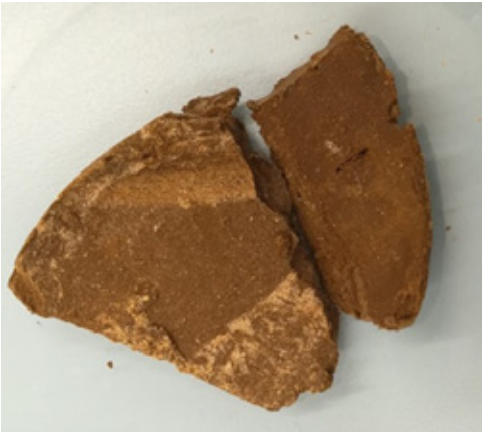


RENOTECH MATERIAL ANALYSIS AND PROCESS DEVELOPMENT LAB



ANALYTICS OF CHALLENGING MATERIALS

0 to 100 % Circular economy samples

Facilities

Our facilities have good connections from Turku and other cities and towns. The access to main roads, highways and motorway is easy and it is about a couple of kilometers to the Kupittaa railway station. Our laboratory can be easily reached also by lorries and vans, and we have an own forklift for heavy loads.

Our laboratory and experimental testing facilities are in the same building, which enables seamless work of the experimental team. The group has approximately 100 m² area for their work.

The following picture presents a glimpse to our Eltra Carbon Sulfur analyser with an induction and a resistance furnace, also equipped with a TIC module (total inorganic carbon). We also have two high-temperature furnaces. We have several ovens for sample drying. We have a freezer and fridge available, too. We have a ball mill and other equipment to decrease particle size.



ELTRA CS2000 Carbon Sulphur analyzer for various materials

We have a Leco TGA that is useful for mass change (LOI) determination. We typically use three or four scales in the laboratory, but we have scales for higher mass, too.

We offer laboratory testing and analysis services e.g. in the following:

- Material separation
- Sieve analysis dry/wet
- Particle size measurements DLS
- Solution purification e.g. by precipitation, filtration, ion exchange
- Carbon and sulphur determination, carbonate
- Solubility testing
- Neutralisation performance
- Chemical composition of a sample, especially inorganic content
- Acid-base properties (potentiometric titration and evaluation of titration data)
- Reaction heat (calorimetric measurement)
- Mixing, from magnetic stirring (with heating) to high-speed mixing 10 000 rpm
- Viscosity, density
- Rheometer?
- Dry material content
- LOI
- Destillation
- Freeze-thaw cycles



We have pressurised air well available, also some gases.

With our co-operators: Available also ICP-OES and ICP-MS, with sample dissolution in microwave ovens or in sand bath by a very experienced team located near us. SEM, XRD, EDX and other analyses by high-level specialists.

ICP OES for metal analyses ppm level analytics →

