

Spectroscopy laboratory

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Laboratory for the complex spectroscopy material analysis

Zetasizer Nano ZS (Malvern Instruments)

The device is used the patented Non-Invasive Back-Scatter (NIBS) technology at dynamic or static light scattering with integrated reverse function of automatic optimization of the measuring point (concentration dependent point). It is used a technique called Phase Analysis Light Scattering (PALS) for multi-frequency measurement determines the mean and distribution during the same measurement.

zetasizernano



It serves size measurement (0.3 nm - 3 μm) by dynamic light scattering measuring of moving particles.

ICP –AES spectrometer HORIBA Jobin Yvon with CCD-based spectra detection ACTIVA M

- Inductively coupled plasma spectrometer, combining top instrument parameters with innovative and interactive software. Spectrometer is used to quantitative and qualitative elemental analysis.
- Vertical and radial observation of optical system provides opportunity of the high salt solution analysis in complicated organic solvents with negligible matrix effect.
- Acquisition of the whole spectral range (120 - 800 nm)
- New database
- M.A.S.T.E.R. (Multi-line Analysis, Selection Tool for Enhanced Reliability)
- CALSTAT
- S.O.S. (Statistical Outlier Survey)



FTIR spectrometer FTLA 2000



- Provides to study all kind of materials both the liquid and solid state (powders, monocrystals, polycrystals).
- Spectral range in transmission mode from 400 to 4 000 cm^{-1} .
- Spectrometer is equipped with ATR with ZnSe lens (spectral range 600 - 4000 cm^{-1}) and diamond lens (spectral range 400 - 4000 cm^{-1}).