Counsellor : Huang Haijun Chief Editor : Weng Jingnong

Executive Editor :Cui Yizhuo / Guo Yuanyuan Editor :Liu Xu / Yang Dongkai / Gao Guozhu Layout Design : Wang Xin / Wan Meng / Feng Biao



Promoting the peaceful use of space technologies for the benefit of all humankind

ADD: East Wing of Library, Beihang University, No. 37 Xueyuan Road, Haidian District, Beijing, 100191, P. R. China

TEL: +86-10-82339734

FAX: +86-10-82339734

WEB: www.rcssteap.org

# **NEWSLETTER**

7 The Seventh Issue Serial No.007

Exchange • Promotion • Development



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## **Preface**

Within a glimpse, the greenness in the whole garden turned into golden times. Autumn made the farewell to old leaves, and new story about the Centre began. Please sit down and listen to it.

In August, experts of the Centre visited the African Regional Centre for Space Science and Technology Education in English (ARCSSTE-E) and jointly organized "The International Workshop on Global Navigation Satellite Systems (GNSS)" at Obafemi Awolowo University, Nigeria.

In September, 49 new students from 17 countries gathered at Beihang, began their new life as graduates on RS&GIS, GNSS, Space Law and Policy. Their arrival has added new vitality to the Centre.

So far, the Center has organized 5 short training programs with the center of APSCO, UNSPSIDER Beijing Office, National Centre for Remote Sensing of Ministry of Science and Technology, High-Analysis Center of National Space Agency, ENAC, Las Engineering and Technology School of Ohio University, China Satellite Global Services Alliance, and other partners, in which 187 students from 19 countries have participated. In order to create an international working environment, the center upgraded its classrooms and offices during the summer vacation, thereby creating a new experience merged with "Chinese Culture" and "Artistic Astronautics", which promoted our international education in a open, innovative and specialized way. At the end of September, the center published its first album "Story about the Centre", telling our stories to the world with 16 pictures.

It is worth mentioning that Mr. Sergio Camacho, Former Director of UNOOSA and pres-ently The, Secretary General, Regional Centre for Space Science and Technology Education for Latin America and the Caribbean, visited the Center and gave a lecture on "Space Policy and Law, Space Science and Technology - the Importance of the work of the United Nations Committee on the Peaceful Uses of Outer Space(COPUOS)" to the participants of the Centre. He was appointed as visiting professor of Law School, Beihang University. The road is long but we will reach the destination with determination despite any difficulties or against all odds. Our story is continuing.

## Special Focus——

# International Training Workshop on BeiDou Technology and Its Applications

#### Overview

In order to implement "the Belt and and students. The total number of participants Road Initiative", with the support of NRSCC's was thirty, from thirteen countries including International training program, "International Zambia, Iraq, Uganda, Thailand, Senegal, South Training Workshop on BeiDou Technology Africa, Morocco, Mongolia, Malaysia, Pakistan, and Its Applications" was jointly hosted by Beihang University, the Centre, and Science and Technology Exchange Center of Ningxia Province, along the "B&R" line and deepening technology technical visits, practice, creative courses, student exchange, etc. The training program mainly involved the development of the BeiDou satellite

The program was held at Beihang University from July 11 to July 30 in 2016, as registration started on the 11<sup>th</sup> and training started from 12<sup>th</sup> to 29<sup>th</sup> of July. The topic of this program was "BeiDou" System Technology and Its Applications, in order to promote the related techniques, push its development and enhance the cooperation. In total, more than twenty experts and scholars from seventeen institutions inside and outside the country were invited as tutors, mainly towards government staff in the field of navigation technology, researchers, engineers

was thirty, from thirteen countries including Zambia, Iraq, Uganda, Thailand, Senegal, South Africa, Morocco, Mongolia, Malaysia, Pakistan, Cambodia, Laos, Egypt. Apart from these countries that participated, seven foreign students from our center also attended this program as auditors. This program consisted of lectures, technical visits, practice, creative courses, student exchange, etc. The training program mainly involved the development of the BeiDou satellite navigation system, signal simulation and testing techniques of BeiDou, introduction to Wide Area Augmentation System and Xihe System derived from BeiDou, and other applications in the field of agriculture, marine, soil, remote sensing, traffic, scenic location services. Through the process, students and teachers made positive exchange, indicating the approval and critical thinking from everyone involved. Creative course, in particular, encouraged our students to combine their nations' application with BeiDou techniques, andput forward constructive plans, thereby offering reference for exchange and cooperation







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in the future. Also, Chinese traditional history and culture was spread during the training program and participants' understanding were deepened. In addition to the curriculum, considering requirements of members from Egypt Mining Bureau, Beihang University made contact with China Geological Survey with the help of NRSCC and made contribution to the final meet and

exchange between two sides. Besides, our participants also visited IGGE of China Geological Survey, CNIET of China Geological Survey and AGRS of China Geological Survey, conducting discussion on their research, devices and applications, creating favorable conditions for further cooperation.

#### Opening Ceremony

On July 12th, 2016, the opening ceremony of International Training Workshop on Beidou Technology and Its Applications was held at Beihang University. This program, supported by the management department of BeiDou System, was jointly hosted by NRCSS, Beihang University and the Centre. In order to speed up the implementation of the "Belt and Road Initiative" proposed by Chairman Xi and the landing of the system in Arabia, Arab students were enrolled for the first time with the help of China-Arab Technology Transfer Center. In the end, 30 students from 13 nations were enrolled, all of whom were the key staff of satellite navigation technology and application in their own country, including three graduates from Beihang Space Technology Program. Plus, seven foreign postgraduates from the Centre attended this program as auditors.

