

RIKEN Symposium
The 3rd: Advanced Optical Fabrication for Analyzer Technologies
(ADOPTECH2022)

Date: 14:10-16:30, March 18, 2022

Innovated optical fabrication technologies have been accelerated through applications of advanced machining processes using ultra/nanoprecision machine tools and also research networks creating advanced optical elements at Materials Fabrication Laboratory (MFL), RIKEN with many collaborators. Furthermore, advanced analyzers with “exclusive specifications” have been developed through applications of such produced advanced optics: one of the representative examples is development of cosmic ray analyzer “Mini-EUSO telescope” which has been launched for ISS (International Space Station) in August 2019. Another example is development of a portable elemental analyzer which employs a X-ray mirror produced via combination of ELID-grinding and CMP.

The ADOPTECH has been founded to provide an opportunity discussing on research and development related to novel optical fabrication technologies and on development of prototype analyzers by employment of the produced advanced optics. This symposium has been organized to provide the latest topics on new optical fabrication and special surface fabrication and finishing. Productive discussion and exchange of information on each research topics are expected through this symposium.

Time	Program
14:10-14:40	ELID-Grinding and Ion-shot Processing on Ultraprecision Machine and their Applications to Optical Fabrication Hitoshi Ohmori, RIKEN
14:40-15:10	ELID Grinding with Conductive Elastic Wheel Containing Carbon Black for Mirror Surface Finish of Complex Shape Atsushi Ezura, Kanazawa University
15:10-15:20	Break
15:20-15:50	High-efficient slurryless manufacturing process for SiC wafers based on electrochemical mechanical polishing Xu Yang, Osaka University
15:50-16:20	Advanced Laser Development and its Application to Surface Texturing Process Satoshi Wada, RIKEN
16:20-16:30	Summary, Hitoshi Ohmori, RIKEN

Contact: E-mail: mfl@mfl.ne.jp (Materials Fabrication Laboratory)