## Report on the Asian Conference on Remote Sensing (ACRS 2019) Student Activities and ISPRS SC Summer School

Sheryl Rose Reyes

## The Student Activities in ACRS 2019

The 40<sup>th</sup> Asian Conference on Remote Sensing (ACRS 2019) was held from October 14 – 18 at the Daejeon Convention Center, Daejeon, South Korea. This year's conference, which was organized in partnership with the Korean Society on Remote Sensing and the Daejeon Metropolitan Government, was themed "Progress of Remote Sensing for a Smart Future." Student activities such as WEBCON9, Student Session, and Student Night were again organized this year.

Six entries were received for WEBCON 9, with participants coming from Taiwan, Japan and South Korea. The judges were Dr. Paolo Gamba from IEEE GRSS, Dr. Anjana Vyas from CEPT University, Dr. Kohei Cho from the Asian Association on Remote Sensing (AARS), and Dr. Fuan Tsai from National Central University. The Bronze prizes were awarded to Ms. Regita Pramesti Nur Cahyani of National Central University in Taiwan for her entry titled "A Personalized Geowebsearch Engine Based on User Intent Recognition" and to Mr. Kouki Kurita, Mr. Yuichiro Yamaguchi and Mr. Riku Nozaki of Shibaura Institute of Technology for the entry "Workout GIS." Mr. Takuho Matsuo of Tokai University, Japan received the Silver prize with his entry titled "Situation Visualization System of Disaster Area Using Track Mounted Camera." The Gold Prize was given to Mr. Tzu Cheng Hou and Ms. Yu Qi Lin of National Taiwan Normal University for their work on "Virtual Indigenous Tribe Immersive Virtual Reality." Certificates of appreciation were given to the other entries who presented their masterpiece in this special session.



The Student Session chaired by Ms. Sheryl Rose Reyes, Chair of the ISPRS Student Consortium (ISPRS SC) and co-chaired by Mr. Seung Joo Yoon of Inha University followed the White Elephant Session in the afternoon. Ten presentations were delivered during the session, including the presentation of the ISPRS Student Consortium and the student activities in ACRS given by Sheryl Rose Reyes. The universities that presented were the University of the Philippines (Department of Geodetic Engineering and Institute of Environmental Science and Meteorology), the University of Tokyo, the Shibaura Institute of Technology, National Central University, National Taiwan Normal University, Tongji University, Inha University, and the Ulsan National Institute of Science and Technology. The WEBCON winners were also announced at the end of the Student Session.



Finally, the Student Night was held in the evening to gather students and young professionals to socialize and establish their professional networks. About 70 students attended the student night and, with the assistance of the students from Inha University's IE Lab, icebreakers and games were hosted. Mr. Miguel Luis Lagahit from National Cheng Kung University was the event's emcee. The participants also enjoyed great food and drinks.



Every year, the student activities in ACRS continue to attract more and more participants. Professors, students and young professionals are now familiar with these events, which provide more opportunities for AARS to engage the youth.

## The ISPRS SC Summer School



The ISPRS SC Summer School was held at the Korea University in Seoul, South Korea after ACRS2019 from October 21 – 25, 2019. The theme of the summer school was "New Remote Sensing Technology for Smart Future." It consisted of about 10 sessions, including lectures and hands-on sessions. A total of 28 participants from the Philippines, Indonesia, Malaysia, Japan and South Korea attended and completed the summer school.



The summer school was opened by Dr. Woo-Kyun Lee of Korea University and the Korean Society of Remote Sensing. The first lecture on drone mapping was given by Dr. Chul-uong Choi, followed by sessions in the afternoon on SAR and interferometry and machine learning on EO data for agricultural applications given by Dr. Ioannis Papoutsis and Dr. Vassilis Sitokonstantinou, respectively. The first day concluded with a Korean BBQ party where Professor Seongwoo Jeon taught the participants about Korean culture and how to enjoy food and drinks in Korea.



The second day sessions included one on climate change risk assessment using Earth observation data facilitated by Dr. Woo Kyun Lee, followed by a lecture on forest monitoring by Dr. Haemi Park. The last session was handled by Dr. Nguyen Dinh Duong, who discussed his work on automated classification of land cover with Landsat image data and demonstrated the capabilities of the program he created for the image classification.



Dr. Sang Wan Kim started the session on the third day with a lecture on SAR interferometry with a focus on InSAR and PS InSAR. Dr. Chulsoo Ye discussed his work on monitoring of flooded areas using multisensor satellite imagery. The last session, with Dr. Hoonyol Lee, focused on satellite and ground-based SAR systems and applications.



The fourth day was a field trip to the Korean Folk Village in Gyeonggi-do, which was about 2 hours away from Seoul. The participants were introduced to the historical folk villages of the country and enjoyed cultural music and dance performances. A candle-making session was held in the afternoon, providing participants an opportunity to make their own scented candles as their personal souvenirs.



Finally, the last session in the summer school, which focused on the quality assessment of high-resolution optical images, was given by Dr. Taejung Kim. A short campus tour followed and participants took great photos around the beautiful surroundings of Korea University. The closing ceremony was hosted by Dr. Woo-Kyun Lee, Dr. Seongwoo Jeon, and Ms. Sheryl Rose Reyes. Certificates were awarded to all the participants and everyone bid farewell to new friends, professors and to the local organizers of the summer school.



The summer school provided comprehensive lectures on automation, radar remote sensing, and image quality assessment as well as on the current applications of Earth observation data to climate change. These lectures are of great importance to students and young professionals alike, given that Earth observation data is becoming more important in achieving a smart and sustainable future. In addition, the lectures on radar remote sensing from the South Korean professors provided a comprehensive explanation of the basic concepts and extended to the applications of radar imagery. Overall, the summer school was a great success. (Photos taken by Dr. Nguyen Dinh Dong, Sheryl Rose Reyes, and Yoonji Kim)