

## *Thai Researchers and Inventors Received Awards from Belgium*

The Office of the National Research Council of Thailand (NRCT) has brought Thai researchers and inventors to several countries to exhibit their research work / inventions and to compete for awards at international fairs. Recently, in Belgium, in particular Thai Researchers and Inventors brought by NRCT have taken part in “Brussels Innova 2015” held during 19 – 21 November 2015. There were approximately 20 organizations and over 300 invention (products) exhibiting in the event. NRCT has sent 26 creative inventions from eight organizations to compete against foreign organizations for prizes, for instance, Chulalongkorn University, Thammasat University, Naresuan University, Prince of Songkla University, The Thailand Research Fund (TRF), Green Innovative Biotechnology Co., Ltd, Klean Greentech Co.,Ltd. In the contest, Thai researchers and inventors got three gold medals of honor 16 golds, seven silvers. Moreover, they received 25 special prizes from several countries, namely Belgium five prizes, Taiwan five prizes, Poland four prizes, Romania three prizes, France two prizes, Russia three prizes, Iran one prize, Bosnia and Herzegovina one prize and Croatia one prize.



## *THAILAND INVENTORS' DAY 2016*

2 – 6 February 2016

Venue: Event Hall 102 - 103

**Bangkok International Trade and Exhibition Centre (BITEC)**

**Bangna, Bangkok**

The Cabinet has designated the 2<sup>nd</sup> February of every year as "Inventor's Day" so as to commemorate the historic day of registration and presentation of royal invention patent "The Slow Speed Surface Aerator" or the so-called "Chaipattana Surface Aerator" to His Majesty King Bhumibol Adulyadej, the first king of Thai monarchy who has been gained this patent for the first time in the world. The Prime Minister had assigned the Office of the National Research Council of Thailand (NRCT) to be the central agency to organize Inventor's Day in collaboration with other related agencies. Apart from arranging activities for inspiring, developing skills, exploring viewpoints on invention and transferring inventions of Thai inventors in the year 2016, this 17<sup>th</sup> event is the first international one held for proposing research work and inventions in ASEAN arena. The 2016 Inventor's Day was held under the theme "Life & Learn" which aims to convey the meaning to the Inventions leading to learning and development for creating the sustainable quality of life and development. The event provides many activities such as exhibition commemorating His Majesty the King "The Father of Thai Invention", exhibition regarding research works awarded the National Research Council Prize, exhibition of Inventions awarded from international events, exhibition of Inventions awarded program of promotion of invention and innovation research (vocational and higher education), exhibition of the private and public sectors, research and ASEAN invention Expo, international invention contest, Invention contest of project "Special Prize", etc.



## The Conference on Climate Change 2015 (COP 21/CMP 11)



Emeritus Professor Dr. Soottiporn Chittmittrapap, Former Secretary-General of the Office of the National Research Council of Thailand (NRCT) and Dr. Monthip Sriratana, Director of Climate Change Research Strategy Center, NRCT as delegates of Thailand (NRCT) attended the meeting of the United Nations Framework Convention on Climate Change - UNFCCC (COP 21) and the conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP11) between 2 - 9 December 2015 in Paris, France. 195 countries have agreed to tackle climate change problem orientating towards a low carbon economy and sustainable development in the future. The issues regarding the Paris Agreement are as follows.

To maintain global average temperature not to rise more than 2°C when compared to pre-industrial revolution. If possible, try not to let the temperature exceed 1.5°C.

To emit greenhouse gases at the highest level as soon as possible in order to prevent the release of greenhouse gases at high altitude indefinitely, and there is a must to create a balance between emission of greenhouse gases from human and absorption of them from the nature within a span of 2050 - 2100, or during the latter half of the 21<sup>st</sup> century.

To revise the intention on this regard of each country every five year. Thailand has sent Intended National Determined Contributions (INDC) to the COP21 conference, targeting to reduce greenhouse gas emissions to 20 – 25% within 2030 by lowering greenhouse gases from 555 million tonnes of equivalent carbon dioxide to 111 – 139 million tonnes.

