Guenther, Adam Wilhelm Siegmund | Encyclopedia.com

(*b*. Nuremberg, Germany, 6 February 1848; *d*. Munich, Germany, 3 February 1923)

mathematics, geography, meteorology, history of science.

Guenther was the son of a Nuremberg businessman, Ludwig Leonhard Guenther, and Johanna Weiser. In 1872 he married Maria Weiser; they had one daughter and three sons, one of whom was the political economist and sociologist Gustav Adolf Guenther.

Guenther studied mathematics and physics from 1865 at Erlangen, Heidelberg, Leipzig Berlin, and Göttingen. He received his, doctorate from Erlangen with *Studien zur theoretischen Photometrie* (1872), He participated in the Franco-Prussian War and then took the teaching examination for mathematics and physics. In 1872 he became a teacher at Weissenburg, Bavaria, and immediately qualified for university lecturing at Erlangen with *Darstellung der Näherungswerte der Kettenbrüche in independenter Form* (Erlangen, 1872–1873). Guenther went to the Munich Polytechnicum as a *Privatdozent* in mathematics in 1874 and to Ansbach in 1876 as professor of mathematics and physics at the Gymnasium. From 1886 to 1920 he was professor of geography at the Munich Technische Hochschule, and from 1911 to 1914 he was rector of this school. A member of the Liberal party, he served in the German Reichstag from 1878 to 1884 and in the Bavarian Landtag from 1884 to 1899 and from 1907 to 1918. During World War I he headed the Bavarian flying weather service, beginning in 1917.

Guenther's numerous books and journal articles encompass both pure mathematics and its history and physics, geophysics, meteorology, geography, and astronomy. The individual works on the history of science, worth reading even today, bear witness to a thorough study of the sources, a remarkable knowledge of the relevant secondary literature, and a superior descriptive ability. Although it is true that his compendia contain a great many names and references, only hint at particulars, and are outdated today, they are nevertheless characteristic of their time.

BIBLIOGRAPHY

I. Original Works Guenther's principal writings are *Zur reinen Mathematik: Lehrbuch der Determinantentheorie* (Erlangen, 1875; 2nd ed., 1877);*Die Lehre von den gewöhnlichen verallgemeinerten Hyperbelfunktionen* (Halle, 1881); and *Parabolische Logarithmen Und parabolische Trigonometric* (Leipzig, 1882).

On physics, geography, and related fields, see *Einfluss der Himmelskörper auf Witterungsverhältnisse*, 2 vols. (Halle, 1877–1879); *Lehrbuch der Geophysik and physikalischen Geographie*, 2 vols. (Stuttgart, 1884–1885), 2nd ed. entitled *Handbuch der Geophysik* (l897–1899); *Handbuch der mathematischen Geographie* (Stuugart, 1891);and *Didaktik and Methodik des Geographie-Unterrichtes* (Munich, 1895).

Works on the history of science include *Vermischte Untersuchungen zur Geschichte der mathematischen Wissenschaften* (Leipzig, 1876); *Ziele und Resultäte der neueren mathematisch-historischen Forschung* (Erlangen, 1876); *Antike Näherungsmethoden im Lichte moderner Mathematik* (Prague, 1878); "Geschichte des mathematischen Unterrichtes im deutschen Mittelalter bis zum Jahre 1525," in *Monumenta Germaniae paedagogica*, III (Berlin, 1887); "Abriss der Geschichte der Mathematik and Naturwissenschaften im Altertum," in *Handbuch der klassischen Altertumswissenschaften*, 2nd ed., V. supp. 1 (1894): *Geschichte der anorganischen Naturwissenschaften im 19. Jahrhundert* (Berlin, 1901); *Entdeckungsgeschichte and Fortschritte der Geographie im 19. Jahrhundert* (Berlin, 1902); *Geschichte der Erdkunde* (Vienna, 1904); and Geschichte der Mathematik, I, *Von den aeltesten Zeiten bis Cartesius* (Leipzig, 1908; repr., 1927).

Guenther was coeditor of *Zeitschrift für mathematischen and naturwissenschaftlichen Unterricht* (1876–1886); *Zeitschrift für das Ausland* (1892–1893); *Münchener geographische Studien* (from 1896); *Mitteilungen zur Geschichte der Medizin und der Naturwissenschaften* (from 1901); and *Forschungen zur bayerischen Landeskunde* (1920–1921).

II. Secondary Literature. Obituaries include E. von Drygalski, in *Jahrbuch der bayerischen Akademie der Wissenschaften* (1920–1923), pp. 79–83; *Geographische Zeitschrift*, **29** (1923), 204–219; W. Schüller, in *Zeitschrift für mathematischen and naturwissenschaftlichen Unterricht*, **56** (1925), 109–113; H. Wieleitner, in *Mitteilungen zur Geschichte der Medizin und der Naturwissenschaften*, **22** (1923), 1–2; and August Wilhelm, in *Neue deutsche Biographie*, VI (1966), 266–267.

J. E. Hofmann