APAS (Automatic Polarization Analysis System) Guide

What's a polarization analysis system?

By measuring and analyzing the polarization state, it is possible to analyze the various items such as the internal state and the surface shape of the material, and the optical properties, etc.

Automatic polarization analysis system of Sigma Koki provides the software and an optical system that are combined with a standard light source, optics, holder and detector. And it is available for dedicated measuring device as well as simple evaluation system. Furthermore, we can propose for a wide variety of measurement and evaluation applications.

Polarization Measurement Software

Simple polarization analysis software "SimpleAPAS"

For corresponding to the extinction ratio and phase difference measurements at specific wavelength such as a laser light, it is software that can also add-on to an existing optical system of the customer.

[Main function]

- O Automatic adjustment for wave plate, the axis direction of analyzer.
- OMeasurement of polarization and phase difference by rotation compensator system
- OThe phase difference measurement by the Senarmont method
- OLog measurement of each operation

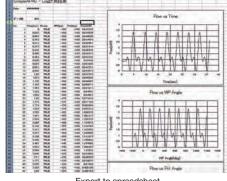
Integrated polarization analysis software "SKPola"

It is the software that supports up to spectral data characteristics in combination with the optical system dedicated to using the UV, Visible and Near-infrared light source.

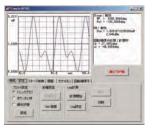
Since it is available to correspond to both the spectroscopy and single wavelength measurement and also multi-order phase difference measurement, it covers all the primary evaluation items of polarization optics.

[Main function]

- O Automatic adjustment of the polarization optical axis direction
- O Polarization measurement by rotating analyzer method
- O Spectral transmittance ratio measurement
- OPhase difference measurement by Senarmont method
- Ocircularly polarized light contrast measurement
- Log measurement
- O Polarization measurement by rotating compensator method
- O Polarizer transmission polarization ratio measurement



Export to spreadsheet



Extinction ratio measurement



Poincare sphere display

Example of Polarization Measurement Application

For customer's requirements, we can provide customized products and also design newly.



Polarizing film transmission polarization ratio measuring system



Coaxial observation system with phase difference measuring system



Circularly polarized light measuring system

Application Systems

Optics & Optical Coatings

Opto-Mechanics

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