## **Preface**

Chitose Institute of Science & Technology (CIST), founded in 1998 as a private technical college, offers a unique educational environment that attracts young and active students. Research done at CIST includes fields such as photonic materials, bio-photonics, photonic devices, subsystems, networks, information and service engineering. We strive to make these results of research and educational systems known to the public as a part of the self-evaluation of academia. From this viewpoint, we organize international forums every year since the foundation of CIST.

Major topics in the past were: Organic nonlinear optics in 1998 (ICONO4), organic photonics and electronics in 1999 (CIF-1), optical memories in 2000 (ISOM2000, organized by ISOM), nanotechnology toward photonic science and technology in 2001 (CIF-2), bio-photonics, nanotechnologies, photonic networks and organic transistors in 2002 and 2003 (CIF-3 and CIF-4), novel photonics and media technologies in 2004 (CIF-5), organic electro-phosphorescence and organic transistors in 2005 (CIF-6), photonic devices and systems, bio-photonics and information & media technologies in 2006 (CIF-7), optical materials, devices and systems in 2007 (CIF-8), organic electronics and photonics in 2008 (CIF-9, co-organized with KJF 2008), optical devices and systems, biomedical and green technologies in 2009 (CIF-10), polymer photonics, and novel optical technologies in 2010 (CIF-11), optical materials, nano- and bio-imaging, and communications in 2011 (CIF-12), biomimetics, photonics sensing and networks in 2012 (CIF-13), Laser - From Science to Applications in 2013 (CIF-14), Nanotechnology - From Synthesis to Devices in 2014 (CIF-15), "Applied Material for Photonics" and "Optical Devices and Systems" in 2015 (CIF-16) and Memoriam of Naoya Ogata, a professor and the 2nd president at CIST, in 2016 (CIF-17).

The 18th CIF was held on October 9-10, 2017, the conference was organized to discuss "Smart Nature City Chitose," the next vision of CIST for the contribution to municipal communities.

On this occasion, we were privileged to have special lectures for public by Mr. Takayuki Nakao and Dr. Hideki Ishida, and a plenary speech by Dr. Julia Krohmer.

Finally, I would like to express my sincere thanks to all distinguished guest speakers both from abroad and Japan for their stimulating presentations and discussion during the forum, to other presenters for their newest achievement, and to all the participants of CIF18. The symposium would not have been successful without the generous financial sponsorship from Photonics World Consortium (PWC) and the support from City of Chitose and Chitose Tourist Association are highly appreciated.

Masaaki Kawase Chairman of CIF18 President of CIST