a new method of guidance for even more accurate biopsies.

R&D in Assistive Technology to Help the Physical Disabled

NTU and The Society for the Physically Disabled (SPD) signed a Memorandum of Understanding (MOU) on 13th June 2005 to pursue and promote research and development in Assistive Technology (AT). Under this MOU, NTU’s Biomedical Engineering Research centre (BMERC) will collaborate with SPD’s Specialised Assistive Technology Centre (ATC) and Community Research Network (CRN), to jointly develop relevant and affordable assistive technology system, helping the physically disabled to enhance their independence.
MSE-NHC Research Partnership in Cardiovascular Technology

The School of Materials Science Engineering (MSE), NTU, and the National Heart Centre (NHC) signed a memorandum of understanding on 19th September 2005 to further research the development in cardiovascular technology, with the goal of bringing such research to successful commercialization. Under the partnership, MSE will develop biomedical technology and its related devices, on which NHC will then conduct clinical trials.

Research Collaboration in DNA Analysis with Defense Medical and Environmental Research Institute

Funded by A*STAR/BMRC, a team led by Assoc Prof Thomas Gong in the BioMEMS Laboratory, School of Mechanical and Aerospace Engineering (MAE), NTU is in collaboration with the Defense Medical and Environmental Research Institute (DMERI), Singapore in developing a biochip platform technology for DNA analysis for applications in molecular diagnostics of diseases. This is to meet the current challenges in molecular diagnostics including the high consumption of reagent and the lack of high throughput diagnostics capability. The molecular biology chemistries used on the biochip are the polymer chain reaction (PCR), which is routinely used in molecular diagnosis, and strand displacement amplification (SDA). To substantially reduce the reagent consumption while able to integrate the multiple DNA analysis steps and increase its throughput, a dual-fluid microfluidics platform technology to microfluidically generate a large array of liquid phase reaction microwells was proposed and developed. This biochip together with an in-house whole-chip fluorescence imaging system can be used to detect real-time DNA amplification.
Hydroxyapatite (HA) coating is usually prepared on the surface of biomedical metal to provide suitable biocompatibility and bioactivity for the biomedical implants. However, its long-term stability is a problem due to the relative large dissolution. A feasible approach is to incorporate fluorine into its structure to reduce the solubility, leading to both early bone-bonding and long-term stability properties. A research team led by Assoc Prof Sam Zhang, School of Mechanical and Aerospace Engineering (MAE), together with Zhejiang University, China and the Singapore Institute of Manufacturing Technology had adopted a so-gel dip-coating method to prepare such fluoridated hydroxyapatite (FHA) coatings. The results saw improvements in three aspects:

1. decreased coatings’ dissolution, while the apatite deposition ability improves when the F content is appropriate,
2. increase cell attachment when the coating contains proper F content, and
3. higher bonding strength of the coating

Collaborative Agreement between MSE and Merlin MD

The School of Materials Engineering (MSE), NTU, has signed a collaborative agreement with Merlin MD (a biomedical company) to develop a drug-eluting stent. The project, led by Prof Freddy Boey, Dean of MSE and Assoc Prof Subbu Venkatraman, Vice-Dean (Research) of MSE, is supported by Economic Development Board (EDB). It combines the School’s strong capability in biodegradable drug-eluting stent technology with the Johns Hopkins University’s patented anti-restenosis drug. The drug-eluting stent will be commercialised by Merlin MD in Singapore.

Present and Future Plans in Traditional Chinese Medicine

The School of Biological Sciences (SBS) recognizes the strategic growth of Traditional Chinese Medicine (TCM) education and research. A 5-year double-degree programme with the Beijing University of Chinese Medicine (BUCM) was started, in which for the first three years, students will obtain their B.Sc (Hons) in Biomedical Sciences at Nanyang Technological University (NTU). For the 4th and 5th (final) year, they will proceed to BUCM to obtain their B.Med (major in Chinese Medicine). In an attempt to provide facilities for training, support translational research and provide TCM consultations and therapeutic treatments, there are plans to establish a TCM clinic within the school premises. Efforts to offer postgraduate training leading to the award of M.Sc and Ph.D in TCM can be seen with the active recruitment of faculty with strong academic and clinical track records in TCM.
MOU Signing between NTU and Hanoi Water Resources University (HWRU), Vietnam

