

Preface

It is our great pleasure to publish “Proceedings of 20th Chitose International Forum on Science and Technology” which was held successfully on October 14th, 2019.

Being in its 20th year, the traditional word “Photonics” vanished from the conference title. The main topic of CIF1, the first forum held in 1999 was organic photonics and electronics. Since this and all the subsequent fora have been organized by faculties of Chitose Institute of Science and Technology (CIST) founded in 1998 and originally specialized in photonics science and technology, CIFs in the early days focused on photonics and related areas such as bio-photonics, nanotechnologies, and photonic networks and systems.

We recognize that photonics is one of the most important fields in science and engineering, and we also understand that application of photonics to other fields or fusion with other technologies are critically essential for the development of future industry and civilization. Therefore, CIST reorganized its structure about ten years ago and started or extended to the fields of bioscience and information technology. The name of the sole faculty of the university also changed from “Photonics Science and Technology” to the more encompassing “Science and Technology.” Thus, the transition of CIF concepts was parallel to that of CIST.

For twenty one years, CIST was governed as a private university, and in April 2019 it turned into a public university being run under the support of Chitose City government. When the concept of a city university was proposed in the end of 2016, we started “Smart Nature City Chitose (SNC Chitose)” project for the contribution to and collaboration with municipal communities. From CIF18 in 2017, the central agenda has been focused on this concept. Sessions of CIFs were separated into two parts, that is, CIF session and SNC session. The CIF session was the technical part composed of several invited talks and a poster session. The SNC part was held in the city center and was open to citizens and business persons with Japanese as the official language. CIF19 and CIF20 were also given in the same fashion in the following years.

The SNC theme of CIF20 was “A sustainable city by resilience design for both usual and extraordinary situations,” and the CIF theme was “Wisdom of coexistence with nature for a sustainable society (interchange in the northern sphere).” The papers in this proceedings were mainly contributed from authors of the poster session. We hope these newly published scientific achievements in this proceeding will invite opportunities for the next development and future collaborations.

Finally, I would like to express my sincere thanks to all distinguished guest speakers for their stimulating presentations and discussion during the forum, to other presenters for their newest achievement, and to all the participants of CIF20. The symposium would not have been successful without the generous financial sponsorship from Photonics World Consortium (PWC) and the support from Chitose City.

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