Mr. Jing Guifei, Deputy Director of NRSCC firstly gave a speech,









regarding the general situation about this program. He emphasized that with the support of international training plan of Ministry of Science and Technology, BeiDou system's international application was widely publicized and promoted, arousing concerns from neighboring countries in East Asia. Mr. Wang Zuling, Dean of School of Electronic Information and Engineering, Beihang University, introduced the work the school had done to promote BeiDou R&D and the relative applications. Mr. Weng Jingnong, Executive Director of the Center and Dean of International School, introduced the education and training promotion in the field of satellite navigation.

Mr. Si Jiale, Deputy Director of International Cooperation Department of Ministry of Science and Technology, gave a speech and announced the opening of BeiDou Technology and Application International Training Program.

Later, representatives of participants expressed their thanks to Ministry of

Science and Technology of China, NRCSS, the Centre and Beihang University for providing opportunities to learn high-tech in China and establishing channels for exchange and further cooperation between China and the other developing countries.

Several experts and scholars of BeiDou Technique Application were invited to give lectures during this program, domestically and internationally. They gave detailed introductions to BeiDou's mature applications, especially Xihe System, which was the product of national science and technology program. Meanwhile, creative course was specially designed to help students grasp the related techniques quickly and speed up exchange and cooperation among the countries.







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#### Experts

In this program, experts from world's and China's top aerospace research institutions and enterprises, including Université Toulouse III, Beihang University, Beijing University of Posts and Telecommunications, China Agricultural University, Shanghai Ocean University, Academy

of Opto-Electronics, Chinese Academy of Sciences, Baidu R&D Center, China Centre for Resources Satellite Data and Application, UniStrong, Ltd., Beijing Digital Huibo Technology Co., Ltd., were invited to give lectures.



Université Toulouse III Jose Darrozes



Beihang University Weng Jingnong



Beihang University Yang Dongkai



China Agricultural University Wu Caicong



**Group Photograph** 



UniStrong,Ltd. Shen Jun



Beijing University of Posts and Telecommunications
Jiao Jichao



Shanghai Ocean University Zhang Yun



Beijing Digital Huibo Technology Co.,Ltd. Zhang Shiwen

### Technical Visit

During this training program, participants visited several corporations under the organization of the committee as follows: Twenty-First Century Aerospace Technology Co., Ltd., SuperMap Software Co., Ltd., China Geological Survey, Academy of Opto-Electronics of Chinese Academy of Sciences, China Academy of Space Technology,









Telecommunications and Information Center of Communications and Transport Ministry (CTTIC), China•LBS, etc. As a result, the participants have obtained a deeper understanding of Chinese satellite navigation enterprises and their products, as well as a more visualized comprehension of techniques in BeiDou Satellite Navigation System.

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#### Idea Exchange and Creative Course

Two parts, namely, Student Exchange and Creative Course, were specially designed in order to promote exchanges and cooperation among the participants, and to understand the needs and current situations in different countries for the development





of satellite navigation technology. Members from 13 different nations, including Zambia, Iraq, Uganda, Thailand, Senegal, South Africa, Morocco, Mongolia, Malaysia, Pakistan, Cambodia, Laos, Egypt, conducted comprehensive exchanges and discussions on the topic of the application status and development trend of satellite navigation technology. The Idea Exchange Activity and Creative Course promoted understanding among different countries and laid a solid foundation for further cooperation.

#### Closing Ceremony





On July 29th, 2016, the closing ceremony for the training program was held at Beihang University. Among those that attended the ceremony were Mr. Yang Dongkai, Professor from School of Electronic Information and Engineering, Mr. Zhang Chi from National Remote Sensing Center of Ministry of Science and Technology, Mr. Zhou Xiaoping, Deputy Director of International Cooperation Department of Ningxia Province, Director of China-Arab Technology Transfer Center, all the participants and volunteers. On behalf of the organizing committee, Professor Yang Dongkai summarized all the achievements during this training program. In the end, certificates of completion were given to every participant.

## Special Focus——

International Training Course on Space-based Technologies for Flood and Drought Monitoring and Risk Assessment

#### Overview









legional Centre for Space Science and Technology Education in Asia and the Pacific (Chir (Affiliated to the United Nations)

联合国附属空间科技教育亚太区域中心(中国)

International Training Course on Space-based Technologies for Flood and Drought Monitoring and Risk Assessment was jointly held by UN-SPIDER, National Disaster Reduction Center of China, RCSSTEAP and APSCO at Beihang University from 22<sup>nd</sup> to 27<sup>th</sup> of September 2016.

This training course focused on how to monitor flood and drought disasters using space technologies. Six experts from UN-SPIDER, International Water Management Institute, Iranian Space Agency and National Disaster Reduction Center contributed to this hands-on training program. 28 participants from 19 countries (Bangladesh, Turkey, Guatemala, India, Iran, Kyrghyzstan, Nepal, Nigeria, Trinidad, Tobago, Ghana, Italy, Mozambique, Pakistan, Peru, Sri Lanka, Sudan, Zimbabwe, Mongolia and China) funded by APSCO, UN-SPIDER and the Centre, participated in the training.

