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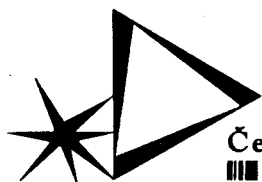
9th CZECHOSLOVAK
SPECTROSCOPIC CONFERENCE

WITH INTERNATIONAL PARTICIPATION

ABSTRACTS

ČESKÉ BUDĚJOVICE

June 22. - 24. 1992



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**MASS SPECTROMETRIC AND FT-IR IDENTIFICATION OF
VOLATILE PRODUCTS OF RADIOLYSIS OF NITROBENZENE-CARBON
TETRACHLORIDE-WATER TWO-PHASE SYSTEMS**

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Nitrobenzene-water and nitrobenzene-carbon tetrachloride-water two phase systems were prepared in different proportions of each constituent and then were subjected to ^{60}Co γ -irradiation to a dose of 197 kGy at a dose rate of 1.25 kGy hr^{-1} after a thorough shaking for five minutes. The organic phase of each sample was separated from the aqueous phase and were analysed by GC-FTIR-MS (capillary gas chromatograph HP 5890, series 11; FT-IR spectrometer HP 5965 A; mass spectrometer HP 5971 A) method. Obtained spectra were analysed and compared with those in the data station to identify the various radiolytic volatile products were identified. Hexachloroethane, tetrachloroethylene, chlorobenzene, isomeric chloronitrobenzenes and isomeric dinitrobenzenes constitute some of the important radiolytic products.