

GENEALOGY DATABASE ENTRY

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Weiss, Joseph Joshua

1905 - 1972

DEGREE: PhD

DATE: 1935

PLACE: Univ. College, London

TEACHER/RESEARCH ADVISOR: Donnan

one of the founders of the field of radiation chemistry; studied the biological action of ionizing radiation, the mechanistic details of radiation chemistry, and the physico-chemical aspects of radiation chemistry; first to propose that radiation of aqueous solutions produces H atoms and OH radicals; with Haber, elucidated the mechanism by which hydrogen peroxide is decomposed by ferrous ions, a study which led to our current understanding of the kinetics of free-radical chain reactions; studied fluorescence quenching by charge-transfer intermediates, molecular complexes, and charge-transfer complexes; investigated the theory of chromatography and the mechanism of proton-transfer processes.

FOOTNOTE: Weiss received a D.Eng. in 1928 from the Technische Hochschule in Vienna. He started working with Fritz Haber in 1930, and went with him to England in 1933. There he obtained another PhD under the guidance of F. G. Donnan.

1. Personal communication, G. Scholes (**29Jul96**).
2. *Int. J. Radiat. Phys. Chem.* **1973**, 5, 127-139.
3. See *Trans. Faraday Soc.* **1935**, 31, 668-681 for evidence of link to Donnan.