flame photometric detector

in gas chromatography

The eluent from the column is fed into a hydrogen-rich flame and produces light emission. Optical filters are used to select the wavelength range of the emission which is characteristic of specific atoms (usually sulfur or phosphorus). The detector is very specific, depending on the choice of optical filters. It can detect the S- and P-containing compounds down to 10^{-3} ppmv, but the detector is non-linear.

Source:

PAC, 1990, 62, 2167 (Glossary of atmospheric chemistry terms (Recommendations 1990)) on page 2191