

GENEALOGY DATABASE ENTRY

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Moissan, Ferdinand Frédéric Henri

1852 - 1907

DEGREE: PhD

DATE: 1880

PLACE: Paris

TEACHER/RESEARCH ADVISOR: Dehérain

Nobel Prize 1906; first to isolate fluorine; discovered BF_3 , CF_4 , CH_3F , $\text{C}_2\text{H}_5\text{F}$, SiF_4 , PF_3 , PF_5 , POF_3 , AsF_3 , SF_6 , SOF_2 , SO_2F_2 , BrF_3 , IF_5 , and AgF_2 ; attempted to synthesize artificial diamonds; discovered NaH , KH , Li_6Si_2 , and Si_2H_6 ; developed the electric arc furnace and used it to prepare rubies, silicon carbide, and many transition metal carbides, nitrides, borides, and silicides; proposed that petroleum may result from the action of water on metal carbides in the earth's crust.

FOOTNOTE: Moissan turned to inorganic chemistry beginning in 1874 with the encouragement of his teachers Henri Saint-Claire Deville and H. J. Debray. Moissan's work on the oxides of iron formed the subject of his PhD thesis.

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