

IEICE Global Plaza

—Monthly community plaza in English for students, faculties and engineers—

Essay

“i-CREATe”, Global Project under the Initiatives of Her Royal Highness Princess Maha Chakri Sirindhorn



Pairash Thajchayapong, Prof. Dr. Senior Advisor, National Science and Technology Development Agency (NSTDA), Thailand

“Going forward, recommendations for action at the local, national and international levels are needed. It is my hope that annual gathering of policy makers, experts and key stakeholders at i-CREATe will stimulate sharing of knowledge and experiences, as well as discussion and action that could mark a turning point for inclusion of people with disabilities in our society to become a Community of Caring Societies as stated in ASEAN Vision 2020.”

—From the Speech by Her Royal Highness Princess Maha Chakri Sirindhorn on the occasion of the international conference i-CREATe 2011 in Bangkok, Thailand, on July 22, 2011—

H.R.H.'s Initiatives towards a Full Participation of Persons With Disabilities

Her Royal Highness Princess Maha Chakri Sirindhorn (H.R.H.) believes there are a few big challenges to overcome before the benefits of assistive technologies can be realized by a large segment of persons with disabilities in the society as follows:

- To increase awareness and understanding of assistive technologies among key stakeholders, persons with disabilities, business and industry. Such understanding will have a significant impact on the availability, affordability and use of assistive technologies.
- To foster national and international collaborations and markets for assistive technology products and services. Such collaborations will accelerate the achievement of mass production of the future assistive technologies through cost reduction and affordability enhancement.
- To promote the principle of “Universal Design” or “Design for All” in the development of the future technologies, products, services, or systems.
- To do more on human resource development and capacity building of professionals who are involved in the development, distribution or delivery, and use of assistive technologies.
- To do more research to increase choices of available products and services.

International Convention on Rehabilitation Engineering and Assistive Technology (i-CREATe)

To achieve a full participation of persons with disabilities, H.R.H. initiates Thai-Singapore collaboration project on persons with disabilities. One of the projects is “i-CREATe” which aims to be a platform for assistive and rehabilitation technologies in ASEAN countries. The i-CREATe, initially started in 2007, has been jointly organized annually over the past seven years by National Electronics and Computer Technology Center (NECTEC)*¹ of Thailand and Singapore Therapeutic, Assistive and Rehabilitative Technologies (START) Centre*² of Singapore.

The objectives of i-CREATe are to provide a common platform for researchers/academics, practitioners, end-users/caregivers, industry players and policy makers to interact and share knowledge, information and experiences in assistive and rehabilitation technologies; to promote awareness, acceptance and adaptation of assistive and rehabilitation technologies in ASEAN; and to encourage and strengthen research, education and commercialization of assistive and rehabilitation technologies in ASEAN.

Target Audience

Target participants of i-CREATe are rehabilitation and education professionals working with or implementing use of assistive technology including suppliers, technologists, physical therapists,

occupational therapists, speech language pathologists, rehabilitation engineers, educators, end-users, caregivers, governmental officials, policy staffs, researchers, academicians and the others interested in assistive technology.

Program

i-CREATe has a comprehensive program, consisting of the following:

(1) Plenary forums

Discussion sessions to address major topics of interest, moderated by an experienced person and with a panel of experts to share their experiences and opinions.

(2) Paper presentations

Researchers, medical practitioners, and industry players present their papers on new findings or experiences, and the papers will be published in the conference proceedings and indexed in several major publication databases. Selected papers will be published in a Journal.

(3) Workshops

Sessions conducted by experts on various topics of interest, aimed at providing continual education and skill upgrading for professionals and introductory/elementary courses for novices and people from other disciplines.

(4) Student Design Challenge (SDC)

The competition encourages post-secondary school students to find creative and innovative solutions to improve the quality of living of the elderly and persons with disabilities. There are 2 categories in this challenge:

(4-1) Design Category

Students are expected to apply a user-centered design process to producing a concept that will make the life easier for its users. Their solution could use any type of technology and result in an improvement to the quality of life for its users or enhance the user experience of the solution.

(4-2) Technology Category

Student entries are expected to apply principles in engineering and information technology to designing and implementing assistive and rehabilitation technology solution to address the issues/problems faced by the elderly, persons with disabilities, their caregivers and clinicians.

