

**VARIOUS ASPECTS OF THE REACTIVITY OF THE XENON(VI) OXYFLUORIDE:
XeOF₄**

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In the liquid state XeOF₄ exhibits an amphoteric behaviour : its ability to form complexes with the strong Lewis base CsF and the strong Lewis acid SbF₅ has been established earlier. Its relative stability toward reduction is discussed.

In the gas phase, the sensitization of its dissociation giving Xenon tetrafluoride and oxygen is performed using SF₆ excited by a pulsed CO₂ laser. This experiment shows an efficiency 60 times greater than the multiphoton dissociation for equal energies. These last results have been explained by a theory of the vibrational intermolecular transfer for molecules in their quasi continuum^{***}.

^{***}V.T. Platonenko, N.A. Sukhareva, Sov. Phys. JETP, 51 (1980) 1065.

C. Angelié, M. Cauchetier, J. Paris, Chemical Physics, 66 (1982) 129-40.

**PERFLUORO AMMONIUM AND ALKALI METAL SALTS OF THE HEPTAFLUORO
XENON(VI) AND OCTAFLUORO XENON(VI) ANIONS**

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The NF₄XeF₇ salt was prepared from XeF₆ and NF₄HF₂, and was converted to (NF₄)₂XeF₈ by selective laser photolysis. These new salts and the known CsXeF₇ and Cs₂XeF₈ were characterized, and their vibrational spectra are reported. Evidence is presented for the existence of a stable NaXeF₇ salt. The presence of different phases in solid XeF₆ was confirmed by Raman spectroscopy.