A Memorandum of Understanding (MOU) between HWRU and NTU was signed on 31st May 2005 at Nanyang Executive Centre. Representing HWRU for the signing was Assoc Prof Pham Ngoc Quy, Vice Rector, HWRU and for NTU, Prof Cheong Hee Kiat, former DP and Dean of School of Civil and Environmental Engineering (CEE). The MOU promotes joint research and development in water resources and environment sector between HWRU and CEE. Some areas identified for possible research collaborations include River Engineering, Coastal Engineering, Environmental Engineering and Flood Forecasting and Flood warning.

CEE-Keppel Joint R&D in Environmental Technologies

On 8th September 2005, the School of Civil and Environmental Engineering (CEE) and Keppel Integrated Engineering (KIE) signed an MOU to embark on joint R&D in environmental technologies, focusing on waste treatment processes. Under the MOU, faculty and students from CEE and in particular CEE’s Singapore Stanford Partnership (SSP) programme will work together with KIE engineers on applied environmental technology projects. For a start, the team will research issues in waste energy utilisation that may improve the efficiency of waste-to-energy in incineration plants.
Direct methanol fuel cells (DMFC) are sought-after alternatives to hydrogen fuel cells due to their higher energy density, and the ability to function without an extra fuel processor. However, the membrane used can sometimes result in high methanol permeability, which will cause poisoning of the electrocatalyst, low methanol permeability. Thus, a membrane that allows low methanol permeability while retaining the high proton conductivity necessary for keeping the overall rate of fuel cell performance is much desired. This challenge was undertaken by a research group led by Assoc Prof Jiang San Ping, School of Mechanical and Aerospace Engineering (MAE), NTU in collaboration with Prof Pan Mu from the Wuhan University of Technology in China. They had successfully synthesized the positively charged poly(diallyldimethylammonium chloride) (PDDA)-Pt nanoparticles and demonstrated the ability of the self-assembled membrane of not reducing the proton conductivity or modifying the microstructure while achieving a significant reduction in methanol crossover thus increasing overall fuel cell performance.

Development of Direct Methanol Fuel Cell by a Novel Self-Assembly of PDDA-Pt Nanoparticles

High resolution TEM image of the positively charged PDDA-Pt nanoparticles.
The Maritime and Port Authority of Singapore (MPA) and the Asian Business Case Centre of the Nanyang Business School (NBS), NTU, have embarked on a joint project to write a series of case studies on the maritime sector in Singapore. The objective of this project is to build a collection of case studies that will expand our understanding and scholarship of this important sector of Singapore’s economy, and which will be used as teaching materials in various courses at the University, such as Maritime Studies.

Strengthening Collaborations between NTU and MPA in Maritime R&D

On 28 July 2005, BG Tay Lim Heng, Chief Executive of the Maritime and Port Authority of Singapore (MPA) and Prof Tony Woo, Vice President (Research), NTU, signed an extension of Memorandum of Understanding (MOU) on Co-operation in Maritime Research and Development, which will see the launch of a Maritime Technology Professorship (MTP) in NTU. The MTP will be used to support maritime R&D through the participation of prominent visiting professors or renowned industry experts. As such, NTU will continue to develop strong links with the maritime industry, develop leading edge research and development (R&D) and also engage industry partners to co-fund maritime (R&D) projects in Singapore.

From Left: BG Tay Him Heng, CE of MPA and Prof Tony Woo, VP (Research), NTU

Collaboration on Container Terminal Gate Simulation

The School of Computer Engineering (SCE) has entered into research collaboration on container terminal simulation with the following partners:

- Maritime Port Authority (MPA) and Jurong Port Pte Ltd (JPPL) in April 2005 on the development of a container terminal gate simulation model for capacity estimation and enhancement of terminal gate process.
- MPA and Surbana in June 2005 on the development of a container terminal capacity simulation model for the design of a large scale container port containing multiple terminals.

