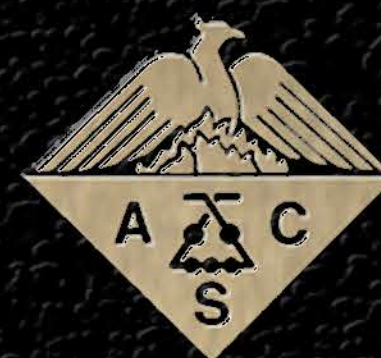




Division of the History of Chemistry
American Chemical Society

Citation for Chemical Breakthrough



Discovery of the First Noble Gas Compound

Proceedings of the Chemical Society 1962, 6, 218.

Xenon Hexafluoroplatinate(v) $\text{Xe}^+[\text{PtF}_6]^-$

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Tensimetric titration of xenon (AIRCO "Reagent Grade") with platinum hexafluoride has proved the existence of a 1:1 compound, XePtF_6 . This is an orange-yellow solid, which is insoluble in carbon tetrachloride, and has a negligible vapour pressure at room temperature. It sublimes in a vacuum when heated and the sublimate, when treated with water vapour, rapidly hydrolyses, xenon and oxygen being evolved and hydrated platinum dioxide deposited:



Presented to The University of British Columbia, 2014.