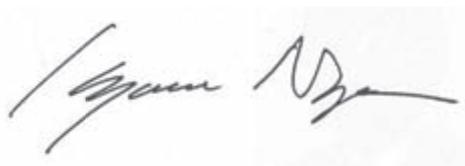


FOREWORD



Kyosuke Nagata
President
University of Tsukuba

Dear Colleagues and Friends

It is my distinct pleasure to welcome everyone to Art & Design Session and Tsukuba Global Science Week (TGSW) 2016, now for the 7th year running.

The history of the University of Tsukuba extends back 144 years when it was founded by the Meiji government as Japan's 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 with a single academic discipline, TGSW 2016 now offers sessions from a wide variety of fields ranging from hard sciences to humanities with prominent researchers from over 40 different countries.

TGSW is a show case 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 University of Tsukuba, just like other higher education institutions, also confronts a range of issues. How can we stay afloat and relevant in this day and age? In particular, how can WE contribute to resolve global problems, how can WE attract talented individuals to our fold, the quest for external funding, just to name a few. Universities have long been used to autonomy to the extent of being insulated from society at large. TGSW offers a great chance for transcending a border between countries. We also want to break down such barriers between sectors, for instance, by seeking synergy through collaborations with government and private firms. Hence, our choice as principal theme for this year's TGSW is *Innovation and Collaboration among Industry, Government and University*. We are honored indeed to have as our keynote speakers pre-eminent experts in the area – Dr. John Davis, Dr. Yuko Harayama, and Dr. David Winwood among others.

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 now proceed with confidence for the event next year.