The principal investigators for the projects are Assoc Prof Hsu Wen Jing and Assoc Prof Huang Shell Ying from SCE, while the co-PIs are Mr. Toh Ah Cheong, Director (Technology) from MPA, Mr. Fong Yue Kwong, President from JPPL and Mr. Chua Keng Chay, Executive Vice President (Reclamation and Infrastructure Division) from Surbana. The projects will be carried out at the Centre for Advanced Information Systems.

The MPA-ABCC Case Study Project

The Maritime and Port Authority of Singapore (MPA) and the Asian Business Case Centre of the Nanyang Business School (NBS), NTU, have embarked on a joint project to write a series of case studies on the maritime sector in Singapore. The objective of this project is to build a collection of case studies that will expand our understanding and scholarship of this important sector of Singapore’s economy, and which will be used as teaching materials in various courses at the University, such as Maritime Studies.
Philips has started an industry mentorship program with Nanyang Technological University (NTU). Vice-Dean (Research), Prof Alex Kot of School of Electrical and Electronic Engineering, NTU, is enthusiastic about the collaboration and strongly believes that projects selected under this program would be beneficial to the students. Fourteen final year students from NTU would research on the applications for near field communication technology for their final year projects, with guidance from NTU professors and Philips’ engineers.

Siemens Collaborates with NTU on Training and Research in Electronics Technology

Siemens Automation and Drives, Electronics Assembly Systems Division (A&D EA) will collaborate with NTU in advancing research and development (R&D) and providing specialist training in electronics and micro-production. Mr Hans-Dieter Bott, Managing Director, Siemens Pte Ltd jointly signed the memorandum of understanding with Prof Lim Mong King, Deputy President and Dean, College of Engineering on 20th October 2005. The agreement will pave the way for NTU and Siemens to collaborate on advanced research and development on surface-mount technology, as well as providing NTU’s students with internships and on-the-job training opportunities.
Joint Research Lab between NTU and Thales

The official opening of Thales@NTU – a joint research laboratory between NTU, Thales Technology Centre Singapore and Thales Research and Technology (France), was marked by MOU signing between Dr Su Guaning, President of NTU and Dominique Vernay, Vice President Research & Technology of the Thales Group on 21st February 2005. Thales@NTU, housed in NTU Research TechnoPlaza, is headed by Assoc Prof Tjin Swee Chuan of School of Electrical and Electronic Engineering (EEE) and Dr Jean Chazelas from Thales Research & Technology. The joint research lab will help NTU to expand its R & D efforts by developing dual-use technologies for both commercial and defence applications by focusing on three initial areas of research: photonics, III-V semiconductor materials and devices, and ultra-wideband (UWB) communication.

NTU-EDB Joint Industry Postgraduate (JIP) Program in IC Design

Several scholarships, jointly sponsored by Economic Development Board (EDB), NTU and industrial partners, are now available for potential candidates to pursue the Master of Engineering and the NTU-Technische Universitat Munchen (TUM) MSc Program in IC Design. Prof Do Manh Anh of School of Electrical and Electronic Engineering (EEE), NTU is the Program Director and some companies have already been invited to participate in this program.
British Telecom’s Collaboration with NTU

British Telecom (BT) had started a “Short Term Research Fellowship” program to promote interactions and collaborations between academia and BT. Recently, Xie Feng, a PhD student of Information and Communication Institute of Singapore of the School Electrical & Electronic Engineering has been selected by BT under this program to conduct a project entitled “Management Protocols for Supporting Multicast Applications in Wireless Networks” in London.

Research Collaboration between MSE and CEA-Saclay

Prof Denis Fichou, Directeur de Recherche CNRS / CEA-Saclay and Professor at Paris 6th University, has signed an agreement to become School of Materials Engineering’s (MSE’s) Visiting Professor for the next 3 years. He, being the Expert Panel member for A*STAR’s Thematic Strategic Research Program on “Polymer & Molecular Electronics & Devices”, will play an instrumental role in building MSE’s effort in this area of research.
DSTA Established Mimic Design Centre in NTU

In March 2005, the Defence Science and Technology Agency (DSTA) established the Monolithic Microwave Integrated Circuit Design Centre (MDC) in NTU. Initial development of this key technology had since started in the School of Electrical and Electronic Engineering (EEE) in the early 1990s with funding from several government agencies and organizations. Over the years, the capabilities have expanded to include areas in design, model library buildup, fabrication and testing. The setting up of MDC under the umbrella of Temasek Laboratories at NTU (TL@NTU) is a major milestone in the next phase of Monolithic Microwave Integrated Circuit (MMIC) development. It will focus on providing rapid prototyping, advanced R&D and manpower training services in related technologies.

