

# Serret, Joseph Alfred | Encyclopedia.com

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(b. Paris, France, 30 August 1819; d. Versailles, France, 2 March 1885)

*mathematics.*

Serret is sometimes confused with Paul Joseph Serret (1827–1898), a mathematician at the Université Catholique in Paris. After graduating from the École polytechnique in 1840, Serret decided on a life of science and in 1848 became an entrance examiner in École. After several other academic appointments he was named professor of [celestial mechanics](#) (1861) at the Collège de France and then, in 1863, professor of differential and [integral calculus](#) at the Sorbonne. In 1873 he joined the Bureau des Longitudes.

With his contemporaries P.-O. Bonnet and J. Bertrand, Serret belonged to that group of mathematicians in Paris who greatly advanced differential calculus during the period 1840–1865, and the fundamental formulas in the theory of space curves bear his name and that of J. F. Frenet. Serret also worked in [number theory](#), calculus, mechanics, and astronomy and wrote several popular textbooks, including *Cours d'algèbre supérieure* (1849) and *Cours de calcul différentiel et intégral* (1867–1868).

In 1860 Serret succeeded Poincaré in the Académie des Sciences. After 1871 Serret's health declined; and he retired to Versailles, where he lived quietly with his family until his death.

## BIBLIOGRAPHY

**I. Original Works.** The *Journal des mathématiques pures et appliquées* contains several of Serret's papers, including "Mémoire sur les surfaces orthogonales," **12** (1847), 241–254; "Sur quelques formules relatives à la théorie des courbes à double courbure," **16** (1851), 193–207; and "Mémoire sur les surfaces dont toutes les lignes de courbure sont planes ou sphériques," **18** (1853), 113–162. See also "Sur la moindre surface comprise entre des lignes droites données dans le même plan," in *Comptes rendus hebdomadaire des séances de l'Académie des sciences*, **40** (1855), 1078–1082.

Serret edited the *Oeuvres de Lagrange*, 14 vols. (Paris, 1867–1892), and the fifth ed. of Monge's *Application de l'analyse à la géométrie* (Paris, 1850), with annotations.

**II. Secondary Literature.** An obituary notice is given *Bulletin des sciences mathématiques*, 2nd ser., **9** (1885), 123–132.

D. J. Struik