

- 121 Protection Requirements of One Million Volts (1MV) and Two Million Volts (2MV) Roentgen Ray Installations. C.B. Braestrup and H.O. Wyckoff. Radiology 51, 840-848 (Dec. 1948).

Data are presented for the computation of concrete protection in the primary beam for 1 and 2 million volt roentgen rays. A saving in weight of concrete can be obtained by using ground floor or isolated locations for the installation. Information is also presented on the secondary protection requirements. -- Condensed from Nuclear Sci. Absts.

- 122 Dentistry and the Atomic Energy Program. W.W. Wainright. N.Y. J. Dentistry 19, 325-332 (1949).

Uranium²³³, plutonium²³⁹, and americium²⁴¹ are shown by radioautographs to localize in dental tissues. -- Chem. Absts.

Environmental Measurements
(Analytical Procedures and Methods)

- 123 Microdetermination of Beryllium With Particular Reference to Its Determination in Biological Materials. W.N. Aldridge and H.F. Liddell. Analyst 73, 607-613 (1948) Chem. Absts. 43, p.1681 (March 10, 1949).

As little as 0.2 micrograms of beryllium can be determined at pH 11.5 to 12.3 with naphthachrome azurine 2B. All ions that are precipitated at this pH must be removed. Iron can be removed as prussian blue and beryllium can be precipitated as a phosphate with aluminum phosphate as a collector. The dye referred to is usually sold as the sodium salt, from which the dye acid can be prepared by precipitating the acid at 30°C. from its aqueous solution by adding diluted hydrochloric acid and drying at 70°C. The reagent contains 0.15 grams of the dried acid in 100 cc. of ethyl alcohol. Details of the process are found in Chem. Absts referred to above.

-- Chem. Absts.

- 124 Testing Mine Air for Carbon Monoxide. L.T. Minchin. Coll. Guard. 171, 724-726 (Dec. 8, 1949).

The author describes the method employing silica gel impregnated with a palladium salt, which turns brown when carbon monoxide is present, and recommends the length-of-stain method rather than the color method. This apparatus has the advantage of being portable and being used at the spot where the carbon monoxide is suspected.

"You will see from the foregoing that the most important problem which we in J & L have to solve is to learn how to live and work together in a spirit of mutual trust and helpfulness. When we achieve this, the future will hold rich rewards for all of us."

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