

[Applications of a multifunctional pyrolyzer for evolved gas analysis and pyrolysis-GC of various synthetic and natural materials](#)

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Abstract:

The applications, characteristics and performance of pyrolysis-gas chromatography (Py-GC) system in characterizing various materials are discussed. This system consists of a multifunctional micro furnace pyrolyzer with a sophisticated temperature-control device and ultrahigh-temperature metal capillary separation columns. The formation of char on the surface of the FR-PC material shields the radiant heat from outside. The results suggests that the crosslinking structure formed during the earlier stage of combustion induced in the presence of the silicone flame retardant might suppress the thermal decomposition of the PC materials at high temperatures.

* Excerpted from online journal website (Click the title)

Frontier Labs products used:

Multi-functional Pyrolyzer, Ultra ALLOY® column