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## UNSPIDER 2016 Annual Conference in Beijing

The annual conference of the United Nations International Space-based Technologies for Disaster Management "Understanding Disaster Risk" was successfully held in Beijing from 19 to 21 of September, 2016. Mr. Weng Jingnong, Executive Director of the Centre was invited to give a special report at the meeting.

This conference aimed at providing a platform to share various means that can be adopted by the Member States and international/ regional organizations in understanding disaster risk, especially the use of space-based technologies. This conference covered five topics, which included: UN-SPIDER 10 years achievements, risk assessment and mapping using Earth Observation data, access to data and information for risk assessment, National Spatial data infrastructure and data framework to support disaster management, networking and engagement with the UN-SPIDER network. Three breakout sessions were also held and the themes were monitoring indicators against the global targets of the Sendai Framework for Disaster Risk Reduction 2015-30, procedural guidelines for sharing space-based information during emergency response and crowdsource mapping for risk assessment and emergency response.















#### Opening Ceremony

On September 22<sup>nd</sup>, 2016, the opening ceremony of the training was held at Beihang University. Mr. Weng Jingnong, Executive Director of the Centre, Dean of International School-Beihang University, Mr. Shirish Ravan from UN-SPIDER Beijing Office, Mr. Mohammad Ebrahimi Seyedabadi from APSCO and Ms. Li Suju from NDRCC attended the ceremony. It was hosted by Ma Yunfei from Department of International Cooperation, NDRCC.







#### Experts

Six experts from UN-SPIDER, International Water Management Institute (IWMI), Iranian Space Agency and National Disaster Reduction Center (NDRCC) contributed to this hands-on training program.

Dr. Shirish Ravan from UN-SPIDER Beijing Office introduced some basic concepts and applications in Earth Observation for Earthquake Damage Assessment. Mr. Giriraj Amarnath from IWMI delivered speeches on Remote Sensing Data in Flood Mapping and Monitoring and SAR Data for Flood Mapping and gave guidance to participants on machine operation. Mr. Abdolreza Ansari Amoli from Iranian Space Agency shared his experience in concepts, assessments, mapping, modeling and prediction of drought. Ms. Li Suju, Ms. He Haixia and Mr. Liu Ming gave lectures on Chinese Open-source Space Data and Products, Introduction to the Space-based Technology for Flood Monitoring, and Introduction to the Drought Thematic Mapping respectively with hands-on guidance.



UN-SPIDER Beijing Office **Mr. Shirish Ravan** 



National Disaster Reduction Center **Ms. He Haixia** 



Iranian Space Agency Expert Mr. Abdolreza Ansari Amoli



National Disaster Reduction Center **Ms. Li Suju** 



IWMI Expert
Mr. Giriraj Amarnath



National Disaster Reduction Center **Mr. Liu Ming** 



#### Closing Ceremony

On the afternoon of September 27<sup>th</sup>, 2016, closing ceremony of the training program was held at Beihang University. It was hosted by Ms. Sun Jiayi from UN-SPIDER Beijing Office. Representatives from RCSSTEAP, APSCO, NDRCC, all the participants and volunteers attended the

ceremony. Mr. Mohammad Ebrahimi Seyedabadi from APSCO and Ms. Tan Yumin summarized the training from different views. In the end, the participants and volunteers were awarded certificates.





#### Feedback

On the afternoon of September 27<sup>th</sup>, participants completed the questionnaires after training with evaluation of the training conditions and contents. The participants spoke highly of experts, contents, arrangement and reception as well as giving suggestions for the future training.

- I benefited a lot from the technical visit and working on data.
- · It is a very good training for me.
- We need more cases in each country to monitor disasters in their own countries.
- · Excellent!
- More emphasis should be given on lectures and hands on application training of geospatial technologies. Open source data information/links should be delivered in hard/soft copies only.

- Well organized lectures of good topics and easy hands on soft-wares.
- The level of attendees (knowledge about subjects & soft-wares) could be determined by a "level investigation form" via E-mail before training.
- Hydro-logical modeling tutorials may be added in to training to improve effectiveness such as stream flow simulations and forecasts, water balance, etc.
- · Good internet speed is suggested.

## RCSSTEAP(China) Activities

International Workshop on Global Navigation Satellite Systems (GNSS) was successfully held at Obafemi Awolowo University, Nigeria

From the 8<sup>th</sup> to 13<sup>th</sup> of August, 2016, International Workshop on Global Navigation Satellite Systems (GNSS), jointly organized by the African Regional Centre for Space Science and Technology Education in English (ARCSSTE-E), Regional Centre for Space and Technology Education in Asia and the Pacific (China) (affiliated to the United Nations) (RCSSTEAP) and Beihang University, was successfully held at Obafemi Awolowo University, Nigeria. Mr. Weng Jingnong, Executive Director of RCSSTEAP and Dean of International School, Mr. Yang Dongkai, professor of School of

Electronic and Information Engineering, Mr. Qin Honglei, professor of School of Electronic and Information Engineering, Mr. Wu Falin, professor of School of Instrumentation Science and Opto-electronics Engineering, Ms. Wang Xin from School of Mechanical Engineering & Automation and Ms. Liu Xu from International School attended the workshop as Chinese delegation.

