

TIDAS MSP systems from J&M offer:

- The ability to measure UV/VIS spectra of fibers in transmission mode
- All applications regarding reflectance (brightfield/darkfield), polarization or fluorescence, depending on the chosen configuration
- Acquisition time less than one second
- Online video image and simultaneous acquisition of spectra with J&M TidasVISION software
- Flexible adjustable measurement diaphragm
- Flexible use in forensic sciences (MSP 400/800), in petrography (MSP 200) as well as in material sciences or biology (MSP 200/400)
- Photomultiplier or CCD detection available
- Microscopes from different manufacturers can be adapted

General

The TIDAS MSP 400/800 is especially designed for the needs of forensic scientists and can cover all applications regarding transmission, reflectance or fluorescence, depending on the chosen configuration. Polarization as well as UV are optional features depending on the configuration of the microscope.

Together with police labs the system was optimized and the software developed for an ergonomic and efficient use in forensic laboratories.

J&M has already installed a lot of systems in Europe, USA, South Africa and Asia.

TIDAS MSP 400

With the J&M TIDAS MSP 400 you can acquire VIS spectra from fibers in transmission as well as VIS spectra from fibers or paints in reflection (brightfield and darkfield). The wavelength range of the spectrometer is 360 nm to 780 nm.

For polarization experiments a polarizer with compensator can be inserted into the optical beam. The spectral range for polarization is limited by the polarizer to 450 nm to 700 nm. In reflectance mode the spectral range goes from 360 nm to 780 nm.

Fluorescence measurements can be done as well, several sets of filters are available (UV, blue and green excitation is normally standard).

Additionally, a fast scanning monochromatic light source (260 nm to 680 nm) is also available.

A full spectrum (360 nm to 780 nm) is usually acquired in less than one second.

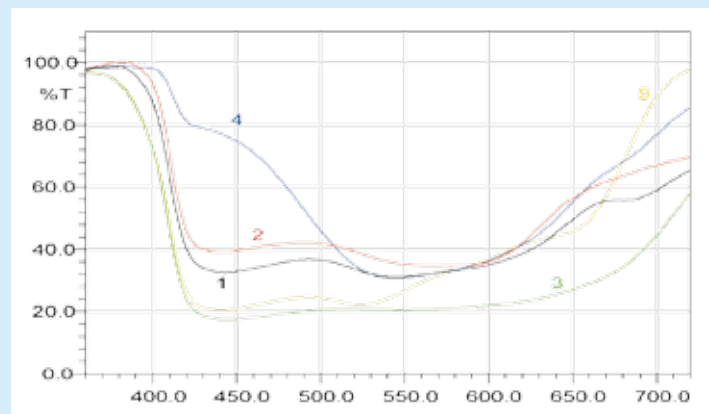
Noise and acquisition speed depends on the chosen field of interest, given by the flexible adjustable measurement diaphragm. Minimum spot size is 2µm by 2µm using a 40x objective.

If the microscope offers UV capabilities, the MSP 400 can be upgraded to the MSP 800.

MSP 400 with Zeiss microscope



Sample spectra (ballpen examination)



Software and Accessories

J&M's Software allows easy instrument control. Additional available software packages offer many possibilities for data handling, documentation, export options and storage. You can create your own spectra libraries for an effective library search.

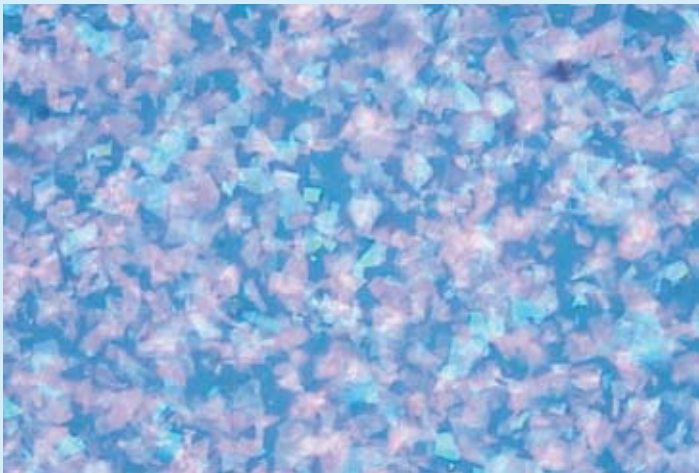
The instrument uses the CIE colour value system and is capable of generating complementary chromaticity coordinates (CCC) values.

Wavelength or photometric accuracy can be checked easily by grey or holmium filters, which are available as accessories.

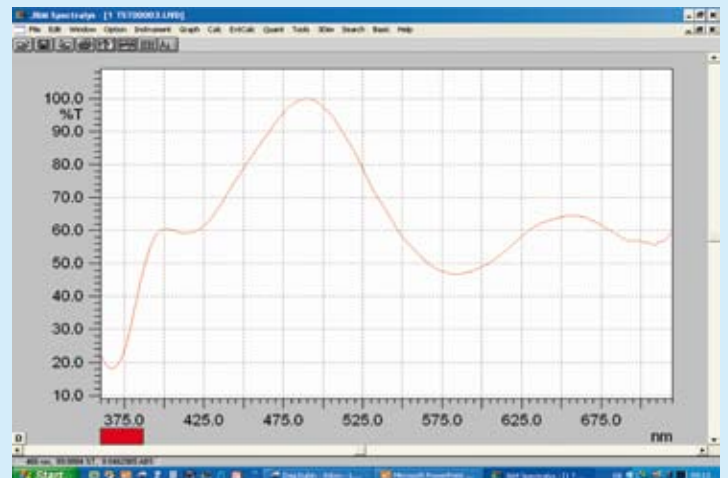
MSP 400 with Leica microscope



Camera picture of a modern effect paint for cars



Spectra of the sample



Applications

- Examination of fibres in the VIS range
- Analysis of particles in the VIS range
- Certification of documents
- Quality control of TFT displays
- Analysis of LEDs

Video imaging

Online video imaging and simultaneous acquisition of spectra is a highlight of this instrument. The flexible adjustable measurement diaphragm marks the region of interest directly on your sample image.