NTU Supports Nation’s Drive towards Becoming Nano Hub

In its bid to support the Nation’s drive towards becoming a nano hub, the Nanofrontier Pte Ltd was launched on 13th May 2005 by Dr Balakrishnan. It will serve as a consultant and provider of nanotechnology equipment and facilities to industry. Headed by Assoc Prof Bryan Ngoi, School of Mechanical and Aerospace Engineering (MAE), NTU, Nanofrontier will be partnering two Japanese conglomerates, Mitutoyo Asia Pacific Pte Ltd (Singapore) and Sumitomo Corporation Pte Ltd in boosting nanotechnology research and development in Singapore and the region.

Coinciding with the launch of Nanofrontier Pte Ltd, a Memorandum of Agreement with Mitutuyo to jointly establish the NanoFrontier-Mitutoyo Nanometrology Centre was signed. It will undertake research and development projects in nanotechnology. As well as that, NanoFrontier had also signed a Memorandum of Understanding with Sumitomo Corporation to formally acknowledge their strategic alliance in the research and commercialization of innovative products using nanosciences and nanotechnology.

NTU-RJC Materials Engineering Collaborative Research Lab

Collaborative effort was made by School of Materials Engineering (MSE), Nanyang Technological University (NTU) and Raffles Junior College (RJC) to set up laboratory facilities and programme in materials science and engineering. This programme at RJC will involve interactive lectures and experiments to inculcate the students towards fundamental knowledge in Materials Science & Engineering, and the impacts on our everyday lives. Students will have hands-on experiment to understand the applications of the principles of material physics and chemistry in areas like nano-materials and smart materials.
Together with Singapore Technologies (ST) Kinetics Ltd, a research team led by Assoc Prof Nader Vahdati and Assoc Prof Yap Fook Fah, School of Mechanical and Aerospace Engineering (MAE) aims at developing a semi-active (consisting of a spring and a Magneto-Rheological (MR) fluid damper) or a fully active suspension system. This will allow military vehicles to travel faster on off highway roads, and thus more valuable for combat. To realize this end, a quarter car test rig (see Figure below) needs to be first designed, fabricated and then tested using the system. The current research focus is to develop the MR-damper design and damper control policy using the quarter car test rig, and later expand this technology to and implement it on the actual combat vehicle.
Development of Novel Anti Landmines Shoes

Landmines remain one of the most lethal battlefield threats to ground troops and civilians; many adults and children are still injured or killed by landmines long after wars are over. The annual casualties are between 10,000 and 26,000 people. The currently available landmine shoes comprise different designs: raised platform, thick sole, and air cushion. Yet, these designs are not really safe and bear the risk of injuries from broken bones to complete destruction of the shank. The newly developed anti-landmine shoe by Assoc Prof Franz Konstantin Fuss from the School of Chemical and Biomedical Engineering (SCBE) consists of a foot plate, preferably six support legs connected to the foot plate by a joint, metal detectors in each support leg, circuitry, and one actuator (solenoid) per leg, which can constrain or release the leg. In the case of metal detection, the leg is released and passively gives way to the trigger protruding out of the ground. Thus, the force applied to the trigger is basically zero, and the load is distributed among the remaining 5 legs. The release time of the leg is 30 ms in the first prototype.