Ten scholars and experts in relevant fields from Nigeria and China were invited to give lectures to more than 100 participants from Nigeria,



















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Tanzania, Kenya, Ghana, Cameroon, Sudan and Libya. Five Chinese lecturers were from Beihang University and Civil Aviation University of China. The participants were composed of students in relevant majors, young scholars and engineers in global navigation satellite system. This workshop, focusing on application of BeiDou Satellite Navigation System and other satellite navigation systems in various fields, aimed at strengthening the capacity of GNSS technology and academia. It provide networking opportunities and promoted cooperation in satellite navigation technology among the member states.

During the workshop, representatives of Beihang University paid a visit to the Vice Chancellor of Obafemi Awolowo University, Professor Anthony Elujoba. The Vice Chancellor expressed his warm welcome to Chinese delegation and congratulated them on the success of the international workshop.

On August 10<sup>th</sup>, representatives of ARCSSTE-E and RCSSTEAP discussed education

and training cooperation seriously. Mr. Ganiy F. Agbaje, Executive Director of ARCSSTE-E and Mr. Weng Jingnong, Executive Director of RCSSTEAP introduced the two Centres and their training programs respectively. Chinese delegation then visited ARCSSTE-E and Obafemi Awolowo University.

In order to make space technology beneficial to more countries, the United Nations started space application program in 1971. Since 1995, according to A/AC105/534 by the United Nations Office for Outer Space Affairs (UNOOSA), UNRegional Centres for space science and technology education were established in Asia and the Pacific,



Africa, Latin America and the Caribbean.

ARCSSTE-E is a Centre under the Nigerian Space Agency. The Centre is located at Obafemi Awolowo University Campus. The University, covering 11.861 square kilometers, is one of the best universities in Nigeria. It has an enrollment of 26,000 students, including 20,000 undergraduates and 6,000 postgraduates. Obafemi Awolowo University has 13 faculties and 2 colleges and covers a wide range of disciplines like humanities, art, natural sciences, social sciences, medicine and engineering.

The cooperation between ARCSSTE-E and RCSSTEAP which is highly appraised and



supported by UNOOSA, set a model of exchanges for other UN-Regional Centres. It also advanced "UN Space Application Programme" as well as showcased Chinese technologies, methodologies and education to the world.







### Representative of Arizona State University (ASU) Visited the Centre

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On August 9th, Professor Gary Dirks from Arizona State University visited the Centre. Professor Wu Wenjun, an expert from the Centre, gave a general introduction of the Centre and exchanged ideas on future cooperation.





### Delegation from Egyptian Ministry of Science and Technology Visited the Centre

On August 25th, 2016, Professor Mohamed El-Koosy and Professor Ayman El-Dessouki, representatives from the Egyptian Ministry of Science and Technology visited the Centre and exchanged ideas with Mr. Weng Jingnong, Executive Director of the Centre, on application for Member States.

Afterwards, Professor Mohamed El-Koosy and Professor Ayman El-Dessouki visited the Campus of Beihang University and Air&Space Museum, and they spoke highly of the rapid development of China's aerospace industry and hoped to promote the peaceful use of space technology for the benefit of all humankind with China.











### The Centre Welcomed New Participants of 2016

From the 5<sup>th</sup> to 8<sup>th</sup> of September 2016, new participants of 2016 came to Beihang University from all over the world. The Centre welcomed the new participants taking "Warm, thoughtful, standard, and efficient" as purpose. The new participants injected fresh energy to the Centre.



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The 10<sup>th</sup> United Nations Workshop on Space Law Contribution of Space Law and Policy to Space Governance and Space Security in the 21<sup>st</sup> Century was held from 5 to 8 in Vienna, Austria. The Workshop provided an overview of the legal regime governing the peaceful uses of outer space, examined and compared various aspects of the broader perspective of space security in global space governance, including transparency and confidence building measures in outer space activities, and will address space law and policy in the context of UNISPACE+50. A round table discussion and six panels were contained in the programme of the workshop as following:

- A Round table discussion on safety, security and sustainability of outer space activities in the context of space governance and space security;
- 2) Panel 1: International space law and policy development;
- 3) Panel 2: Safety of space operations and security of space systems;
  - 4) Panel 3: TCBM Implementation and the

The 10<sup>th</sup> United Nations Workshop on Space role of international entities: institutional and Contribution of Space Law and Policy to regulatory perspectives;

- 5) Panel 4: International Models and mechanisms for space cooperation and coordination;
- 6) Panel 5: Cooperation and capacity-building in space law and policy for the benefit of developing countries;
- 7) Panel 6: Legal regime of outer space and global space governance: Current and future perspectives.

More than 40 experts, scholars and officers from UNOOSA attended the workshop. Mr. GAO Guozhu, an associate professor from the Law School, Beihang University and on behalf of RCSSTEAP, was invited to attend the workshop and gave a speech on "Role of Regional Centres: A perspective of space law and policy", introduced the development of the training and education program on space policy and law, especially the ongoing Master program on space law and policy.



