

GENEALOGY DATABASE ENTRY

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Mallard, François Ernest

1833 - 1894

DEGREE: Engineer, 3rd Class DATE: 1856

PLACE: École des Mines

TEACHER/RESEARCH ADVISOR: Sénarmont

with LeChatelier, published a series of papers on the design of safety lamps, on combustion temperature, on velocity of flame propagation, and on the importance of mixtures of coal dust; with LeChatelier, instituted the use of ammonium nitrate as an explosive - it has remained the preferred explosive to this day; with LeChatelier, investigated the thermal properties of crystals; using the theories of A. Bravais as a starting point, showed the importance of twinning in “anomalous” crystals (i.e., crystals whose morphology seems to be of greater symmetry than their optics) and of pseudosymmetry as an explanatory concept; contributed the theory of twins based on the continuation or pseudo-continuation of a lattice between the twinned crystals.

1. *Dictionary of Scientific Biography*; Charles Scribner's Sons: 1970-1990; vol. 9, p58-60.
2. *Revue Scientifique* **1894**, 2, 123-124 and **1896**, 6, 801-812.
3. *Bull. Soc. Fr. Mineral.* **1894**, 17, 241-266.
4. *Bull. Soc. Géol. Fr. [3rd Ser.]* **1895**, 23, 179-191.
5. *Ann. Mines [9th Ser.]* **1894**, 6, 303-318 and **1895**, 7, 267-303.
6. *Compt. Rend.* **1894**, 119, 1042-1044.
7. *Génie Civil* **1894**, 25, 190-191.
8. *Nature* **1894**, 50, 428.
9. *Mineral. Mag.* **1894**, 10, 328-330.