

Session: [B5A-5] S7 : Historical Astronomy, Astronomy Education and Public Outreach

Date: August 22, 2014 (Friday)

Time: 09:00~10:30

Room: Room E (Room 107)

Chair: Avivah Yamani (langitselatan)

[B5A-5-1]

09:00~09:15

[Invited] Roles of the OAD: Astronomy for a Better World

Wayne Orchiston (National Astronomical Research Institute of Thailand, Thailand) and Kevin Govendor

The mission of the Office of Astronomy for Development (OAD) is to help further the use of astronomy as a tool for development by mobilizing the human and financial resources necessary in order to realize its scientific, technological and cultural benefits to society. The 3 task forces, namely (1) Astronomy for Universities and Research; (2) Astronomy for Children and Schools; (3) Astronomy for the Public, have been established to drive global activities using astronomy as a tool to stimulate development. Since 2012, the OAD has appointed three Regional Nodes. Each Node will foster the goals of the IAU Strategic Plan and liaison with the OAD and the three sector Task Forces in planning and implementing relevant programs within the region. Several activities in each Task Force will be discussed in the presentation.

[B5A-5-2]

09:15~09:30

[Invited] Astronomy for Development Approaches in Asia

Kumiko Usuda-Sato (National Astronomical Observatory of Japan, Japan) and Akihiko Tomita

The International Astronomical Union (IAU) has set up the Office of Astronomy for Development (OAD) in partnership with the South African National Research Foundation (NRF). The OAD was officially opened in 2011 at the South African Astronomical Observatory (SAAO) in Cape Town, South Africa. With the vision of "Astronomy for a Better World", the mission of the OAD is to help further the use of astronomy as a tool for development by mobilizing the human and financial resources necessary in order to realize the field's scientific, technological and cultural benefits to society. One of the roles of the OAD is to implement the IAU's 10 year Strategic Plan.

OAD has established the three Task Forces (TFs): (1) Astronomy for Universities and Research; (2) Astronomy for Children and Schools; and (3) Astronomy for the Public. The members are selected from all around the world. Among them, three TF1 members (from China and Indonesia) out of 11, one TF2 member (from Japan: Tomita) out of 9 members, and four TF3 members (from Hong Kong, Sri Lanka, China, and Japan: Usuda-Sato) out of 10 are from Asia region.

One of the important tasks of the TFs is calling for proposals and reviewing them. In the last two years with translation support in 7 languages, the proposals relevant to astronomy for development were called. A total of 191 and 230 proposals were received in 2012 and 2013, respectively. Each TF group reviewed the proposals and reported to the IAU Extended Development Oversight Committee, and three lists (recommended, wish list, and rejected proposals) of each TF were approved. In 2012, seven-TF1, five-TF2, and six-TF3 projects were funded including 5 projects in Asia. The reports of all 2012 funded projects can be read on the OAD's 2014 brochure. The eight-TF1, eight-TF2, and seven-TF3 projects in 2013 including 6 projects in Asia are currently under way. Please visit the web site of www.astro4dev.org for funded projects and their reports. Many of the TFs members are related to various projects relevant to astronomy education and global networking, including Galileo Teacher Training Project (GTTP), Global Hands-On Universe (GHOU), Universe Awareness (UNAWA), Astronomers Without Borders (AWB), and many others. We share new information and discuss new ideas. We properly introduce new projects including astroEDU, crowdfunding campaign for Universe in a Box. In addition to the OAD TF works, Usuda-Sato and Tomita are involved in efforts to share our joy and enthusiasm to touch the Universe with diverse people such as people

with disabilities. We have had conferences in Tokyo twice to collect resources of such activities and to connect people who have similar goals. Our efforts meet one of the goals of OAD and some OAD funded projects. We will introduce our activities in Japan and also some OAD projects with similar approaches.

