

# Rotational Spectra of Fluorodiacetylene and Fluorotriacetylene Produced by Electrical Discharge

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The rotational spectra of discharge produced <sup>13</sup>C isotopomers of fluorodiacetylene were recorded with high sensitivity to improve the centrifugal distortion analysis. Stimulated by the sensitivity attained by the spectrometer the investigation was extended to detect the *hitherto unknown fluorotriacetylene*. The spectrum of a linear molecule was found, which with high probability belongs to fluorotriacetylene.

*Key words:* Rotational Spectra; Fluoropolyacetylenes; Discharges; Molecular Beam;  
Fourier Transform Spectroscopy.