The Paris Agreement will come into force in 2020. Nonetheless, prior to that year, developed countries have promised to provide developing countries and least developed countries 100,000 million dollars per year under the Green Climate Fund in order to help them to adapt to the change of climate and patterns of energy use by focusing on renewable energy. In addition, developed countries will determine to increase more financial support on which the discussion will be made in the year 2025; and the Paris agreement which will be enforced, ratified in more than 55 countries around the world will be ratified and signed between April 22, 2016 – April 21, 2017. In this regard, the countries that will ratify the agreement must send out greenhouse gases not be greater than 55 percent of the world.

Thailand will present the Paris agreement to the Parliament of which the National Legislative Assembly is acting in place; and if the agreement is approved, Thailand will be able to ratify it.

Participating in the COP21 conference, NRCT has presented a project on “Research and Knowledge Management to Improve Watershed Ecosystem Management under Climate change: A Case Study of the Sirindhorn International Environmental Park and Related Areas” in a submeeting “National Adaptation Plan for Action” organized by the Ministry of the Environment, Japan, at Japanese Pavilion in which Minister Tamayo Marukawa chaired the meeting, Besides, exhibition under the Project was as well organized at Thai Pavilion. Moreover, research strategy on climate change in Thailand was proclaimed publicly in three dimensional news programme live from COP21 to Thailand by Channel 3.

Research projects under the above project have been approved and supported as a “Best Practices” project which will suit climate change in watershed areas in the region.

## A Meeting of “Steering and Reform Committee on Development of Human Resources and Education System”



Ms. Sukanya Theerakullert, Deputy Secretary – General, Acting Secretary – General of the Office of the National Research Council of Thailand, NRCT, together with her executive staff attended the 1<sup>st</sup> conference on

“Steering and Reform Committee on Development of Human Resources and Education System” held on 8<sup>th</sup> January 2016 at Command Building 1, Government House in which Air Chief Marshal Prajin Juntong, Deputy Prime Minister, acted as the president. The Ministry of Education and the Ministry of Social Development and Human Security co-hosted the meeting in order to take main yield target into account in eight months “**Final Strategy Report**” and to monitor an evaluation of “**Action Plan**”. Besides, the agenda on research system reform was engaged with the work of this committee in particular the creation of learning system.



**Officials of the International Office of Development Research Center (DRC), Government of Guangxi, P.R.China paid a visit to the Office of the National Research Council of Thailand (NRCT)**

On November 5 2015, NRCT's executives gave a welcome to DRC officials: Mr.Zhao Zhibo, Investigator and Associate Researcher, Industrial Development Office, Ms.Shen Xiaochun, Investigator and Associate Researcher, Industrial Development Office and Mr.Zhang Sen, Investigator, Agriculture Office on occasion of their visit to NRCT to discuss the issue "One Belt One Road" of China, together with future research collaboration between the two organizations.



## A MEETING ON “BENEFITS OF ENTERING INVENTIONS IN THAI INVENTION ACCOUNT”

The Office of the National Research Council of Thailand (NRCT) in collaboration with the National Science and Technology Development Agency (NSTDA) and the Bureau of the Budget arranged a meeting on “Benefits of Entering Inventions in Thai Invention Account” on December 2, 2015 at Grand Ballroom, Century Park Hotel, Ratchaprarop Road, Din Daeng, Bangkok over which presided by Air Chief Marshal Prajin Juntong, Deputy Prime Minister. The meeting which comprised 400 participants was held in the hope that executives of organizations involved in research, invention, innovation, stakeholder and related organizations can learn of and understand the importance and the process of entering inventions in Thai invention account.



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## The Office of the National Research Council of Thailand (NRCT) signed a memorandum of cooperation on the project “Research for Community”

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NRCT held a press conference and signed a memorandum of cooperation between NRCT and 20 higher education institutions such as Chulalongkorn University, Thammasat University, Kasetsart University, Mahidol University, Chiang Mai University, etc. on the project “Research for Community” on December 9, 2015 at Field Marshal Sarit Thanarat Meeting Room, NRCT at which presided by Air Chief Marshal Prajin Jantong, Deputy Prime Minister. This cooperation aims to apply knowledge gained from research for the development of and the utilization in the community. NRCT, as research central agency in charge of formulating research policy and allocating funds for research, has realized this crucial issues and encouraged integration of knowledge gained from research to extend results to aimed target group in various dimensions, which suits the needs of each region of the country.

