

Schoute, Pieter Hendrik | Encyclopedia.com

Complete Dictionary of Scientific Biography COPYRIGHT 2008 Charles Scribner's Sons
3-4 minutes

(*b.* Wormerveer, Netherlands, 21 January 1846; *d.* Groningen, Netherlands, 18 April 1923)

mathematics.

Schoute, whose family were industrialists on the Zaan near Amsterdam, studied at the Polytechnical School at Delft, from which he graduated in 1867 as a civil engineer. He continued his study of mathematics at Leiden, where he received his Ph. D. in 1870 with the dissertation "Homography Applied to the Theory of Quadric Surfaces." While teaching at high schools in Nijmegen (1871–1874) and The Hague (1874–1881), he published two textbooks on cosmography. From 1881 until his death he was professor of mathematics at the University of Groningen.

Schoute was a typical geometer. In his early work he investigated quadrics, algebraic curves, complexes, and congruences in the spirit of nineteenth-century projective, metrical, and enumerative geometry. From 1891 he turned to geometry in Euclidean spaces of more than three dimensions, then a field in which little work had been done. He did extensive research on regular polytopes (generalizations of regular polyhedrons). Some of his almost thirty papers in this field were written in collaboration with Alice Boole Stott (1860–1940), daughter of the logician [George Boole](#).

Schoute was an editor of the *Revue semestrielle des publications mathématiques* from its founding in 1893, and in 1898 he became an editor of the *Nieuw archief voor wiskunde*. He held both positions until his death. In 1886 he became a member of the Royal Netherlands Academy of Sciences.

BIBLIOGRAPHY

I. Original Works. Much of Schoute's work appeared in *Verhandelingen der Koninklyke nederlandse akademie van wetenschappen*, Afdeeling Natuurkunde, 1st section: see esp. "Regelmässige Schnitte und Projektionen des Hundertzwanzigzelles und des Sechshundert-zelles im vierdimensionalen Raume," **2**, no. 7 (1894); and **9**, no. 4 (1907). Writings on other polytopes are in **2**, no.2 and 4 (1894), which deal with the 8-cell, the 16-cell, and the 24-cell. See also "Het vierdimensionale prismoïde," **5**, no. 2 (1896); and "Les hyperquadratiques dans l'espace à quatre dimensions," **7**, no.4 (1900). Several articles appeared in *Archives néerlandaises des science exactes et naturelles* 2nd ser. 5–9 (1896–1904). Many of Schoute's results were collected in his *Mehrdimensionale Geometrie*, 2 vols. (Leipzig, 1902–1905).

II. Secondary Literature. See H. S. M. Coxeter, *Regular Polytopes* ([New York](#)-London, 1948; 2nd ed., 1963), passim; and D. J. Korteweg, "P. H. Schoute," in *Zittingsverslagen der Koninklyke nederlandse akademie van wetenschappen*, **21** (1912–1913), 1396–1400. Also: H. Fehr, *Enseignement mathématique*, **35** (1913), 256–257.

D. J. Struik