

1st WISE Symposium - Food Systems Transformation and SDGs

The 1st WISE Symposium was held last 30 November 2022 from 9:30 am to 12:00 noon during the 48th International Congress on Science, Technology and Technology-based Innovation (STT48) with the theme “*Science and Technology for Advancing toward SDGs*”. The symposium was co-organized with the Committee of Women in Science and Engineering (WISE) of the Association of Academies and Societies of Science in Asia (AASSA), under the support of the Science Society of Thailand and Walailak University, Thailand. The symposium was held at Room 7209 Building 7 in the School of Science, Walailak University, Nakhon si Thammarat, Thailand.

The WISE Symposium focused on the topic, “Food System Transformation and SDGs”. Food systems contribute about 30% of greenhouse gas emissions, 80% of biodiversity loss, and account for up to 70% of all freshwater use and 80% of all deforestation. Many of these environmental problems have exceeded the planetary boundaries. There are other challenges in the food system, such as hundreds of millions of people around the world still lack access to adequate food nutrition, and about one-third of food is wasted in supply chains and consumption. Meanwhile, the Covid-19 pandemic and the Ukraine war have seriously affected food production, distribution and consumption, pushing up the cost of food production and distribution, further affecting the safe supply and equitable distribution of food, and exacerbating nutrition and health problems. In the face of increasingly serious nutrition, health and environmental problems, the transformation of food systems is imperative. Coordinated solutions within and outside the food system, science and innovations etc. are fundamental for food system transformation and achieving the SDGs. The symposium aims to identify various pathways on addressing food system challenges and transforming food system towards a more resilient and sustainable one.

The Symposium was chaired by Prof. Dr. Supawan Tantayanon (Thailand) and co-chaired by Prof. Dr. Azra Khanum (Pakistan), Prof. Dr. Aura Matias (Philippines) and Prof. Yukari Ito (Japan). Other WISE Committee members who attended in person were Prof. Dr. Nadira Karunaweera (Sri Lanka), Prof. Dr. Srubabati Goswami (India), Prof. Dr. So Young Sohn (Korea) and Dr. Prof. Suchana Chavanich (Thailand). WISE Committee members who attended online were Elena Grigorieva (Russia) and Prof. Dr. Linxiu Zhang (China). Participants of the STT48 Congress were able to attend in person and online.

Five speakers were invited to present their research papers in the program as follows:

Time	Speaker	Title of Paper
9:30am-10:10am	Prof. Dr. Vania G. Zuin Zeiler Leuphana University, Germany *Pre-recorded Video	Sustainable Chemistry and Circularity in the Context of the “From Farm to Fork” Strategy
10:10 am -10:30am	Dr. Lalana Thiranusornkij CPF Research and Development Center Co., Ltd., Thailand	Present and Future Food Based on CPF’s Agro-Industrial Business

10:45 am - 11:00 am	Prof. Dr Azra Khanum Pakistan Academy of Science, Pakistan	Current Environmental Calamity in Pakistan totally Shaken the Food Systems Transformation and SDGs
11:00 am - 11:15 am	Prof. Dr. Yunli Bai Associate Professor, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences	Empowering Women in Intra- Household Decision-Making to Improve Crop Diversity and Household Dietary Diversity: Evidence from Five Developing Countries in Asia
11:15 am - 11:30 am	Prof. Dr. Elena Grigorieva Far Eastern Branch of the Russian Academy of Sciences, Russia *Pre-recorded Video	Food-Energy-Water Nexus and Climate Change: Risks and Social Vulnerability

A brief round table discussion was held after the paper presentation to brainstorm other topics and concerns that may be subject to future research and sharing in the next WISE Symposium. Three topics were highlighted. These were: a) Food security (in light of the growing population); b) Nutrition (providing for affordable healthier food) and, c) Climate action (a call for sustainability measures).

Other Activities Attended by the WISE Committee members:

29 November AM: Attendance in the STT48 Opening Ceremony
 PM: WISE Committee Meeting (Room 7204, Lecture Building 7)
 Welcome Reception

30 November Other Paper Presentations in the STT48 Congress

Session	Author	Paper Title
Session A	Srubabati Goswami	The Curious Case of the Sterile Neutrino
Session B	Azra Khanum	Development of DNA Vaccine against Tuberculosis
Session B	Nadira Karunaweera	Leishmaniasis in Sri Lanka: Then and Now
Session D	Yukari Ito	Crepant Resolution of Quotient Singularities and the McKay Correspondence

PM: Congress Banquet at Wailalak University