

GENEALOGY DATABASE ENTRY

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Chatt, Joseph

1914 - 1994

DEGREE: PhD

DATE: 1940

PLACE: Cambridge

TEACHER/RESEARCH ADVISOR: Mann

explored the nature of bonding between transition metals and olefins, resulting in the Chatt-Duncanson-Dewar model; studied in detail the properties of phosphine and arsine ligands and their potential for stabilizing a wide variety of novel transition metal complexes (including hydrides of types previously thought incapable of existence); used metal-ligand stretching frequencies to study the trans-influence of ligands in complexes; carried out extensive investigations of the chemistry of metal dinitrogen complexes as part of an effort to reduce N_2 to NH_3 ; developed a classification (with Ahrland and Davies) of metal atoms into two types depending on their relative affinities for different types of donor atoms.

1. *Chem. Brit.* **1994**, 30, 1011.
2. Eaborn, C. *Memorial Pamphlet*; 1994.