[B5A-5-3]

09:30~09:45

[Invited] OAD Activities in South East Asia

Suparek Aukkaravittayapun (National Astronomical Research Institute of Thailand, Thailand), Boonrucksar Soonthornthum, Wayne Orchiston, Supaluck Chanthawan, and Sulisa Chariyalertsak

This paper will briefly introduce the South East Asian Regional Office of Astronomy for Development (SEA-ROAD) and its functions. Then it will present past SEA-ROAD activities, for example, the 1st COSPAR symposium, the NARIT-KASI Winter School in Radio Astronomy, and also future activities, such as the NARIT-Seminar in Modern Astronomy for secondary school students in South East Asia and the International School for Young Astronomers (ISYA2014). Lastly, roadmap of SEA-ROAD in 2014 will also be presented.

[B5A-5-4]

09:45~10:00

Talking and Star-Gazing for Thai-Japanese Astronomy and Cultural Exchange

Pisit Nitiyanant (National Astronomical Research Institute of Thailand, Thailand), Nakai Senjo, Siramas Komonjinda, and Saranya Kongjit

Astronomy Research Laboratory, Department of Physics and Materials Science, Faculty of Science, Chiang Mai University and Japanese Studies Center, Faculty of Humanities, Chiang Mai University are co-organized "Talking and Star-Gazing for Thai-Japanese Astronomy and Cultural Exchange" activities once a year in early 2012-2013 at Chiang Mai University. The objectives of this activity are for astronomers to share astronomical and cultural knowledge of Thai and Japanese, and also to share it with the public. In addition, each partner has its own objective: for Astronomy Research Laboratory, promoting outreach activity and Japanese Studies Center, providing the public with knowledge of Japanese culture. This activity is divided to 2 sections: the discussion and the stargazing. During the discussion, the Thai and Japanese knowledge was presented. For example, the main theme in 2013 is "Comet" thus topics which presented are the perspective of comet, comet in Thai and Japanese historical record. Stargazing is astronomical observation with naked eye and by telescope. An average amount of audiences in these activities is 90, and the results of questionnaires by nearly half of all audiences indicate that average value for satisfaction is 92.23%. These activities provide an invaluable platform for cross-cultural exchange of astronomical knowledge and history of astronomy. They also provide general public with an opportunity to learn humanistic approaches to astronomy. The success of these activities is expected to have more cross-cultural events, such as Thai-Chinese and Thai-Korean exchanges.

[B5A-5-5]

10:00~10:15

Linking Young Astronomers in Southeast Asia: The SEAYAC Story

Rogel Mari Sese (Regulus SpaceTech Inc., Philippines)

The importance of involving young astronomers in developing astronomy cannot be overemphasized. This is very much true in areas where astronomy is still an emerging and minor field, such as in the Southeast Asian (SEA) region. However, recent years have seen a sudden spark of interest in developing professional astronomy within SEA, primarily for young astronomers and students. This was especially highlighted during the 2009 International Year of Astronomy. In this presentation, we introduce the Southeast Asian Young Astronomers Collaboration (SEAYAC), a recently formed organization that aims to provide a venue for professional and personal interaction for young astronomers in the SEA region. Here we present the background and rationale behind the formation of SEAYAC, its current status as well as planned future activities aimed at developing collaborations between young astronomers in the SEA region. We will also discuss the problems and challenges being faced by SEAYAC as well as its future plan of actions. It is the aim of this presentation to introduce SEAYAC to the astronomical community to encourage collaborations and interactions with both young and senior astronomers in and out of SEA region.

[B5A-5-6]

10:15~10:30

Handy Spectrograph and Its Application in Astronomical Education

In-Ok Song (Korea Advanced Institute of Science and Technology, Korea)

I applied common educational spectrograph (SV200R) in order to obtain astronomical spectra after inventing new adaptor for telescope. Experimental class and learning project in schools and public outreach are well established on imaging and photometry in terms of observations. However, experiment of astronomical spectrograph is rather hard to find because the procedures of spectral extraction and wavelength calibration is less convenient. SV2011R is 1D CCD array and thus has an advantage of unnecessary of spectral extraction. Also, basic wavelength calibration is installed on the provided software. It was adopted on 12-inch reflecting telescope in Korea Science Academy of KAIST in Busan and the spectra of bright object, Arcturus, was successfully obtained. It means one can provide educational program in a topic of astronomical spectrum. Few suggested projects are presented.