

Message from the Director

The year 2021 was continually impacted by the COVID-19 pandemic, not only for NSRRC and Taiwan but also for all countries in the globe. The world was faced with an unprecedented challenge of a rapidly evolving virus that blusteringly altered our pace of work and life. Despite this, NSRRC took agile preventive measures and implemented rolling-wave adjustments, so as to maintain advancing while ensuring the safety of our scientific community as a paramount priority.

NSRRC has, however, delivered scheduled beamtime at a very high percentage under such a restricted situation, outperforming similar facilities around the world. We saw the achievement of 489 SCI papers published using NSRRC facilities in year 2021 with an average impact factor progressing steadily up to 9.785. With these two determinants surpassing expectations, the influence of the overall NSRRC publications attained an increase by 25.2% over the previous year. Meanwhile, NSRRC marked an uplifting milestone in the development of accelerator technology. The accelerator of Taiwan Photon Source achieved a steady operation at its designed beam current, and was officially raised to 500 mA for routine operation. These fulfillments were driven by our commitment to provide synchrotron radiation of utmpst quality as a sharp tool to unlock the innovation of science and technology, which in the end will facilitate the welfare of human life.

NSRRC also took initiative in collaboration with international research facilities and domestic industries. During the year, NSRRC inked several Memoranda of Understanding, including a renewal with MPI CPFS in Germany, and a new term with ELI Beamlines of Czech Republic. The Industry Applications Division was spun off from the Experimental Facility Division and became an independent one, signaling NSRRC's capabilities in transferring its cutting-edge technologies to industrial applications and production processes. These actions were taken to extend and to expand our engagement in the worldwide scientific community.

The other notable event was the first presentation of a NSRRC Outstanding Paper Award. Since its establishment, NSRRC has upheld the principle of the award to recognize research toward the eternal truth of the universe and the overall benefit for humanity. This momentous award symbolized the harvest of remarkable scientific findings over the years, which honored NSRRC in return. We look forward to applauding, motivating and inspiring more research teams to explore knowledge in the uncharted areas of science as well as to solve global challenges using synchrotron radiation.

For all these purposes, the entire NSRRC staff with an unwavering determination vows to strengthen our capabilities and services. We have been on a journey, and hopefully users and friends will take the ride with us. Together, we shall continue to pursue our vision and to focus our devotion to science and knowledge creation for the benefit of society at large.



Gwo-Huei Luo
Director