

- 962 Radioactivity of Dust. C. Jeck (letter to Editor).
Nature 163, 570 (Apr. 9, 1949).

Writing from Prague, the author reports that when dust from air containing 1.5×10^{-6} curies per cc. of radon was deposited on a glass plate and left there an hour, many tracks of alpha particles of radium C' were observed. Most of the radon atoms were deposited with the dust and not directly on the glass, as shown by experiments with dust-free air. It is reasonable to suppose that artificial radioactive atoms, for example, those atoms left in the air by the explosion of an atomic bomb--will similarly be adsorbed on dust particles.

- 963 Radiation Cataracts. Editorial.
J.A.M.A. 140, 1218-1219 (Aug. 13, 1949).

Since 1905 the entity of radiation cataract has been well established, both clinically and experimentally. The development of cataracts in young physicists with a common history of exposure to cyclotron radiations has renewed interest in the subject. The injuries are believed due to the lack of knowledge of the hazardous character of neutrons, which for certain organ systems may have four to eight times the effectiveness originally suspected. Even now, dosimetric methods for neutrons are unsatisfactory. In the case of roentgen rays, the electrons cause chemical alterations, but the damage to any one cell by one electron is relatively small, and roentgen rays are relatively effective only against dividing cells. In the case of neutrons, the released proton passing through a cell may cause permanent injury. Neutrons may injure the cell at any phase. The urgency for research in this field is evident.

- 964 Exposure to Microwaves. W.W. Salisbury, J.W. Clark
and H.M. Hines. Electronics 22, 66-67 (May, 1949).

The results of recent experiments on animals with high intensity 12 cm. radiation indicate that a dangerous amount of heat may be generated beneath the surface of living tissue without causing fever or pain. The action of radiation on the eye and other tissues is also discussed.

Explosion-Proof "Speaker".

The Signet Development Company, Chicago, has developed a loudspeaker for intercomms and public address systems, for use in locations where explosive or combustible gases or dusts may be present. This speaker, said to be both flame-proof and explosion-proof, is intended primarily for use in refineries, chemical plants, and munitions manufacturing establishments. The speaker operates just as any regular loudspeaker except that it is said to be incapable of igniting dusts or gases surrounding it, should a breakdown in the voice coil or field coil occur.

-- Chem. Eng. (July, 1949)