

Anna Ciajolo

Chemistry degree

Research Director at IRC-CNR

Team leader of the research group and analytical lab of IRC-CNR on pollutant formation and emission from combustion.

COMPETENCIES and SCIENTIFIC AREA

- Analytical and Organic Chemistry
- Physical Chemistry
- Environmental/ Atmospheric Chemistry
- Combustion Chemistry
- Materials Chemistry and Nanoscience

Chemical and spectroscopic characterization of carbon and hydrocarbon fuels and materials.
Pyrolytic behaviour and combustion.

Environmental impact of combustion and industrial plants.

Fine and Ultrafine Particulate formation from combustion and gasification systems.

Soot formation and oxidation.

Management of laboratory combustion plants (flames and reactors) and evaluation of efficiency and environmental impact, through sampling and chemical and spectroscopic analysis of combustion products.

Analytical techniques:

UV-Visible spectroscopy, fluorescence spectroscopy, gas chromatography/fid/tcd, FT-IR spectroscopy, Raman spectroscopy, gas chromatography/mass spectrometry (gc-ms), size exclusion chromatography, elemental analysis, thermogravimetry, mass spectrometry.

PUBLICATIONS

More than 100 papers on peer-reviewed journals.