

Climatic Hazards Programme

International Conference on Atmospheric Chemistry and Climate Change 2018

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Professor Dr Peter Brimblecombe giving his keynote speech.

Held at Pusat Siswazah, Universiti Kebangsaan Malaysia (UKM) on 27-28 March 2018, the International Conference on Atmospheric Chemistry and Climate Change (ICACCCA 2018) was jointly organised by SEADPRI and Institute for Environment and Development (LESTARI) UKM, and supported by the Asian Network on Climate Science and Technology (ANCST) with collaboration from the Faculty of Science and Technology (FST) UKM, Institute of Climate Change (IPI) UKM, Institute of Ocean and Earth Science (IOES) University Malaya, Meteorological Department of Malaysia (MetMalaysia), Department of Environment (DOE) Malaysia, and Monsoon Asia and Oceania Networking Group (IGAC-MANGO). The ICACCCA 2018 was attended by 130 participants from Malaysia, Singapore, Thailand, Indonesia, Taiwan, Pakistan, Bangladesh, Japan, United Kingdom and United States of America. They comprised researchers, academicians, members from government agencies and private sectors, and students. It was organised to provide an opportunity to share knowledge and expertise in atmospheric composition and climate change research.

The two-day conference hosted three keynote speakers, 30 oral presentations and 20 posters with discussions on topics including emissions and pollutant composition, greenhouse gases, tropospheric ozone, biomass burning episodes, sea-atmosphere interaction, effects of pollution on regional weather and climate, long-range transport of atmospheric pollutants, air pollutants and climate change, and the health and legal aspects of atmospheric composition and climate change.

The three keynote speakers were Professor Dr. Peter Brimblecombe (Hong Kong City University), Professor Dr. Fredolin Tangang (UKM) and Dr. Hiroshi Tanimoto (National Institute of Environmental Studies, Japan). Prof. Dr Peter Brimblecombe's address was entitled Effects and Changes in Emission and Climate on Air Pollution; it covered the importance of the relative balance between pollutant emissions and climate in which there would be a need to examine a complex pattern of change that can override earlier generalised claims that pollutants will necessarily increase in the future. Prof. Dr. Fredolin Tangang spoke on Climate Change and Climate Variability: From Global to Regional on Science, Impacts, Solutions and Challenges and highlighted key findings of the Fifth Assessment Report (AR5) of the Inter-governmental Panel on Climate Change (IPCC) on the science, impact and mitigation efforts required to halt and slow down climate change, and what actions the country must take to avoid severe impacts in the future. Dr. Hiroshi Tanimoto delivered on Atmospheric Chemistry Research and International Collaborations: The International Global Atmospheric Chemistry (IGAC) Project and the IGAC Monsoon Asia and Oceania Networking Group (MANGO). He discussed the IGAC MANGO aims to enhance communication and collaborations between scientists, and explore opportunities for funding and infrastructure to foster scientific research, capacity building, and regional collaborations.

The oral presentations were divided into six sessions involving researchers from various backgrounds. They included Dr. Warradorn Phairuang (Prince Songkhla University, Thailand), Dr. Shani Tiwari (Nagoya University, Japan) and Dr. Paul Griffith (Cambridge University, UK). The involvement of young scientists and postgraduate students from various countries and institutions including India, Japan, Thailand and Malaysia in the oral and poster presentations was encouraged, giving them the opportunity to introduce their research work. It was a good platform for the young researchers to discuss and collaborate with researchers from other countries. At the end of the conference, a panel discussion was moderated by Prof. Dr. Joy Jacqueline Pereira, ANCST Director and Principal Fellow of SEADPRI with panelists Dr. Hiroshi Tanimoto, Dr. James Crawford (NASA Langley Research Centre) and Prof. Dr. Abdus Salam (University of Dhaka, Bangladesh). The discussion focused on the future of atmospheric sciences and climate change research, and how environmental matters are a shared problem among countries in the same region. It was agreed that the collaboration of researchers, young scientists and resources are crucial for understanding and resolving this issue.

As atmospheric composition and climate change effects are not limited to the environment alone, a more holistic approach in discussing the impact of environmental issues on other risks including health and exposures, is necessary. It all comes down to the implementation of research into policies and collaboration between researchers from different backgrounds. ANCST as a virtual platform for Asian scientists, can bring together all the cohorts of atmospheric chemistry and climate change in the region to address this common goal.