Rudio, Ferdinand | Encyclopedia.com

(*b*. Wiesbaden, Germany, 2 August 1856; *d*. Zurich, Switzerland, 21 June 1929)

mathematics, history of science.

Rudio completed his secondary schooling in Wiesbaden, then, in 1874, entered the Zurich Polytechnic to study physics and mathematics. From 1877 until 1880 he studied at the University of Berlin, from which he received the doctorate *magna cum laude* with a dissertation on Kummer's problem of determining all surfaces of which the centers of curvature form secondorder confocal surfaces. Rudio's solution utilized reduction to a differential equation. He also worked in group theory, algebra, and geometry. In 1881 lie returned to Zurich as lecturer at the Polytechnic; he was appointed professor of mathematics there in 1889 and served in that post until 1928. He also administered the Polytechnic's library from 1893 to 1919.

Rudio wrote on a number of topics in the history of mathematics, including the quadrature of the circle, Simplicius' work on quadratures, and Hippocrates' lunes. He also composed biographies of contemporary mathematicians, and wrote a history of the Zurich Naturforschende Gesellschaft for the years 1746 to 1896.

Of particular importance was Rudio's project for editing the collected works of Euler. He first proposed this edition in 1883, on the occasion of the centenary of Euler's death, then brought it up again before the meeting of the first International Congress of Mathematicians at Zurich in 1897, and finally suggested it as an appropriate memorial for the bicentennial of Euler's birth in 1907. His efforts bore fruit in 1909, when the Naturforschende Gesellschaft decided to undertake the work, and named Rudio general editor. He himself edited two volumes (the *Commentationes arithmeticae*) and brought out an additional three in collaboration, including the *Introductio in analysin infinitorum*. In all, he supervised the production of some thirty volumes.

BIBLIOGRAPHY

I. Original Works. Rudio's publications include "Zur Theorie der Flächen, deren Krümmungsmittelpunktsflächen confocale Flächen zweiten Grades sind," an abstract of his inaugural dissertation (Berlin, 1880), published in *Journal für die reine und angewandte Mathematik*, **95** (1883), 240–246; *Archimedes, Huygens, Lambert, Legendre. Vier Abhandlungen* (Leipzig, 1892); "Die Möndchen des Hippokrates," in *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich*, **50** (1905), 177–200; and "Der Bericht des Simplicius über die Quadraturen des Antiphon und des Hippokrates," in *Bibliotheca mathematica*, 3rd ser., **3** (1902), 7–62.

II. Secondary Literature. See G. Pólya, obituary, in *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich*, **74** (1929), 329–330; Alice Rudio, "F. Rudio," in *Biographisches Lexikon verstorbener Schweizer*, **II** (Zurich, 1948), 230; and C. Schröter and R. Fueter, "Ferdinand Rudio zum 70. Geburtstag," in *Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich*, **71** (1926), 115–135, with portrait and bibliography of his works.

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