

SIMULTANEOUS DETERMINATION OF MAJOR, MINOR AND TRACE CONSTITUENTS IN COAL ASH
BY INDUCTIVELY COUPLED PLASMA-ATOMIC EMISSION SPECTROSCOPY. V. A. Fassel,
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The present status of the simultaneous determination of major, minor, and trace elemental constituents in coal ash by the inductively coupled plasma-atomic emission spectroscopy technique will be reviewed. The coal ash samples are brought into solution either by lithium metaborate fusion or by a perchloric-nitric-hydrofluoric acid dissolution procedure. The relative merits of these two procedures will be discussed. Linear analytical calibration curves covering concentration ranges of three or more decades are obtained. Corrections for stray light effects may be required unless these background contributions are reduced to negligible proportions through the selection of appropriate gratings and for the use of interference filters. Analytical data in reference coal samples will be discussed.