Environment, soil, geology, marine science

Organic chemistry, pharmacy

Food analysis & security

Petrol chemistry, coal, energy

Quality control

Carbon and Nitrogen in pine wood and rubber wood

Instrument: ECS 8020
Mode: CN
Pretreatments: grinding

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Innovative Elemental µ-Analysis

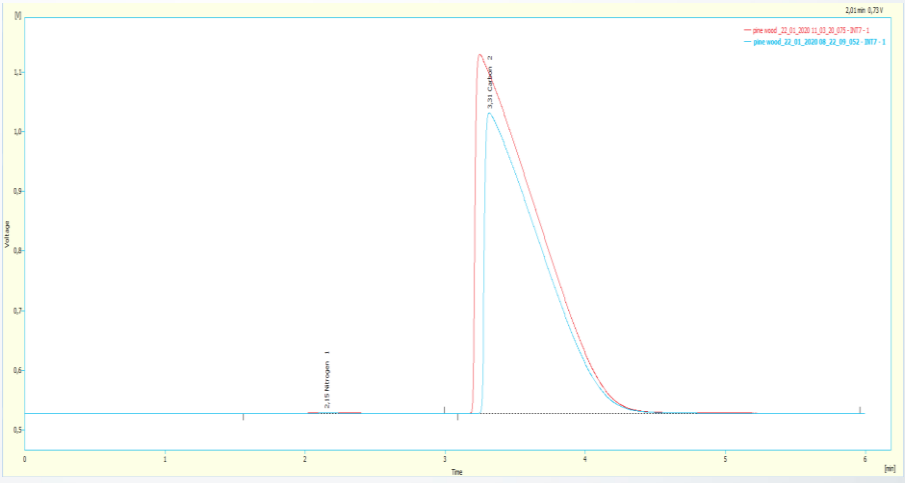
Carbon and Nitrogen in pine wood and rubber wood

Soil Sample	Carbon	Nitrogen
Pine wood	45.4±0.04	0.10±0
Rubber wood	44.1±0.04	0.27±0.01
Average accuracy	0.08	3.5

All reported values unit: %

Nowadays, the search of new and renewable energetic sources is a crucial theme of science, economy and politics.
Wood is an interesting application field in this sense: wood is an energetic source of power and heat. The cultivation of dedicated crops let to produce high amount of biomass per hectare, with a low pollution impact and a positive feedback on environment and biosphere.
Elemental analysis on wood biomasses has an important role in defining the heat potential of considered samples; in energetic conversion processes, this analysis helps to quantify the elements crucial for heat conversion and elements that reduce wood power. Lignin is the percentage of wood that has the highest heating value, followed by cellulose and hemicellulose. Generally, the higher is the carbon and hydrogen content, the higher is the heating value.
The characterization of wood biomass involved in energetic conversion processes needs the determination of carbon and nitrogen. ECS 8020 can analyze efficiently these types of samples giving in few minutes accurate and precise results.

- ✓ Configuration: CN
- ✓ Furnaces: no.2
- ✓ Sampler: Pneumatic
- ✓ Reference standard: acetanilide



To send your samples for free demonstration analyses:
info@nctechnologies.it

For analytical and technical questions:
customerservice@nctechnologies.it

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