MANGOLD, Sister Marie Cecilia. December 5, 1872–February 9, 1934. TRINITY COLLEGE (WASHINGTON, D.C.) (BS 1910, MS 1914), CATHOLIC UNIVERSITY OF AMERICA (PhD 1929).

Josephine Margaret Mangold was born in Cincinnati, Ohio, the daughter of Mary Anna (Hemann), born in Cincinnati in 1843, and Matthew Mangold, born in Bavaria, Germany, in about 1833. Eight of their children survived of ten born. They were Mary P. (b. ca. 1866), Anna (b. ca. 1868), Laura (b. ca. 1870), Philomena (b. ca. 1871), Josephine (b. 1872), Edward (b. ca. 1877), Matthew (b. 1881), and Anthony (b. 1882). Their father was a dealer in imported wines, brandies, and liquor; their mother was a housewife who was widowed by 1900.

Josephine Mangold attended parochial school and later the Academy of the Sisters of Notre Dame de Namur in Cincinnati. In March 1898 she entered the novitiate of the Sisters of Notre Dame de Namur in that city and professed in August 1900. At that time the Ohio Province of the Sisters of Notre Dame embraced all foundations east of the Rocky Mountains, so after Sister Marie Cecilia Mangold taught in the high school at Notre Dame Academy in Cincinnati, she was sent to Washington, D.C., in January 1901, to Trinity College, which now calls itself Trinity (Washington) University. There she was to assist in the teaching of German and to study mathematics with Sister Blandina of the original Trinity faculty.

Trinity College was established in 1897 and first offered instruction at the postsecondary level in 1900. Sister Marie Cecilia began to teach mathematics there in 1902. The bachelor's degree was first conferred at Trinity in 1904; that year Sister Marie Cecilia succeeded Sister Blandina and then directed the mathematics department until her death in 1934. While teaching at Trinity College, she also took courses there. Her entrance credits included a Trinity College exam, high school certificate, and normal courses she had taken previously. She completed the work for her BS degree in 1910 with major subjects mathematics and physics. She took no mathematics courses at Trinity, having been given credit for the elementary courses from the Notre Dame normal courses and having done all of her advanced work in both mathematics and physics privately, most likely under the guidance of faculty from the Catholic University of America. She continued her private study and earned an MS from Trinity in 1914 with a mathematics major and chemistry minor. Her master's degree was granted just prior to the opening of Catholic Sisters College, which formalized the practice of teaching women religious at Catholic University.

Since women religious were not listed in the register of students at Catholic University until 1928–29, public documents do not indicate when Sister Marie Cecilia began taking courses there. She studied mathematics under Aubrey E. Landry, history of science under Rev. Patrick W. Brown, and educational measurement under T. G. Foran at Catholic University. She wrote two papers in educational measurement, which appeared in 1927 and 1929. After writing a dissertation in algebraic geometry under the direction of Landry, Sister Marie Cecilia received her PhD in 1929 with a minor in education. She was the second woman religious in this country to earn a PhD in mathematics; the first was Sister Mary Gervase (Kelley) in 1917.

During her more than thirty years on the faculty at Trinity College, Sister Marie Cecilia was either the only member, or one of two members, of the mathematics department. In her earliest years in the department she taught trigonometry, solid

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geometry, analytic geometry, advanced algebra, differential and integral calculus, theory of equations, theory of determinants, and history of mathematics. In 1907–08 she introduced analytical mechanics, and in 1910–11 advanced calculus and a teachers' course with a calculus prerequisite. In 1914–15 three courses for graduates, differential equations, vector analysis, and projective geometry, were added to the curriculum; in 1919–20 practical mathematics for students in physics and practical mathematics for students in chemistry were introduced; and in 1923–24 a course in statistical methods was added. The Pascal Circle, the Trinity College mathematics club, was organized in 1916 with Sister Marie Cecilia the faculty advisor and honorary president. In a memorial article after her death it was reported that "she was a lover of the classics, and a firm believer in the adage, 'The best mathematician is a student in every field'" ("In Memoriam").

Sister Marie Cecilia was in ill health for a number of years before her death at the college in 1934 at age sixty-one. Among the pallbearers at her funeral were Aubrey E. Landry and Otto J. Ramler of the mathematics department at Catholic University. She is buried at Mount Olivet Cemetery in Washington, D.C. The Sr. Marie Cecilia Memorial Prize was awarded at least once, in 1942, to a senior mathematics major.

Organizational affiliations: AMS, MAA (charter member).

Thesis and dissertation:

1914 Application of the complex variable to certain problems in metric geometry. MS thesis, Trinity College.

1929 The loci described by the vertices of singly infinite systems of triangles circumscribed about a fixed conic. PhD dissertation, Catholic University of America, directed by Aubrey Edward Landry. Printed for The Catholic University of America, Washington, DC.

Publications:

1927 Methods of Measuring the Reliability of Tests. Washington, DC: The Catholic Education Press. Educational Research Bulletins, vol. 2, no. 8.

1929 with Sister Mary Louise M'Graw. *Group Intelligence Tests in the Primary Grades*. Washington, DC: The Catholic Education Press. Educational Research Bulletins, vol. 4, no. 2.

References to: AmMSc 5.

"Sister Marie Cecilia." (Death notice) Washington Post, 11 Feb 1934.

"Funeral Services Held for Sister Marie Cecilia." Trinity Times, 1 Mar 1934.

"In Memoriam." Trinity Times, 1 Mar 1934.

Other sources: PhD dissertation vita 1929; Trinity College Archives; communication with Sisters of Notre Dame de Namur, Ohio Province Archives; Mullaly, *Trinity College, Washington, D.C.: The First Eighty Years 1897–1977*; US Census 1860, 1870, 1880, 1900, 1910 OH, 1920, 1930 DC.

Last modified: December 12, 2008.