## Petersen, Julius | Encyclopedia.com

Complete Dictionary of Scientific Biography COPYRIGHT 2008 Charles Scribner's Sons 2-3 minutes

((b. Sorø, Denmark, 16 June 1839; d. Copenhagen, Denmark, 5 August 1910),

mathematics.

Petersen's interest in mathematics was awakened at school, where his main occupation was solving problems and attempting the trisection of the angle. At the age of seventeen he entered the College of Technology in Copenhagen; but after some years of study he transferred to the University of Copenhagen, from which he graduated in 1866 and received the doctorate in 1871. His dissertation treated equations solvable by square roots with applications to the solution of problems by ruler and compass. During his university years and after graduation Petersen taught in secondary schools. In 1871 he was appointed docent at the College of Technology and, in 1887, professor at the University of Copenhagen, a post he held until the year before his death.

Through his terse, well-written textbooks Petersen has exerted a very strong influence on mathematical education in Denmark. Several of his books were translated into other languages. Worthy of particular mention is his *Methods and Theories for the Solution of Problems of Geometrical Constructions* (Danish, 1866; English, 1879; French, 1880; Italian, 1881; Russian, 1892). His other writings cover a wide range of subjects in algebra, <u>number theory</u>, analysis, geometry, and mechanics. Perhaps his most important contribution is his theory of regular graphs, inspired by a problems in the theory of invariants and published in *Acta mathematica* in 1891.

## **BIBLIOGRAPHY**

Petersen's works are listed in Niels Nielsen, Mathematiken i Danmark 1801–1908 (Copenhagen-Christiania, 1910).

There are obituaries by H. G. Zeuthen, in *Oversigt over det K. Danske Videnskabernes Selskabs Forhandlinger 1910* (1910–1911), 1, 73–75; C. Juel and V. Trier, in *Nyt Tidsskrift for Matematik*, *A*,**21** (1910), 73–77, in Danish; and C. Juel, "En dansk Matematiker," in *Matermatisk Tidsskrift*, *A* (1923), 85–95.

Borge Jessen