# EXTEND THE POWER OF YOUR UV-VIS SPECTROPHOTOMETER

Make the most of your UV system with flexible accessories

# LIQUID SAMPLES

# TEMPERATURE CONTROL & ELECTROTHERMAL ACCESSORIES

Ideal for samples and methods that are affected by temperature including:

- Kinetic studies
- Enzyme assays
- DNA melting
- Microvolume temperature control

#### **Q** Typical application

- Thermochromic dyes, biological and clinical

#### **AUTOCHANGERS**

Ideal for high throughput analysis of multiple samples

- Internal sample automation
- External autosampler for high throughput work

#### **Q** Typical application areas

- Environmental, water, food & pharmaceutical Laboratories
- Tablet dissolution
- Hazardous Samples

#### **CELL HOLDERS**

- Long pathlength cell holders used for dilute samples to increase strength of absorbance
- Microvolume cell holders used when sample volume is limited

#### Typical application

- Drinking water analysis
- DNA, neonatal samples & online experiments

#### FIBRE OPTIC PROBE

• Fibre optic dip probe and remote sampling – used for fast direct sampling

#### **Q** Typical application

- QC, reaction monitoring & online/inline experiments

# LIQUID & SOLID SAMPLES

#### **INTEGRATING SPHERE**

Ideal for analysis of samples that contain particles or require surface analysis

- Light from the sample surface or scattered by particles in solution is collected within the sphere
- Sphere allows for scattered light to be reflected & collimated on to the detector
- Internal detectors for optimal sensitivity and increased wavelength range

#### **Q** Typical application

- Colour and spectral determination for clothing, films, tablets, and other materials

#### TRANSMISSION ACCESSORIES

Various accessories available to help measure the amount of light transmitted through a sample

- Fixed and variable angle transmission accessories
- Film holders
- Rotating film holder
- Fibre optics

#### **Q** Typical application

- Film polarization
- Driving glassesCar headlights
- Glass bottles

# SOLID SAMPLES

The type of accessories used for solid sample analysis depends on the light scattering characteristics of the sample:

- Samples that scatter light require diffuse reflectance accessories
- Samples that do not scatter light use specular reflectance/transmission accessories

### Samples that scatter light

INTEGRATING SPHERE

**DIFFUSE REFLECTANCE ACCESSORIES** 

Collects scattered light from the sample surface

#### **Q** Typical application

- Study and measurements of catalysts
- Carbon dioxide capture
- High & low temperature analysis
- Atmosphere sensitive materials

#### Samples that do not scatter light

#### SPECULAR REFLECTANCE - VARIABLE ANGLE

Ideal when measuring the amount of light reflected at different angles from a smooth surface

#### **Q** Typical application

- Display panels, mirrors, architectural materials, packaging
- Films, security films coatings, holograms

## SOFTWARE ACCESSORIES & ADD-ONS

#### FILM THICKNESS MEASUREMENT

Suitable for optics market, plastics industry, plastic coatings and films

#### **COLOUR ANALYSIS SOFTWARE**

Suitable for anyone requiring accurate colour characterisation, such as materials processing, food industry, paints, packaging, fabrics and many more

### SOLAR APPLICATIONS AND UV BLOCKING

Suitable for solar panels research, UV protection Factor Fabrics and creams, LEDs, environmental energy conservation, electronic devices – electronic bandgaps & phosphors

#### ARCHITECTURAL GLASS SOFTWARE

Suitable for heat reflecting glass testing, building materials research, climate change building products

#### THERMAL-MELTING FOR DNA ASSAYS

Suitable for DNA investigations incl. DNA sequence, DNA triplex, DNA quaternary structure; oligonucleotides analysis

