Division of Measurement
Committee for Sensing Photonics Technology

Optical measurement technologies in SICE
--- New Sensing Technology by Optics: from Principle to Application ---

Keywords: 1) Photonics sensing, 2) Optical material, 3) Optical device

Goals
Surveillance and enlightenment of sensing technologies using optical properties such as high sensitivity, noncontactness, electromagnetically-resistance, environmentally-resistance as well as the basic technologies.

Themes
Creation of photonics sensing principle, photonics material and photonics device as well as establishment of sensing system using these key technologies.

Key Technologies
Photonics devices such as laser diode, photo detector, optical fiber, optical waveguide, LCD

Activity Plan
Cooperation of Optical Sensing Technical Workshops (June and December)
Co-sponsor of Riken Symposium (November)
Planning and implementation of lectures, seminars and laboratory tours

History
Feb. 1982 Technical committee for industrial measurement research using optics
Mar. 1986 Committee for applied optical measurement
1996 Committee for Sensing Photonics Technology

Chair: Ichiro Fujima, NMIJ/AIST <fujima.i@aist.go.jp>
Member of steering committee: 13persons (7 from companies, 1 from university, 5 from agencies etc.)

Key technologies and the applications

Property
Non-contactness
Electromagnetically-resistance
Environmentally-resistance
High sensitivity

Technology
Optical fiber
Optical detector
Laser diode
Optical waveguide
LCD

Application
FA, OA, HA, Security, disaster prevention, health care, transportation
Space, aviation, ocean