NBS Expands Ties with SAFTI Military Institute (SAFTI MI)

BG Tan signed an MOU with Prof Hong Hai, Dean of the Nanyang Business School (NBS) at a ceremony held in SAFTI MI on 24th August 2005. This MOU signing strengthens the existing cooperation between SAFTI MI and the Nanyang Business School. It will allow the two institutions to identify and develop joint research projects on ethics, values, and other aspects of leadership development and education.
NIE & SAFTI MI Promote Instructional Excellence

National Institute of Education (NIE) and SAFTI Military Institute (SAFTI MI) representatives signed a Memorandum of Understanding (MOU) on 5 May 2005 to cooperate on research, development and promotion of instructional excellence. By combining NIE’s pedagogical research and learning sciences and SAFTI MI’s expertise in military leadership and organizational development, joint research projects relating to strategies on ethics and value education can be undertaken. Apart from that, there can also be plans to develop training programmes in military and national education.

Digital Media & Creative Technology

Singapore-US Collaboration to Develop Breakthrough Capabilities in Creative Technologies

Nanyang Technological University (NTU), comprising Temasek Laboratories, School of Art, Design and Media (ADM) and School of Computer Engineering (SCE)’s Game Lab, and the Defence Science & Technology Agency (DSTA) have teamed up with University of Southern California (USC) to push new frontiers in the development of creative technologies. This collaboration was marked by MOU signing between Dr Su Guaning, President of NTU, Mr Richard Lim, Chief Executive of DSTA and Mr Richard Lindheim, USC’s Director of ICT on 4th March 2005 at NTU. This is the first time in which collaboration linking local education and defence communities with the entertainment/gaming industries, military and academia in the United States of America (US) had taken place. Through this, new technologies in areas like animation, artificial intelligence, gaming, modeling and simulation, as well as developing exciting applications for security and defence can be developed.
SCE is Behind Vietnam’s First Virtual Reality Lab

Vietnam is getting its first virtual reality (VR) laboratory with the help of the School of Computer Engineering (SCE), NTU. Since January 2005, ten SCE professors and researchers have been working with the Vietnamese Academy of Science and Technology’s Institute of Information Technology (IOIT) to design and set up the key national laboratory.

The IOIT Virtual Reality Laboratory, which opened in April 2005, will be outfitted with VR technology and applications designed by the SCE team. These tools enable virtual reality to be harnessed in teaching and learning and experts will be sent to Vietnam to conduct training workshops and provide technical supports.

NTU to Partner the INRIA in Developing Cybercar

In April 2005, NTU was selected along with Shanghai Jiao Tong University (China), Sungkyunkwan University (Korea), and University of Tokyo (Japan) to partner the INRIA (France) on the EC-funded ICT project on French-Asian Cyber Transportation (FACT). NTU is represented by Assoc Prof Michel Pasquier for the Centre for Computational Intelligence (School of Computer Engineering, SCE) and Assoc Prof Wang Danwei for the Centre for Intelligent Machines (School of Electrical and Electronic Engineering, EEE). The partners will work together to develop the intelligent car of the future, the so-called Cybercar.

SCE-I2R Intelligent Media

School of Computer Engineering (SCE), NTU and A*STAR Institute for Infocomm Research (I2R) entered into a research collaboration in March 2005 to develop Intelligent Technologies for Media Fusion and Analysis (Intelligent Media). The project, which commenced in April 2005, will span a period of three years. The principal investigator (PI) for the project is Assoc Prof Tan Ah Hwee from SCE, while the co-PI is Dr Lonce Wyse from I2R. Being an inter-centre project, the research team includes staffs from the NTU’s Centre for Multimedia and Network Technology, Centre for Advanced Information Systems, and the Emerging Research Lab.

Joint NTU-ST Projects Focuses on AI-Based Simulation

An agreement was concluded in March 2005 with Singapore Technologies Dynamics to undertake research that focus on Artificial Intelligence (AI)-based simulation and exploring novel methods in machine learning. Headed by Assoc Prof Narendra Shivaji Chaudhari from the School of Computer Engineering, the eventual aim is to generate and deploy such a form of artificial intelligence in common combat or melee applications where users can be exposed to opponents/non-player entities that adaptively learn and thereby challenge their minds. This is realistic, robust, and efficient for both strategic and real-time applications.
NTU is planning to set a Confucius Institute, NTU (an intended joint venture with the China National Office for Teaching Chinese as a Foreign Language) in Singapore next year. It will be headed by Asst Prof Koh Hock Kiat, Director-Designate of Confucius Institute, NTU. The Institute aims to promote and develop Chinese language, culture, studies and business in Singapore and the region. Activities will be organized to get people to experience and appreciate Chinese art and culture, feel the charm of ancient China and admire the elegance of contemporary China.

