

SAMPLING AND ANALYSIS OF LEAD PARTICULATES IN THE URBAN ENVIRONMENT.

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Particulate samples in air were collected using organic membrane filters and glass fibre filters using high volume air samplers. Samples collected on membranes were prepared by destroying the membranes in acetone solution and then extracting the lead in 1 : 1 nitric acid. The samples on glass fibre filters were ashed with perchloric acid and nitric acid mixture. These samples were analysed spectrophotometrically and by atomic absorption spectrophotometry. Both methods compare well for the determination of time weighted average concentration of lead in the urban environment.

Results indicate a variation in lead levels from 0.3 to 2.5 μg per cubic metre of air.

Reference

1. Harrison, R. M. and Laxen, D. P. H. (1981). Lead pollution. Cambridge ; University Press.