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NAINITAL, INDIA

IGAC Sponsored

IGAC-MANGO Meeting, Science Workshop, and Training Courses 2019

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HOST INSTITUTIONS

FUNDING

PARTICIPANTS

Japan, India, Bangladesh, Singapore, Myanmar, Malaysia, Indonesia, Vietnam, Philippines, Taiwan, Nepal, Sri Lanka, Cambodia, Brunei, Thailand, France, United Kingdom

BACKGROUND

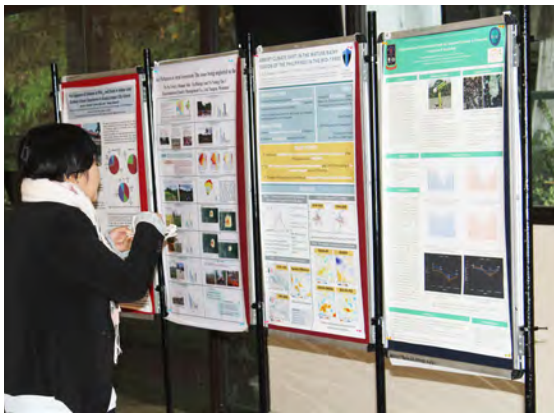
IGAC sponsored this workshop to foster the development of an atmospheric science community in Asia as part of its effort to create National/Regional Working Groups. IGAC-MANGO was established with the ultimate goal to form a cohesive network of atmospheric scientists in the Asian monsoon region, facilitate collaboration between Asian and international scientists, and foster the next generation of scientists in this region.

IGAC-MANGO 2019 Participants

Eleven current MANGO committee members, along with twenty-two early career scientists, and four invited lectures, gathered in Nainital, India, a town with a beautiful lake in the foothills of Himalayas, for the IGAC-MANGO Meeting, Science Workshop, and Training Course 2019. The main objective of IGAC-MANGO is to form a cohesive network of atmospheric scientists in the Asian monsoon region, facilitate collaboration between Asian and international scientists, and foster the next generation of scientists in this region. Recent updates and future directions of MANGO, including membership, new activities, and funding opportunities were discussed during the one day committee meeting. This was followed by a two-day science workshop and training course that included sessions dedicated to science-policy and science communication, as well as a joint MANGO-India scientific session, including 1 minute flash poster talks, and a course on satellite data analysis and low-cost sensors. Unique this year was a video-clip competition by MANGO early career scientists called "MANGO Junior" or "green-MANGO".

The sessions devoted to science-policy and science communication comprised four main components: an invited talk, a panel discussion, a video presentation, and a sharing talk on a case-study related to science

Nainital, India



◀ Training course, posters and launch of ozonesonde-radiosonde. ▶

communication. The invited talk entitled "Recurrent Haze in Southern ASEAN: What more can we do to prevent it?" given by Prof. David Koh covered multifaceted elements; it overviewed the recurrent smoke emissions from burning peat forest in Southeast Asia, the relevant policies built, the progression and challenges of policy implementation, and evolvement of understandings, as well as technologies of protecting the public by minimizing exposure to airborne smoke pollutants.

Following the invited talk, a panel discussion was convened where the invited members (Drs. David Koh, Shyam Lal, Candice Lung, MM Sarin, and Hiroshi Tanimoto) shared their individual experiences and insights on the gaps and dos-and-don'ts (for scientists) in effective communication linking science and policies. To provide a balanced view, the panel members encouraged to the early career scientists to concentrate on building solid scientific knowledge and research capabilities. Such endeavor is required to form a solid foundation to contribute to effective science-policy communication during later stages of ones' career development as a scientist.

A 20-min video focusing on "What is Science Policy? Why do we want to engage in Science-Policy" made by Dr. Erika von Schneidemesser was presented. The session in Science-Policy concluded with a successful story of how scientific findings led to meaningful policy of protecting the public from being overly exposed to emission of burning incense during religious activities in Taiwan. Dr. Candice Lung detailed local-culture-specific understandings in the mindset of public and policy makers, obstacles encountered, and the perseverance required to convince policy makers to address this issue. This was followed with a lively Q&A, encouraging all MANGO countries to endeavor a dynamic practice.

The MANGO 2019 workshop launched a new initiative on "MANGO Flavored Research-Educational Video Competition". The competition aims to enhance effective scientific learning and sharing through video literature that demonstrates (a) novel scientific research findings in the MANGO region, and/or (b) better explanation and understanding of existing yet challenging scientific concepts related to the scope within IGAC. A total of 10 submissions were received and all the MANGO members and invited delegates participated in the viewing and scoring of all the submitted videos.

Parallel sessions for a training course on satellite data handling/visualization and on low-cost sensors were also organized. Dr. Silvia Bucci gave lectures and hands-on training on satellite data retrievals with demonstrations of processing GOME-2, Sentinel 5P, and CAMS data.

Awards presentation

Lectures and hands-on training on low-cost sensors were provided on the next day by Drs. Tomoki Nakayama and Iq Mead. "Green-MANGOs" were grouped to perform and present measurements using low-cost sensors at different locations. These sensors were also provided to interested students/scientists for observations in their own countries. One of the unique events of the workshop was the live onsite launch of ozonesonde and radiosonde by Dr. Manish Naja, a rare experience and a highlight of the workshop.

A MANGO-India session on the second day hosted a total of 14 presentations, including two remote presentations, to provide an overview of the scientific research carried out in the individual member countries. The session helped to share information on status of air pollution and will contribute to focusing on future research themes in Asia. It was noted that so far, there has been only two major international observational field campaigns (INDOEX and Suskat) in South Asia. Considering the complexity and intensity of emission sources it is very important to have extensive observations, with open data policy, over this region with the Himalayas on the North and pristine oceanic regions to the South and a huge human population in between.

Dr. Hiroshi Tanimoto summarized the activities for 2020 and beyond. The event concluded with the distribution of top three posters and top two video clips awards with nicely made mementoes and certificates. Certificates of commendation were also emailed to individual awardees for their video clips.

Thank you for coming to Nainital for the first ever IGAC, NIES and APN sponsored meeting in India. The 3-day event highlighted the successes of the MANGO initiatives, while also outlining the work still needed. Further details of the event can be found at **http://cger.nies.go.jp/gac/igac-mango/**.