Moreover, by viewpoint of NRCT, institutions getting the budget for research and creating continuous knowledge have been deemed ready to solve problems of the country via research knowledge. Hence, NRCT signed a cooperative memorandum “The Utilization of Research Results for Community” with 20 mentioned institutions so as to boost research work to a practical use by increasing manufacturing efficiency, augmenting income from research work, and developing life quality that can be economically assessed.



## *20<sup>th</sup> Meeting of International Council for Science (ICSU) Regional Committee for Asia and the Pacific & Science Forum*



The Office of the National Research Council of Thailand (NRCT) organized the 20<sup>th</sup> Meeting of ICSU Regional Committee for Asia and the Pacific & Science Forum during 24 – 25 November 2015 at Dusit Island Resort Chiang Rai and Mae Fah Luang University, Chiang Rai Province.

ICSU is an international organization which is non-governmental and non-profit. It becomes also International Scientific Unions established according to the resolution of the International Research Council at Brussels, Belgium in 1931. ICSU aims to promote knowledge and understanding of science to the general public, as well as encouraging and supporting scientific and technological activities for the well-being of mankind. Thailand, by NRCT has joined ICSU since 1965. Currently Emeritus Professor Dr. Soottiporn Chittmittrapap, former Secretary-General of the NRCT has been a Thai representative in ICSU Asia and the Pacific Board in the period of 2010 – 2016.

ICSU's Regional Committee for Asia and the Pacific has collaborated in carrying out three projects of importance to the people of the region:

### ◆ Psychological Interventions after Disasters (PIAD) Project

ICSU and International Union for Psychological Science (IUPsyS), Friedrich Schiller

University Jena, Germany and Chinese Psychological Society of the People's Republic of China jointly organized the workshop continuously by inviting 25 scientists from eight countries to participate in the PIAD Project. Being network of PIAD, Thailand has as well sent scholars to attend the conference.

#### ◆ Urban Health and Wellbeing Project

This project was established to make urban residents be in good health and increase feeling of well-being. At present, International Project Office (IPO) has been established in the People's Republic of China to proceed that project. Meanwhile a project "Planning Green Transportation for Better Urban Health under Climate Change" operated by the Institute of Urban Environment (IUE) is being developed in the People's Republic of China.

#### ◆ Future Earth Project

The aim of this project is to gather knowledge and technology from various academic disciplines to enable researchers to warn a possible danger early, control environmental risks and to stimulate the research to support change leading to sustainability. In addition, the "Future Earth CEO" which has headquarters in Montreal, Canada, administer the structure of the project and take responsibility in supervising the operations of the Secretariats located around the world. The Secretariat in Asia is located at the Science Council of Japan (SCJ) in Japan where Research Institute for Human and Nature (RIHN), Japan is responsible for the operations concerned. Besides, Emeritus Professor Dr. Soottiporn Chittmittrapap and Prof. Dr. Mohd. Nordin Hasan, Executive Director of ICSU Regional Office for Asia and the Pacific were invited to be Regional Advisory Committee of the Future Earth Project in Asia.

## **The Office of the National Research Council of Thailand (NRCT) exhibited research work (and inventions) in a press conference in which the government reported results of the work performance over the past one year**

NRCT brought outstanding research work in Social Science, Research, Information Technology, and Energy fields to exhibit at Santi Maitree Building, Government House in which the government reported results of the work performance in the past one year on December 23, 2015 at which presided by General Prayuth Chan-ocha, Prime Minister, and Air Chief Marshal Prajin Jantong, Deputy Prime Minister, reported the government's results of the performance in the above fields.

In retrospect, research has not tackled problems of the country due to unsystematic research of organizations, apparent lack of unity in research operation, complicated researches, the users of research results were not capable of accessing research work, and the deficiency in making use of research especially in rural community, NRCT has thus developed research system to make it more robust by reforming it with cooperation of the Thailand Research Organization Network (TRON) which takes into account nine significant dimensions: policy, research fund support, research budget, research institute, research personnel, reforming structure, standard, product management and evaluation. The output of research system reform effectuates better integration and cooperation among research institutes, and yields positive results that can ease problems of the country concretely. Also, NRCT has pushed forward the bringing of those research results to improve Thailand's competitive efficacy in order to support the policies of the government and the private's sector in different aspects by granting research funds to over 20 provincial universities. Furthermore, NRCT has managed knowledge and technology gained from doing research and innovation to target people in order to have knowledge and technology utilized and overcome the country's crucial problems.

