

Characterization methods for soils and sediments

Norlab offers a whole range of testing and sample preparation instruments for soil science.

Soil samples are complex types of samples because they consist of mixtures of very different compositions. Small pores e.g. micropores in humus often play a key role in soils, whereas sediments are often characterized by particle size and particle shape. Water repellency and water absorption can be studied with contact angle measuring systems.



Parameter	Method	Instrument
BET surface area and pore analysis	Gas adsorption	3P micro series 3P meso series 3P sync series 3P surface DX
Density	Gas pycnometry	3P densi 100
Particle shape	Image analysis	BeVision D2 Bettersizer S3 Plus
Particle size, nanometer range	Dynamic light scattering	BeNano series
Particle size, powders	Laser diffraction	Bettersizer S3 Plus Bettersizer S3 Bettersizer 2600 Bettersizer ST
pH for demanding applications	ISFET pH sensor Measuring soil pH	ConeFET probe for soil LanceFET probe for soil Si400 pH meter Si600 pH meter
Pore volume and size distribution	Mercury intrusion porosimetry	Contract analysis Please ask for a quote
Soil-water absorption	Dynamic contact angle measurement	Dynamic contact angle measuring devices and tensiometers
Soil water repellency	Optical contact angle measurement	Optical contact angle systems
Tap density	Tap volumetry	BeDensi T Series
Water uptake and release	Dynamic vapor sorption (DVS)	3P graviSorb series