# Former Director of UNOOSA Mr. Sergio Camacho Was Appointed as Visiting Professor by the Law School of Beihang University



On September 14th, 2016, the ceremony of appointing a former Director of UNOOSA Sergio Camacho as Visiting Professor was held at the meeting room of the Law School, Beihang University. Those in attendance at the important ceremony were: Mr. Li Yue, Director of Civil-military Integration Promotion Department, Ministry of Industry and Information Technology of the People's Republic of China, Mr. Du Hui from China National Space Administration, Mr. Huang Haijun, Vice President of Beihang University, Mr. Long Weigiu, Dean of the Law School, Mr. Weng Jingnong, Executive Director of the Centre, Dean of International School, Mr. He Linshu, Chief Expert of the Centre, the faculty and students of the Law School, Beihang University, and the international graduates majoring in Space Law and Policy from the Centre. It was hosted by Ms. Huang Hui, Vice Dean of the Law School, Beihang University. Before the ceremony, Mr. Camacho gave an excellent report on the development course and hot spots on space law.

At the ceremony, Mr. Huang Haijun, Vice President of Beihang University, extended a warm welcome to Mr. Camacho and appointed him as Visiting Professor. He also

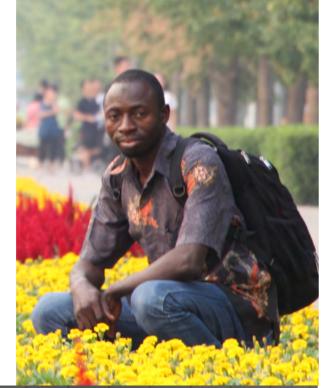
expressed his gratitude to Mr. Camacho for his contribution in international coordination and the promotion of peaceful use of space technology once as Director of UNOOSA, as well as his contribution for the establishment of RCSSTEAP and Space Law Policy. He said that Beihang University would continue to promote the development of RCSSTEAP with high level and international talents in space law and policy based on its outstanding academic strengths and international education background. Mr. Camacho thanked Mr. Huang Haijun and expressed his hope to make a positive contribution to the development of international space law talents.

In this fall semester, 60 candidates have been offered admission by the Centre in RS&GIS, GNSS, Space Law and Policy, including 46 master's candidates and 14 doctoral candidates. The first class of Space Law and Policy totals 14 participants mainly recommended by APSCO, UN-Regional Centres and space-related organizations and departments. They will also be the backup candidates for the representatives of different countries in the sessions of UNCOPUOS.

## Mid-autumn Day Trip to Olympic Forest Park



September 15<sup>th</sup>, 2016 was the traditional Chinese festival Mid-autumn Day. A trip to Olympic Forest Park was organized by the Centre for the participants' better understanding of Chinese culture. Moon cakes were prepared and distributed as a holiday gift for all the participants. In the end, they all expressed thanks to the Centre for organizing this activity which made them felt the warmth of being away from home here.







### Forum on the "Belt and Road Initiative" Spatial Information Corridor Engineering Application and Industry Internationalization

Forum on the "Belt and Road Initiative" Spatial Information Corridor Engineering Application and Industry Internationalization was held in Urumqi, Xinjiang from September 19th to 20th, 2016. Representatives of the Centre were invited to attend the forum.. Twenty-five experts from China Aerospace Science & Industry Corporation, General Administration of Customs of the People's Republic of China, Xinjiang Satellite Application Centre gave excellent reports on the topics of national policies, technological achievements, service capacities, international business models, international education, industry and regional applications, which presented a better illustration on how to promote the "Belt and Road Initiative" spatial information corridor engineering application and international development. Mr. Weng Jingnong, Executive Director of the Centre, reported on "Education and Training Internationalization in the "Belt





and Road Initiative" Spatial Information Corridor Engineering Application", and drew warm public response.

This forum, giving a full play in promotion and exchange, provided a platform for showing the demand, status, and the way forward of satellite application. It is of great significance to carry out the national strategy of "the Belt and Road" and forward the concept of sharing, together-building with the implementation of the construction of the "Belt and Road Initiative" spatial information corridor engineering application.

# RCSSTEAP

## **Education and Training Programs**

# Former Director of UNOOSA Mr. Camacho Gave Lectures to Participants of the Centre

Mr. Sergio Camacho, Former Director of UNOOSA, Secretary General, Regional Centre for Space Science and Technology Education for Latin America and the Caribbean (CRECTEALC) was invited by RCSSTEAP at Beihang University to visit the Centre and give lectures on "Space Policy and Law, Space Science and Technology - The importance of the work of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS)" for the first batch of international postgraduates majoring in Space Law and Policy here.

These series of lectures providing a good platform for the participants to understand the frontier knowledge of outer space affairs, attracted not only students from different majors but also representatives from China National Space Administration, the Supreme People's Court of the People's Republic of China, Management Office of Satellite Navigation System and China Great Wall Industry Corporation, etc. The attenders listened and thought carefully in class and asked questions after class. Mr. Camacho answered those questions patiently. The participants said





that these series of lectures provided them a rare opportunity to get a better understanding of the mechanism of UNOOSA, international treaties on outer space, relevant basic principles and so on.

During Mr. Camacho's visit, he had extensive exchanges with representatives from China National Space Administration, RCSSTEAP and Law School of Beihang University on expanding cooperation and promoting the long term sustainable development of Space Law and Policy. In addition, he exchanged ideas with representatives from RCSSTEAP about in-depth cooperation between the CRECTEALC and RCSSTEAP and reached a consensus. He was

also invited to attend the opening ceremony of UN-SPIDER 2016 Annual Meeting in Beijing and visit China Great Wall Industry Corporation. He gave a speech on how to promote international cooperation by the platform provided by the United Nations. Mr. Camacho said that it was a very meaningful visit with ideas exchange and he was willing to give lectures to the participants of the Centre and hoped more participants would benefit from it.

