SYNTHESIS AND REACTIONS OF FLUORINATED INDOLES

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In continuation of our search for fluorine containing bioactive indole derivatives, we wish to report the synthesis and reactions of some fluorinated indoles and their reactions. Treatment of fluorinated acetophenones with arylhydrazine afforded the corresponding hydrazones which in turn were cyclized with polyphosphoric acid to yield fluorinated indoles(I). These indoles(I) on treatment with perfluoroglutaryl chloride and oxalyl chloride followed by addition of morpholine gave II and III, and with p-benzoquinone gave an interesting dimeric product IV. These products have been characterized by IR, PMR ¹⁹F NMR and mass spectral studies.

Ar= Fluorophenyl, pentafluorophenyl or a derivative

$$X = H$$
, Cl , F
 $Y = H$, Cl , F