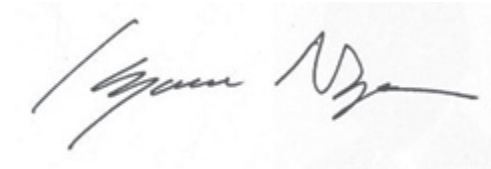


FOREWORD



Kyosuke Nagata
President
University of Tsukuba

Dear Colleagues and Friends

It is my distinct pleasure to welcome everyone to Tsukuba Global Science Week (TGSW) 2017, now for the 8th year running.

The history of the University of Tsukuba extends back 145 years when it was founded by the Meiji government as the first institution of higher education and premier normal school. A little over forty years ago in October 1973, our university relocated from Tokyo to Tsukuba City where it was reborn as a comprehensive institution of higher education.

Since its establishment, the University of Tsukuba has aimed for interdisciplinary education and research and to be a university open to society and the world. In accordance with these principles, we are delighted to host TGSW which gathers together a number of participants not only from a diverse range of academic fields but also from many different countries. What started out as an event focused on a single academic discipline, TGSW now offers sessions from a wide variety of fields ranging from the hard sciences to the humanities with prominent researchers from more than 30 different countries.

TGSW is a showcase of world class researches carried out by our faculty members jointly with fellow scientists throughout the globe, including those associated with

public and quasi-public institutions based in Tsukuba Science City and our partner universities outside Japan. But TGSW is more than that. The radical transformation of a globalized society has brought about a range of global challenges – food crisis, energy issues, environmental risks, never-ending wars, poverty, and the list goes on. These could be solved only by *trans-border* collaboration for innovation, so that the greater community of scientists, regardless of their areas of specialty, citizenship, ethnicity, gender, faith, and world views, must get together and collaborate closely. TGSW can serve as an invaluable forum for exchanging views on how to meet those challenges in a way that defies all kinds of traditionally conceived barriers.

The scope of TGSW is indeed broad and far-reaching. By bringing together internationally renowned researchers and aspiring young researchers and students based in Tsukuba and much beyond, it covers a whole range of topics, promoting lively exchanges, regardless of borders and disciplines. It also serves as an ideal international networking opportunity for trans-disciplinary, trans-organizational and trans-border collaborations.

Building on last year's theme *Innovation and Collaboration among Industry, Government and University*, we have decided on the theme of *Science for Social Innovations* this year to explore the question of how the “sciences,” as widely understood to involve not just the hard sciences but also the social and human sciences, may offer innovative solutions to global challenges.

I would like to thank all of you for your participation and hope that the range of sessions on offer will set off meaningful dialogues among yourselves. The continuing success of this conference means that planning can proceed with confidence for the event next year.