The Centre at Beihang University initiated the Master's program of Space Law and Policy among all the six UN-Regional Centres which set an example to the others.

# RCSSTEAP

#### Introduction of Space Law and Policy

Space law is an area of law that encompasses national and international law governing activities in outer space. The inception of the field of space law began with the launch of the world's first artificial satellite by the Soviet Union in October 1957. Since that time, space law has evolved and assumed more importance as mankind has increasingly come to use and rely on space-based resources. The Committee on the Peaceful Uses of Outer Space, established in 1958, is the only international forum for the development of international space law. Since its inception, the Committee has concluded five international legal instruments, i.e. the 1967 Outer Space Treaty, the 1968 Rescue Agreement, the 1972 Liability Convention, the 1976 Registration Convention and the 1979 Moon Agreement.

The advent of commercial space activities beyond the scope of the satellite communications industry, and the development of many commercial spaceports, is leading many countries to consider how to regulate private space activities. The challenge is to regulate these activities in a manner that does not hinder or preclude investment, while still ensuring that commercial activities comply with international law.

As China's first university focusing on aeronautical and astronautical engineering and academic research, Beihang University attaches great importance to the development of space law discipline. Relying on the Law School of Beihang University Institute of Space Law of Beihang University (ISL) was established in 2000. It is the first specialized research agency of space law and one of the most important research centers in China.





Following resolutions 45/72 and 50/27 of the UNGA, the Programme of Space Application defined objectives and an action plan for the establishment of regional centres in each region covered by the United Nations Economic Commissions: Africa, Asia and the Pacific, Europe, Latin America and the Caribbean, and Western Asia.

The Regional Centre for Space Science and Technology Education in Asia and the Pacific(China) was established on November 17, 2014 in China. Its Predecessor is International Space Education Center of Beihang Univ.(2004) The purpose of the center is to train the participants( Major in STA) from Member States of APSCO.

Capacity-building, training and education in space law help to promote international development and cooperation in space activities and provides the means for a deeper understanding of the interdependent roles of science, technology and law in this area. So far, space law has played a big role in the field of space technology application. Space law education have been taken into account by several regional centres for space science and technology education (affiliated to the United Nations), especially by RCSSTEAP.

In order to promote the training and education of Space Law and Policy, an international training program on Space Law and Policy was held from September 17<sup>th</sup> to 25<sup>th</sup>, 2016 at Beihang University, jointly organized by Regional Center for Space Science and Technology Education in Asia and the Pacific (China) (affiliated to the United Nations), Asia Pacific Space Cooperation Organization (APSCO) and Beihang University, which enjoyed great success.

Based on the success of the training program,

RCSSTEAP has decided to set up a new master program on space law and policy under MASTA in 2016. Currently, the master program has started since September. 13 participants funded by CSC/BUAA Scholarships were recruited from the Member States of RCSSTEAP and APSCO, including Mongolia(2), Pakistan(3), Brazil(1), Thailand(2), Nigeria(1), Bolivia(1), Venezuela(1), Turkey(1), Iran(1).

The program will focus on training professional talents who are familiar with space law and policy for countries in the Asia-Pacific region and other developing countries. The participants will master and fully utilize the knowledge of space law and policy, with necessary knowledge of space science, space technology and space application so as to engage in the work related to research on space law and policy, legal consultation and management of space activities, national space legislation and international space cooperation.

With the strong support of UNOOSA, Chinese Government, RCSSTEAP and APSCO, the Program will take advantage of global resources of space law and the advantages of the Regional Centre and its partner in the field of space science and space technology application, invite high level technical, policy and legal experts in related field from all over the world, and provide lectures, practice courses to ensure the participants to have a comprehensive understanding on the policy, law, management and technical knowledge related to space applications and make them the high-end talents so that they can provide the necessary strategic, technology, policy and legal support for the development of space applications in their home countries.



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## **Capacity Building**

#### Office Environment Perfection of the Centre

The environment in the Centre was improved during this summer vacation in order to provide a better international environment for studying and teaching as well as inspire students' enthusiasm in Chinese culture and space science&technology exploration. Many areas such as Display Area, Chinese Cultural Experience Center, Seminar Room were redesigned, providing new experience of Chinese culture and art space together. It

The environment in the Centre was improved will further promote opening up, innovation and this summer vacation in order to provide a and characteristic development of international environment for studying and education.

This environment redecoration took three months with design and construction teams working closely. It has been carried out safely with elaborate layout and polishing details. The Centre now has a new look in the new semester.

### Story about the Centre

**Editor's note:** Regional Centre for Space Science and Technology Education in Asia and the Pacific (China) (RCSSTEAP), established on November 17, 2014, has been taking "Promoting the peaceful use of space technologies for the benefit of all humankind" as its honorable mission bycontinuously exploring and forging ahead with innovative development. In the golden fall, this album, recording the development course of the Centre with 16 pictures, was published to tell the story of the Centre to the world as well as in commemoration of its second anniversary.







