

Grain size lab

The Beckman Coulter LS 13320 measures grain size in fine-grained sediment based on laser diffraction, with the aim of reveal the geological depositional history of sediments. The laser light is refracted at different angles depending on the size of the particles and is then measured by a series of detectors. The recorded angles correspond to given particle sizes, and the number of particles is related to the intensity measured by the corresponding detector.

The grain distribution is thus determined on a volume basis, assuming the same density of the material, cumulative volume% will be identical to cumulative mass%.

Calculation on a volume/mass basis is based on the assumption of spherical particles.

The measurement range varies, depending on the type of detectors used during measurements, from $0.017\text{ }\mu\text{m}$ - $2000\text{ }\mu\text{m}$, and provides very high resolution, reproductivity and accuracy.



Photo: Kai Mortensen

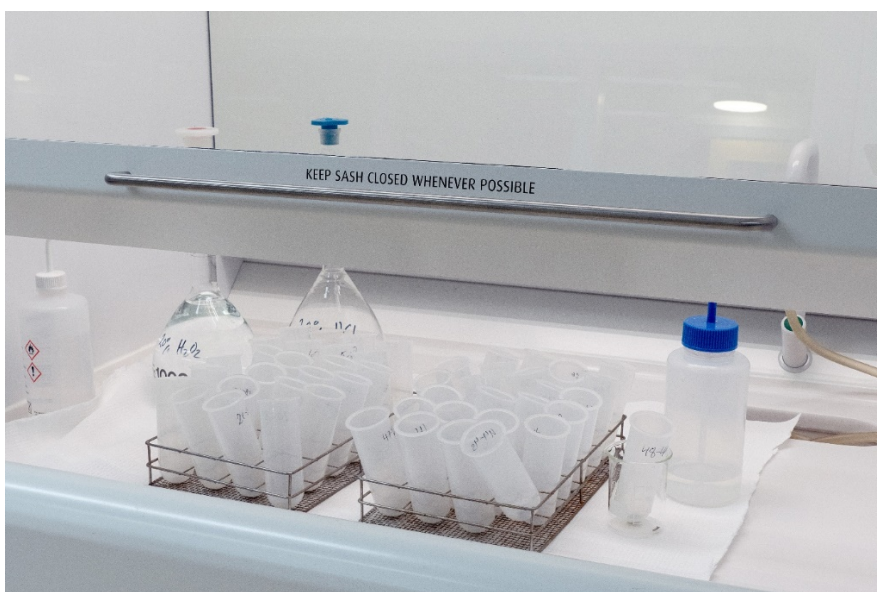


Photo: Kai Mortensen