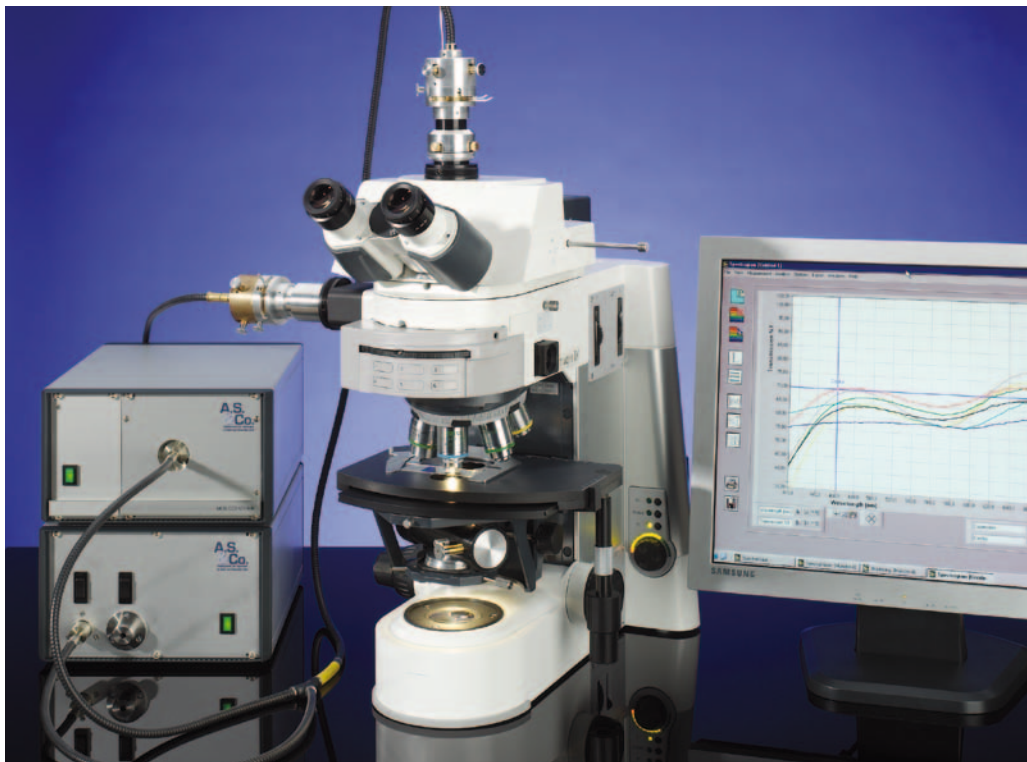


Microscope SPECTROSCOPY

SpectraVision Configurations for Applications in Microscope Spectroscopy

SpectraVision from A.S. & Co. sets new standards in quantitative microscope colour detection. PC-controlled motorized microscopes are merged with diverse illumination systems, flexible use of cameras, spectral sensors and PMTs, software modules that can be freely combined as required and a high level of remote controlled automatic functions into a concept, which enables the user to scale the workstation to the full range of spectroscopic issues.



Optical Flexibility through the Free Selection of the Basic Microscope

- SpectraVision modules from A.S. & Co. are attached on microscope standard mounts.
- The microscope light sources guarantee precise sample observation while stabilised external light sources provide the correct measurement conditions.
- Optional additional illuminations support the positioning of apertures or the adjustment of lasers and flashes.
- Various types of additional pinholes for excitation and emission can be implemented.
- Deep UV modifications expand the transmission range below 300nm.

SpectraVision from A.S. & Co. utilises the full range of optical microscopy and offers

- rapid, cost effective preparation
- non destructive observation
- accelerated spectra detection in a few seconds
- comparisons between references and the samples being examined
- reporting according GLP
- easy data transfer into external evaluation tools

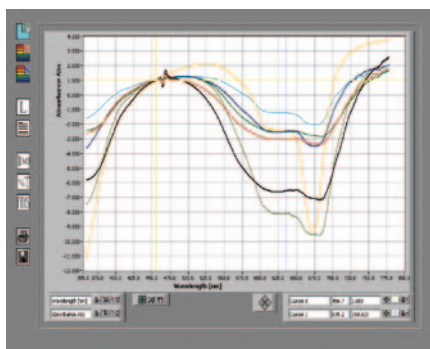
ACCESSORIES

Modularity guarantees Flexibility



Our Sensors:

- **CCD Arrays** measure between 220 nm and 1000nm, Peltier-cooled for use in Dark Field and Fluorescence Microscopy for weak signal detection
- **Photodiode Arrays (PDA's)** for spectral analysis between 195 and 2200 nm as low noise alternatives for applications with well illuminated samples
- **Photomultiplier-Modules (PMT's)** – direct mounted or fiber coupled, when the highest dynamic specifications are required, available as a Photon-Counting Version or Peltier-cooled
- **Analogue and Digital Videosystems** for two-dimensional quantification and three-dimensional observation combined with image analysis software



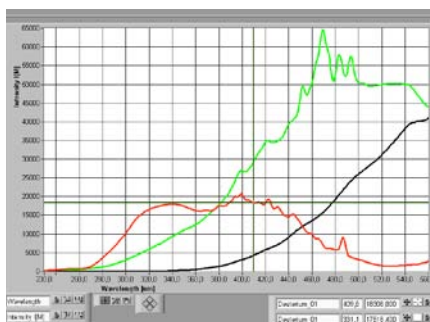
SpectraVision Software

- **SpectraVision Basic** for system settings, data acquisition, visualisation and data export
 - **SpectraVision Control** – to automate the workflow, to integrate microscopes or periphery, such as scanning stages, monochromators or light sources
 - **SpectraVision Histo** – adds histogram functions, polarisation kinetics and measures minimum/maximum intensity distributions
 - **SpectraVision Color** – for quantitative color measurement, conform to CieLab as international standard
 - **SpectraVision LayerThickness** – supplies the algorithms for the evaluation of transparent layers and coatings
 - **SpectraVision Imaging** offers densitometry tools and reporting functions
- Other SpectraVision kits, e. g. library functions are available on request



Accessories for Integration of Optical Microscopes

- modified spectrophototubes improve the instruments transmission and project the pinhole images into the microscope's eyepiece for alignment purposes
- Light guides, pinhole systems and fibre colimators with x/y/z adjustment
- Measurement and illumination apertures with fixed or variable diameters
- Variable rectangular and iris apertures for flexible and easy alignment
- Deep UV – high performance setup with Köhler condensor
- Calibration Standards



Illumination units with excitation spectra from 250 nm to 2000 nm

- continuous light spectra with stabilised halogen (black), xenon (green) or deuterium lamps (red)
 - additional intensity peaks through the use of mixed-light gas discharge lamps
 - highly efficient light yield in deep UV through Deuterium-Halogen Lamp combinations
 - ultra short XBO flashes for pulse excitation
- monochromatic excitation**
- with stepper motor solutions including synchronised filter systems for scattered-light correction
 - ultrafast galvanometer units
 - laser diodes systems for cw and pulse applications

The A.S. & Co. accessories are fully described in the chapter "Tool Box" on our website www.microscope-spectroscopy.com