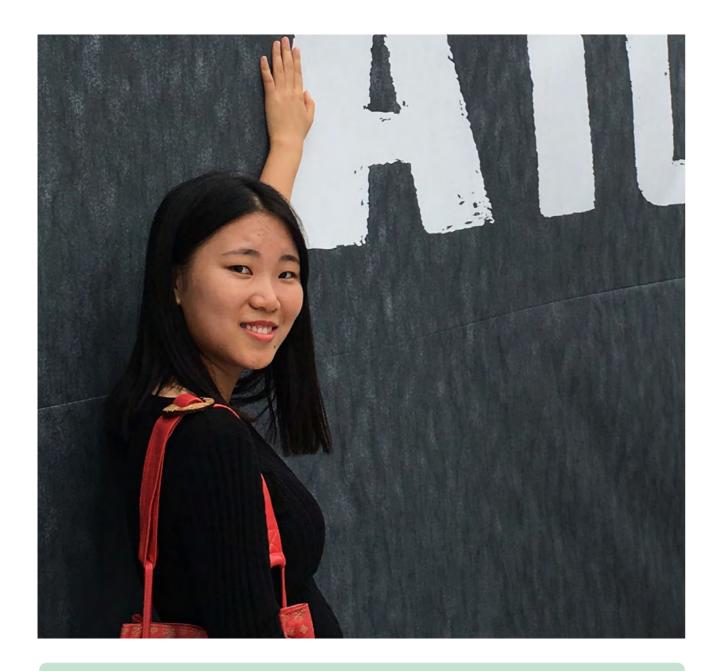
# RCSSTEAP

NEWSLETTER (Serial No.007) | Volunteer Show

NEWSLETTER (Serial No.007) | Volunteer Show

## **Volunteer Show**

## Yang Lan: To Be a Cultural Ambassador



**Editor's note:** The Centre has been focusing on its capacity building since its establishment. The group of volunteers, as an important part of the Centre, is becoming another shining star. Two of the stories of "Youth•Being a volunteer" have been selected in this column. Let's listen to their unforgettable experiences.

Before I got admitted to Beihang University, I barely had the chance and courage to do reception work, especially when it came to foreign guests. The reason why I volunteered to do it this time mainly lay in the growing charm of cultural diversification. It would also be a great opportunity to accumulate practical experience and test my self-quality.

At first there was no instruction for me and things were quite unacquainted. I could not get rid of the nervousness until I went into the International School where everyone was actually quite warm and friendly. As I got more and more familiar with the environment, nothing like that bothered me anymore.

For me, a week's stay with Mr. Camacho, former director of UNOOSA, was even more informative than I thought it would be. Every detail of our conversations reflected Mr. Camacho's wide range of knowledge, which not only related to his area of expertise, but also his rich life experience. I felt so lucky and honored to be his accompany, by which I learned useful things every day. One of the things that touched me most was Mr. Camacho's worrying about cultural inheritance: Since values varied from generation to generation, it was totally understandable that great spirit and skills could not be handed down from age to age. And if we just let the precious knowledge end here instead of passing on to others, it would be a great shame for the society and the knowledge itself. I believe that it was also why Mr. Camacho stressed so much importance on cultural exchange and insisted on working so far without complaint. Every day, I asked how many hours he slept last night, answers would usually be like 2 to 5 hours, which was not enough even for youngsters. But I

understood that he didn't want a third of his life to be taken by sleep, and there were still a lot of meaningful work waiting for him. That kind of spirit was exactly what I lacked and it would have much effect on my future life.

Another impressive aspect was the diversity of culture. Quite different from Chinese's preference of our own country, China in foreigners' eyes was usually made up of her tangible or intangible cultural heritages. Typical heritages, like Temple of Heaven, Tiananmen Square, embroideries, kites and so on, somehow represented the whole of Beijing or even the whole of China. Thus introducing all these cultural heritages caused much pressure to me. I was trying to explain everything in detail, but the historical value behind each heritage was too huge a part, which was not likely to make it clear once and for all. Difficult as the work was, I did hope that one day I could contribute more to cultural exchange, which was definitely worthwhile to put efforts in.

I was quite aware that reception work required so much consideration in advance. One would need to plan everything meticulously so as to make your guests feel comfortable. All in all, this was a rare chance and challenge for me to enhance my ability, through which I also knew better about my strengths and weaknesses. And most importantly, to be recognized by others was actually the best feeling in the world.

Yang Lan, Junior of Law School, Beihang University



Mondal Krishna Prosad, from Bangladesh, is in his second year as a graduate in the program of Space Technology and Application, majoring in remote sensing and geological information system. He obtained his bachelor and master degree of geology and environment in Bangladesh. Since his sophomore year, he showed interests in geological information system and wanted to conduct further study. As there is no relative program in this field in his country, he submitted his application to Beihang's program as soon as he saw the admission information. After recommendation of Asia-Pacific Space Cooperation Organization, material auditing and online interview, he was admitted to Beihang University and honored with Chinese Government Scholarship. He said that he was lucky to study in this school and he cherished the opportunity very much.

Although this young fellow was born in the 1990s, he is already a volunteer and photographer with rich experience. Early in his undergraduate career he actively participated in all kinds of volunteering service organization, including Bangladesh National Cadet Core, YES, etc. On

account of his keen interest on photography and his laborious study on it, he was selected by UNFAO as a photographer, working for six months in the program of "Bangladesh Historical Map Collection" after graduation. It was after that he was devoted to study on photography in a professional way. At that time he needed to grasp every opportunity for practice because he did not have a private camera. Luckily, this year he got his own camera and began a lifestyle of "taking pictures wherever I am".

