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Prof. Penlidis

Polymeric materials for detection of Formaldehyde.

Polymeric sensing materials for toxic gas analytes in ppm quantities find applications in occupational health, industrial environments, and finally, for chemical warfare agent detection. My MSc research focuses on the detection of aldehydes, which act as surrogate gases for toxic agents. Polymeric materials such as undoped and doped polyaniline, poly(2,5-dimethylaniline), and other derivatives were synthesized and tested for their sorption characteristics (sensitivity, selectivity, and stability) using a highly specialized gas chromatograph at room temperature