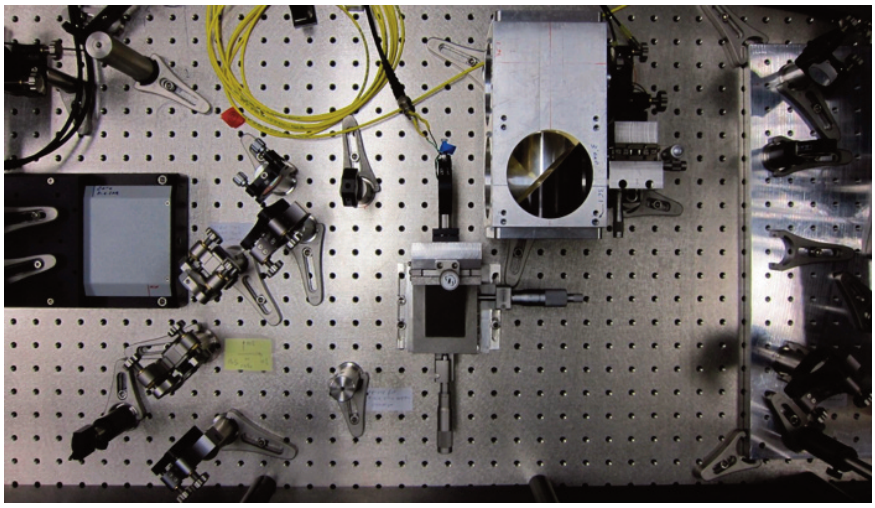
NACE CODE C20, C21, C22, M72

# NON-DESTRUCTIVE CHARACTERIZATION OF MATERIALS THROUGH THZ SPECTROSCOPY

**Innovations and benefits -** Time Domain (THZ-TDS) Spectroscopy is becoming a major method for non-destructive characterization materials, structures and components. Spectroscopic analysis of reflection and transmission properties on a very wide frequency range (30 GHz to 10 THz) reveals important molecular and structural properties. The use of fiber optic systems increases the flexibility providing access to samples in extreme environments with accessibility limitations.

**Uses -** Study of chemical compounds and polymerized plastics.

**Past and present activities -** A THZ-TDS spectrometer is under development at the ENEA Frascati Laboratories.



CUSTOM Thanks to its flexibility, the non-destructive characterization service can be adjusted to different needs and contexts.

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