Milestones of i-CREATe

With the collaboration of NECTEC and START Centre, i-CREATe was inaugurated in Singapore, in 2007. The past editions of the convention had been alternatively hosted in Bangkok and Singapore (Singapore in 2007, Bangkok in 2008, Singapore in 2009, Bangkok in 2011, Singapore in 2012), with the exception of the year 2010 where i-CREATe was held in Shanghai, People's Republic of China with new counterparts—Shanghai Jiao Tong University and University of Shanghai for Science and Technology. Furthermore, in 2013, it was extended to a substantive partnership among 6 organizations that was committed to work together in Republic of Korea. The i-CREATe has been evolved to have 250-300 active participations in average from more than 20 countries and territories every year.

Invitation to i-CREATe 2014

Let's join the 8th International Convention Rehabilitation Engineering and Assistive Technology (i-CREATe 2014). It will be held at Thailand Science Park Conventional Centre (TSP-CC) in Pathum Thani Province, Thailand on August 6-8, in 2014. The i-CREATe2014 will attract a crowd of close to 300 delegates during 3-day convention where the participants will be from a vast background which covers allied health professions, practitioners,



Fig. 1 H.R.H. and the author with i-CREATe2013 organizers and SDC students. H.R.H. (center), the author third to the left.



Fig. 2 H.R.H. talking to SDC students.



Fig. 3 Conference venue full of the participants.

non-governmental organizations and more.

Into the 8th year, *i-CREATE* continues as well, to provide a stage for technical exchanges and bring together advocates and professionals from across the countries to share ideas and best practices in the disabilities fields and exchange information on advanced technologies, equipment, techniques and materials applied in the field of Assistive and Rehabilitative Technology.

This convention will include a range of workshops on the types of assistive technologies available for use in education and employment. There will also be presentations by persons with disabilities using technologies in their daily lives, including education, training and employment.

One of the highlight in this convention is the 7th Student Design Challenge at *i-CREATE*. It is an annual student design competition that challenges undergraduates from all over the world to design creative and innovative assistive and rehabilitation technology projects that socially benefits and improves the quality living of the elderly and persons with disabilities

It is very honored to have the presence of H.R.H. Princess Maha Chakri Sirindhorn who will be gracing the opening of the convention for the 8th consecutive year. Should you have any inquiry, please visit <http://www.icreateasia.org/>. We are looking forward to meet you all in Bangkok Metropolitan (Pathum Thani) Thailand, for *i-CREATE* 2014.

Acknowledgement

The author thanks to Dr. Wei Tech Ang, Nanyang Technological University, Singapore, and all the committee members who have co-worked with me to organize the annual conferences of *i-CREATE*.

*NECTEC

A statutory Government organization under NSTDA, Ministry of Science and Technology. It undertakes, supports and promotes the development of electronic, computing, telecommunication and information technologies through R&D activities. It also disseminates and transfers such technologies for the socio-economic development of the country according to the National Economic and Social Development Plan.

*START Centre

It was established in 2006, as a service provider of technological aids that would enable people of all ages and disabilities to improve their quality of life. For Assistive, Rehabilitative & Therapeutic (ART) Technology applications and solution, START Centre covers the evaluation, custom design and installation of ART tools to assist people with disabilities toward their independence, education and vocational living goals.

Note by the Editor (Prof. Kenzo Takahashi)

The author received his BS deg. in Electrical and Electronics Eng., with the first class honor from University of London in 1969, and his PhD deg. in Computer and Electronics, from Cambridge University in 1974, in UK each. He joined King Mongkut's Institute of Technology Ladkrabang and served it as Rector from 1981 to 1987 and 1992 to 1998. He also served NECTEC as Director from 1992 to 1998, NSTDA as President from 1998 to 2004, and served Ministry of Science and Technology as the Permanent Secretary from 2002 to 2005, and has served NSTDA as Senior Advisor from 2005 to Present. Meanwhile, he contributed to the nation-wide construction of Internet since the beginning of 1990's and has served Internet Thailand Public Company as Chairman from 1995 to Present. He also has served many public companies as the VIP. He holds many decorations including Knight Commander of the Most Illustrious Order of Chula Chom Klao to His Majesty King of Thailand due to his contribution to the evolution of the country. He also has contributed to quite many social activities from the humanism viewpoint and he still serves the Council of Thai Red Cross Society as the Elected Member, Chulabhorn Research Institute covering biomedical research activities for cancer eradication as the Member of Council. He worked under H.R.H. Princess Maha Chakri Sirindhorn on many ICT projects, especially ICT applications to help underprivileged children and disabled people. He also joined a Thai research team helping His Royal Highness Prince Akishinomiya

