

Geiser, Karl Friedrich | Encyclopedia.com

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(b. Langenthal, Bern, Switzerland, 26 February 1843; d. Kösnacht, Zurich, Switzerland, 7 May 1934)

mathematics.

Geiser was the son of Friedrich Geiser, a butcher, and Elisabeth Geiser-Begert. Following graduation from the Polytechnikum in Zurich and the University of Berlin, where the influence of his great-uncle, [Jakob Steiner](#), was of help to him, Geiser became *Dozent* in 1863. In 1873 he became professor at the Zurich Polytechnikum (later renamed the Eidgenössische Technische Hochschule), where he remained until his retirement.

Geiser made an outstanding contribution to the development of the Swiss system of higher education. Acquainted with many persons in the fields of politics and economics as well as with important mathematicians in the neighboring countries, and a close adviser of the chairman of school supervisors, Geiser worked effectively within the professoriate to attract first-rate teachers. There devolved upon him, above all, the instruction of candidates for the teaching of [algebraic geometry](#), differential geometry, and invariant theory.

Geiser's scientific works are concerned especially with [algebraic geometry](#). He explained the relation of the twenty-eight double tangents of the plane quadric to the twenty-seven straight lines of the cubic surface. An involution that he discovered bears his name. Minimal surfaces also engaged his attention: he investigated the intersection of an algebraic minimal surface with an infinite plane and determined all the algebraic minimal surfaces. In addition, Geiser edited [Jakob Steiner](#)'s unpublished lectures and treatises. He was organizer and president of the first International Congress of Mathematicians, held at Zurich in 1897.

BIBLIOGRAPHY

I. Original Works. Geiser's major works are *Einleitung in die synthetische Geometrie* (Leipzig, 1869); and *Zur Erinnerung an Jakob Steiner* (Schaffhausen, 1874). His papers are listed in the articles by Kollros by Meissner and Scherrer (see below).

Die Theorie der Kegelschnitte, pt. 1 of Jakob Steiner's *Vorlesungen über Geometrie*, was compiled and edited by Geiser (Leipzig, 1867).

II. Secondary Literature. See the following obituary notices: A. Emch, in *National Mathematics Magazine*, **12** no. 6 (1938), 287–289, with portrait; L. Kollros, in *Verhandlungen der Schweizerischen naturforschenden Gesellschaft* **115** (1934), 522–528, with list of publications and portrait; and E. Meissner and F. R. Scherrer, in *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich*, **79** (1934), 371–376, with list of publications.

J. J. Burckhardt