On 20th July 2005, Dr Su Guaning, President of NTU and Dr Zhan Tao, President of Shandong University signed an agreement to promote academic, scientific, and cultural collaboration between the two universities. Mr Chan Soo Sen, Minister of State was also present at the signing ceremony.

南洋理工大学发挥多元文化优势为新加坡引进世界一流汉语学院

南洋理工大学孔子学院，是中国国家对外汉语教学领导小组办公室（简称“汉办”）与南洋理工大学合作建设的一所高层次的汉语学院。透过南洋理工大学孔子学院，南大计划与中方联手促进汉语、中华文化、中国研究及商用中文在新加坡及本区域的整体发展。南洋理工大学孔子学院在将发挥其中文化的学术精尖和威望，通过举办各类文化活动、学术交流和开办课程，在东南亚区域为社会提供权威的华语教学资源，并持续不断地总结和研究，对本地汉语教学发挥支持作用，为中华文化的优良体系提供健康且多元的养分。

南大与山东大学也于2005年7月20日在北京签署框架协议。有关协议由南洋理工大学校长徐冠林博士和山东大学校长展涛博士签署，新加坡教育部政务部长曾士生也出席签字仪式。为通过教学和研究促进学习和知识的传播，两校同意进行以下合作：

(Left to right): Prof Ning Jiming (Director, College of International Education from Shandong University), President Su Guaning, NTU, Dr Zhan Tao (President, Shandong University) and Asst Prof Koh Hock Kiat (Director-designated, Confucius Institute).
Designing a Children’s Portal with McGill University (Canada)

School of Communication and Information (SCI) carried out a joint research with McGill University of Canada to investigate if cultural differences exist among Canadian and Singaporean school children based on “Bonded Theory” when designing web portals. Profs Andrew Large and Jamshed Beheshti are the lead researchers from McGill while the NTU team consists of Asst Prof Theng Yin Leng, Prof Schubert Foo, Assoc Prof Abdus Chaudhry, and Asst Prof Dion Goh. Twelve design sessions were conducted with eight children design partners from Xingnan Primary School in Jurong as a pilot project. The larger project is expected to be funded by the Social Sciences and Humanities Research Council of Canada.
Collaboration with Asia Europe Foundation

Asst Prof Dion Goh, School of Communication and Information (SCI) has collaborated with the Asia-Europe Foundation to develop a cultural information portal for facilitating exchanges between individuals and organizations in the ASEM countries. The project, which began in early 2005, involved feasibility studies aimed at potential users as well as technical surveys of portal infrastructure. Asst Prof Dion Goh was also invited to present two talks on the state-of-the-art in portal software. Work is now underway to implement the portal.

Taxonomy Deployment Project between NTU and URA

School of Communication and Information (SCI) had concluded a taxonomy deployment project at the Urban Redevelopment Authority (URA) of Singapore. The Nanyang Technological University (NTU) Project Team (Assoc Prof Abdus Chaudhry, Assoc Prof Khoo Chris, Assoc Prof Majid Shaheen, and Lecturer Lee Chu Keong) will work with senior staff from URA to develop and implement a comprehensive taxonomy system for organizing knowledge resource in the Electronic Knowledge Repository & Information System – eKris. This project, a pioneering effort in Singapore, showcases taxonomy and metadata applications in supporting government
Cross-Cultural Communication and Design Research

Asst Prof Chen Hsueh-hua, School of Communication and Information (SCI) and Asst Prof Duh Been-Lirn, School of Mechanical and Aerospace Engineering (MAE) had collaborated a project entitled “Overcoming Communication Barriers in Collaborative Product Design Team”. Based on the theories of cross-cultural communication, team work, organizational management and through case studies, this project aims to increase productivity and identifies communication barriers during collaborative design process as well as effective strategies to manage those barriers. The output of this project has been included in conference proceedings in HCI International 2005 and 18th International Conference on Production Research.