Fumihito, the second son of His Majesty Emperor of Japan, and conducted his research as the project leader in Thailand. With his long years work with Japanese organizations, he was awarded the Honor of the Rising Sun, a Japanese award in commemoration of the 120th anniversary of Thai-Japanese relations. This article will remind general readers of his greatest humanitarian personality through his invitation to *i-CREATE* activities and it will encourage especially younger generation over the world toward the future with challenge.

Hot Topics

International Conference ICTF2014 Comes Up!



**Piotr Zwierzykowski, Prof. Dr.,
Poznań University of Technology,
Chair of ICTF2014 Organizing Committee
IEICE Europe Section**

The 2014 Information and Communication Technology Forum (ICTF2014) will be held in Poznań, Poland, on May 28-30, 2014. It has been organized by IEICE Europe Section to encourage the collaboration of researchers between academia and industry. It will be sponsored by the Section, IEICE, Poznań University of Technology, Polish Association of Telecommunication Engineers, and technically co-sponsored by IEICE Communications Society. The conference will provide three dedicated special sessions entitled "Energy and Bandwidth Efficient Communications and Networking", "Multi-Service Network Management for Reliable Internet Access in Public Wireless Networks", "Abstraction Layer for Implementation of Extensions in Programmable Networks" and sessions for general paper focused on major trends and challenges in the updated ICT. I believe that it could be a very good opportunity for you to present your work and exchange opinions on the future communications and networking aspects. For the updated information, please refer to <http://www.ictf2014.org>. If any, please contact Prof. Mariusz Głabowski at mariusz.glabowski@put.poznan.pl.

Upcoming International Conferences

- COOL Chips XVII**-IEICE Electronics Soc., in Yokohama, Japan, on Apr. 14-16, 2014, <http://www.coolchips.org/wp/>
- EMC'14/Tokyo**-IEICE Communications Soc., in Tokyo, Japan, on May 13-16, 2014, <http://www.ieice.org/~emc14/>
- ISOME2014**-IEICE Electronics Soc., in Tokyo, Japan, on May 15-16, 2014, <http://www.ieice.org/~ome/ISOME/Welcome.html>
- ICTF2014**-IEICE Europe Section, at Poznań University of Technology in Poznań, Poland, on May 28-30, 2014, URL as above.
- WTC2014**-IEICE Communications Soc., in Berlin, Germany, on Jun. 1-3, 2014, <http://conference.vde.com/wtc2014/Pages/Start.aspx>
- ASIACCS2014**-IEICE Engineering Sciences Soc., in Kyoto, Japan, on Jun. 4-6, 2014, <http://www2.nict.go.jp/nsri/fund/asiaccs2014/>
- CFI2014**-IEICE Communications Soc., in Tokyo, Japan, on Jun. 18-20, 2014, <http://cfi2014.wide.ad.jp/>
- ADSN2014**-IEICE Communications Soc., in Madrid, Spain, on Jun. 30-Jul. 3, 2014, <http://adsn.net.info/hiroshima-cu.ac.jp/>
- WCSIT**-IEICE Communications Soc., in Iasi, Romania, on Jul. 3-4, 2014, <http://www.wcsit.eu/>
- ITC-CSCC2014**-IEICE Engineering Sciences Soc., in Bangkok, Thailand, on Jul. 4, 2014, <http://www.itc-csc.org/>

Message from TFIPP Secretariat

This issue is delivered also by a free mail magazine "IEICE Global Plaza Online" with updated news of interest for you. Please contact Prof. Takahashi, TFIPP (Task Force for International Policy and Planning) at global@ieice.org, if you need. Back numbers are available in archives at: http://www.ieice.org/eng/global_plaza/index.html/

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