

## MATERIAL ANALYSIS

We offer a wide range of analyses in its laboratory and by its high-level service partners. We determine chemical and physical properties as well as reactivities of samples, with special knowhow in analysis of industrial side streams and residues. Below there is a short presentation about the services we offer. If you are unsure whether we can offer some analysis you need, contact us for more information: [jouni@renotech.fi](mailto:jouni@renotech.fi)



### OUR SERVICES INCLUDE:

#### 1) Ash, slag

Determination of reactivity, physical characteristics, and leaching (LOI, TOC, metals, use potential, environmental risks). We have made analyses and tests that confirmed the suitability of the ash, e.g., in cement industry.

#### 2) Raw material, process sample and product analyses

Composition, appearance, separation, structure, size etc. (ICP-OES, SEM, XRD etc.)

Reaction kinetics of process chemicals (as an example, MgO, Mg(OH)<sub>2</sub>, MgSO<sub>4</sub>, ...)

Process precipitates: composition, formation, kinetics, separation, appearance, structure, size etc. (ICP-OES, SEM, XRD etc.)

LOI (e.g., calcination)

Sludge – TIC, TOC, Metals, Reactivity, Utilization potential

Viscosity

Also, ICP-MS measurements, e.g., environmental samples.

Low temperature behaviour

Process samples

Product samples

We provide analytical services ourselves and in close co-operation with



*References: Fortum, Berner Chemicals, Ecolan, Rautaruukki/SSAB, Helen, Jyväskylän Energia, Pohjolan Voima.*