

RASMUSEN, Ruth B. March 29, 1899–October 27, 1974.

CONCORDIA COLLEGE (BA 1921), UNIVERSITY OF CHICAGO (MS 1926, PhD 1936).

Ruth Beatrice Rasmusen was born in Moorhead, Minnesota, the first child of Oline (Steen), born in 1876 in Norway, and Robert Rasmusen, born in 1866 in Minnesota. Her mother had immigrated to the United States in 1892 and was later naturalized. Her parents married in about 1898. In 1910 there were three daughters living of five children who had been born. The other two daughters were Esther (1902–1974) and Elizabeth (1905–1992). Their father was a barber in Moorhead.

Ruth Rasmusen attended the public schools of Moorhead and graduated from Moorhead High School in 1918. After three years at Concordia College in Moorhead, she graduated summa cum laude with a mathematics major and a Latin minor. She was a member of the Alpha Society, the scholastic honor society there.

For the next four years, 1921–25, Rasmusen taught in high schools in Minnesota and North Dakota. In the summer of 1925 she enrolled at the University of Chicago and studied there for five consecutive quarters before receiving her master's degree in September 1926.

Rasmusen indicated in her dissertation vita that she was a teacher at the senior high school in Muskegon, Michigan, for three semesters in 1927–28, an instructor at North Dakota State College (now University) in Fargo 1928–29, and an instructor at South Dakota State College (now University) in Brookings 1929–33. She continued her graduate work at the University of Chicago, spending twelve quarters in residence between summer 1930 and summer 1936, after which she received her doctorate with a dissertation in differential geometry directed by E. P. Lane. It appears that Rasmusen was living in her home town of Moorhead for a while after completing her graduate work. She was appointed instructor at the Platteville State Teachers College in Wisconsin (now University of Wisconsin–Platteville) and began teaching there on January 3, 1938.

Rasmusen began her employment with the Chicago Board of Education at Woodrow Wilson Junior College (now one of the City Colleges) in October 1938. She was transferred from Wilson to Chicago Teachers College (now Chicago State University) in September 1953. When rank was first established there in 1959, she was made a full professor, one of 18 of the faculty of 137. Rasmusen became the secretary of the committee on promotion and wrote about the first few years of the new policy in the *Chicago Schools Journal* in 1962. She also contributed book reviews to that journal.

Rasmusen's compulsory retirement occurred in June 1964. She then taught at Kearney State College (now University of Nebraska at Kearney) for the academic year 1964–65. The Chicago Teachers College became a state institution, Illinois Teachers College Chicago–South, with a more lenient retirement policy, in September 1965, and Rasmusen returned to work there until her second retirement in 1967.

Rasmusen continued some research in differential geometry throughout the late 1930s and early 1940s. Her published work includes a joint article in 1941 with [Beatrice Hagen](#) of Penn State, who had also been a student of Lane at Chicago. Rasmusen served as an associate editor of *Mathematics Magazine* 1964–68. With two of her colleagues she wrote a text for use at Chicago Teachers College; in 1960 it was published by Allyn and Bacon, with a second edition appearing in 1965.

A profile written at Concordia indicates that she was chairman of the mathematics department at Wilson Junior College and that she inaugurated the mathematics contest there. It notes that she also inaugurated the graduate department in mathematics at Chicago State and sponsored Pi Mu Epsilon. She served as a judge at city mathematics and science fairs, read papers in the Chicago home study department, and taught by invitation at the Chicago Teachers Review School.

A former colleague described Rasmusen as an excellent teacher. He said she was tall, slender, lovely, quiet, retiring, with a sense of humor. He indicated that she liked to travel and was a “rabid” White Sox fan who knew the players’ batting averages. A former student, who had a course in differential equations from Rasmusen in one of her last years of teaching, referred to her as adorable, kindly, concerned, caring, and stately. She said Rasmusen was ramrod straight and always well-prepared for class.

In 1970 the Dr. Ruth B. Rasmusen Award was established at Chicago State; it is given annually to a mathematics major who shows outstanding promise as a scholar in the field of mathematics research. In 1972 she received an Alumni Achievement Award from the Concordia College Alumni Association.

For many years Rasmusen lived in Chicago with her sister Esther Rasmusen, who was a biology teacher at a Chicago high school. Esther Rasmusen died in April 1974; six months later Ruth Rasmusen died at age seventy-five in Minneapolis. She was buried in Moorhead and was survived by her sister Elizabeth.

Organizational affiliations: AMS, MAA, Sigma Xi.

Thesis and dissertation:

1926 Metric geometry of the quadric of Lie. MS thesis, University of Chicago, directed by Ernest Preston Lane. Typescript.

1936 Conjugate osculating quadrics associated with the lines of curvature. PhD dissertation, University of Chicago, directed by Ernest Preston Lane. Private edition, 1937, distributed by the University of Chicago Libraries.

Publications:

1938 Metric properties of the cylinder of Kubota. *Bull. Amer. Math. Soc.* 44:674–77. Reviews: *JFM* 64.0736.04 (W. Süß); *Zbl* 019.36901 (W. Haack).

1939 The canonical lines and the extremals of two invariant integrals. *Amer. J. Math.* 61:1004–8. Reviews: *JFM* 65.1409.02 (E. Salkowski); *MR* 1,87c (J. L. Vanderslice); *Zbl* 022.26203 (P. Buzano).

1941 with B. L. Hagen. Comments on canonical lines. *Bull. Amer. Math. Soc.* 47:298–302. Reviews: *MR* 2,301b (J. L. Vanderslice); *Zbl* 025.08301 (W. Haack).

1947 An application of degenerate conics. *Sch. Sci. Math.* 47:502.

1960 with J. M. Sachs and W. J. Purcell. *Basic College Mathematics*. Boston: Allyn and Bacon. Second ed.: 1965. Boston: Allyn and Bacon.

1962 Three years of professorial rank at Teachers College. *Chicago Schools J.* 43:341–44. In special issue, “Chicago Teachers College South.”

Abstracts:

1940 Two metric quadrics. *Amer. Math. Monthly* 47:599 #8. Presented to a meeting of the MAA, Bloomington, IL, 10–11 May 1940.

1951 The determination of a quadric surface from its equation in general form. *Amer. Math. Monthly* 58:218–19 #6. Presented to a meeting of the MAA, Carbondale, IL, 12–13 May 1950.

1959 Equation of a quadric surface through nine points. *Amer. Math. Monthly* 66:641 #3. Presented to a meeting of the MAA, Decatur, IL, 8–9 May 1959.

Reference to:

“Dr. Rasmusen.” (Obituary) Unidentified newspaper clipping.

Other sources: MS thesis vita 1926; PhD dissertation vita 1937; Owens questionnaire 1937; application for social security account number 1948; conversations with William J. Purcell (former colleague) 1984 and with Carolyn Musto (former student) 1991; communications with Concordia College Alumni Relations, Chicago State University personnel office, Moorhead Public Library, and with Southwest Wisconsin Room, Karrmann Library, University of Wisconsin–Platteville; US Census 1900, 1910, 1920, 1930 MN; SSDI.

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