After entering Beihang University, encouraged by Mr. Weng Jingnong, Executive Director of RCSSTEAP, he continued his volunteering job in all kinds of academic meetings, short-term trainings and cultural activities. He never mentioned a word of tiredness among all those tasks, photography, purchase order, assistance for the organizations. Take the recent remote sensing training program as an example, as an active volunteer, he not only took his task on photography but also engaged in checking equipments, doing cleaning. He was always the first to arrive and the last to leave. He always made warm response to every teacher or student's question, impressing the

whole class. He said, "Because this program have permited or admitted, and he hopes to continue so many relevance with my major, through the his volunteering job. After returning to his country, voluntary work, I also gained lots of professional he will keep his voluntary service, introducing knowledge useful for my research, such as how some basic knowledge about remote sensing to do drought and flood monitoring by different and geological information system to people softwares. Also, I have learned some experience for program management, which is helpful to my future development. I really thank my tutor and the center for this chance."

When talking about the unforgettable experience during his voluntary service, he said that was a "mistake". Last year, the center organized students to pay a professional visit in Xi'an, and Mendal asked to be responsible for taking pictures. This time he ignored the task of previous examination. One day he found that the memory card was full and there was no way to get a new one nearby, as a result, the shooting had to be ended. He noticed that no matter how familiar you were with your job, he said, you must make preparations in case of emergency.

"Everyone is pursuing happiness. According to me, happiness is a spiritual state. I feel the happiness of being needed through my volunteering job. I made friends, I also enhanced my ability. This June, at the closing ceremony of the course, Mr. Weng introduced me to everyone as 'voluntary photographer' of our center, at that moment I was so overwhelmed with happiness." He said, apart from that, he hope more and more people could join in the volunteering service. Why not if you can help others and make yourself happy at the meantime?

In second year of graduate study, his study career in Beihang is going to end. He still wants to pursue a doctoral degree at Beihang University if

in Bangladesh on the Internet, thereby making contribution to the development of his nation.

The secret of ambition lies in action. We firmly believe this "active" boy will achieve his dream one day!



# **Participant Show**

## Welcome to Beihang University







#### To Be a Better Man at Beihang University

If

Doing what you have not done means growing up;
Doing what you do not want to do means changing;
Doing what you dare not do means breaking through.

Then, in this fall,

What you must do is to be a better man at Beihang University!







NEWSLETTER (Serial No.007) | Additional Words

This issue records the main work of RCSSTEAP from July to September, 2016, including International Training Workshop on BeiDou Technology and Its Applications, International Training Course on Space-based Technologies for Flood and Drought Monitoring and Risk Assessment, International Workshop on GNSS and other activities at the Centre. In September, the new participants registered and started their new life here.

Adhering to the mission "Promoting the peaceful use of space technologies for the benefit of all humankind", the Centre is always focusing on program development and capacity building together. The environment and facilities of the Centre are continuously upgraded. The Album of "Story about the Centre" has been published. A new column "Volunteers" in this issue provides a platform for volunteers to share their stories with the Centre.

Your concern and support have always been our sources of motivation, and your comments and suggestions are highly welcomed. We will continue forward step by step with perseverance and enthusiasm.



## Glance of the Centre

#### Name List of the Governing Board Members

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No.	Title	Name	Gender	Country	Affiliation & Title
1	Chairperson	Xu Dazhe	Male	China	Administrator of China National Space Administration (CNSA)
2	Member	Houari Karim	Male	Algeria	Director of International Cooperation of Algerian Space Agency (ASAL)
3	Member	Felix Menicoccí	Male	Argentina	Secretary General of Argentina National Commission of Space Activities
4	Member	Md. Dilwar Bakth	Male	Bangladesh	Chairman of Bangladesh Space Research and Remote Sensing Centre
	Member	Jaime Antonio Mendoza Gonzales	Male	Bolivia	Space Segment Enginee of Bolivian Space Agency (ABE)
	Member	Jose Raimundo Braga Coelho	Male	Brazil	President of Brazilian Space Agency (AEB)
7	Member	Thomas Djamaluddin	Male	Indonesia	Head of National Institute of Aeronautics and Space (LAPAN)
8	Member	Imran Iqbal	Male	Pakistan	Member of Pakistan Space and Upper Atmosphere Research Commission (SUPARCO)
9	Member	Jose Julio Cesar Humberto Acuña	Male	Peru	Representative of National Commission on Aerospace Research and Development (CONIDA) of the Republic of Peru
10	Member	Victor Cano	Male	Venezuela	President of Bolivarian Agency for Space Activities of Venezuela (ABAE)

#### Name List of the Representatives of Observers



No.	Name	Gender	Affiliation & Title
1	Simonetta Di Pippo	Female	Director of the United Nations Office for Outer Space Affairs (UNOOSA)
2	Li Xinjun	Male	Secretary General of Asia-Pacific Space Cooperation Organization (APSCO)

#### Name List of the Advisory Committee



No.	Title	Name	Gender	Country	Affiliation & Title
1	Director	Xu Huibin	Male	China	President of Beihang University





#### Campus of the Centre (



#### Secretariat of the Centre

