

## STORIES FROM THE ARCHIVES:

### Dr Germaine Joplin – geologist and STEM pioneer

Germaine Joplin was a student at PLC Sydney from 1917 to 1923. When she was a pupil the word “stem” meant only the structural part of a plant that conducts water and minerals from the root to the leaves.

The acronym STEM, referring to science, technology, engineering and mathematics, was not coined until the 1990s and is used in educational discussions to encourage students into these academic disciplines.



*Germaine Anne Joplin*

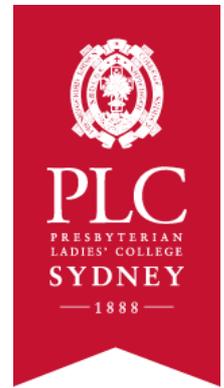
Yet Germaine Joplin was an early ambassador for STEM, as evidenced both by her career at PLC Sydney and throughout her life. At a time when few women entered academic circles, Germaine Joplin became a geologist who undertook research, taught, published numerous scientific papers, and wrote six text books. She attained significant status in her profession and was awarded the AM in 1986 for her outstanding geological research.

In 1917, when Germaine entered the College, Dr Marden was the Principal and the students had been knitting and raising funds to help the soldiers of World War I for several years. In the following year the Black Watch tartan fabric was introduced for the school uniform. She was at school the day the armistice was announced in November 1918, when Dr McQueen became Principal and when Lindley Evans joined the Music Department.



*Upper Sixth Form, 1923  
Germaine is in the front row, second from the left*

The curriculum included Geography, Chemistry, Geology, and Science and, indeed, Germaine consistently won Speech Day prizes in these areas. In 1921 she was Dux of her year. She was a member of the Aurora Committee, the Dramatic Society and the Secretary of the Tuck Shop Society. This last Society was formed to raise funds to purchase items for the school, i.e. a cinematograph to show films. Germaine was on the committee of West House. She was a Prefect in her final two years and was awarded two bronze Medallions.



As a child Germaine's favourite outing was not "to the beach or to the theatre or to the zoo but to the mining museum to look at the rocks".<sup>1</sup> She later recalled, "When I started in the early 1920s girls were not supposed to go wandering about with maps and sacks of rocks, but if you were really interested in your work you had to. . . Girls suffered also in that men on the academic staff took some of the brighter boys on expeditions and the girls missed out. This is why I often took a group with me when I visited a site. Boys and girls studying geology nowadays go on mixed excursions and no-one thinks a thing about it, but once it would have been considered scandalous if a chaperone, usually the professor's wife, were not invited also."<sup>2</sup>



*Dr Joplin with her notebook, 1930s*



*Germaine's sister and brothers, looking at rocks, 1920s*



*At a mine in Finland, 1950s*

Germaine aspired to be a geologist. Her path to this goal was delayed for a bit after PLC, as she suffered iritis and lost the sight in one eye. She entered the University of Sydney, where she came top of her class for the first two years, studying geology and chemistry. She won the University Medal in Geology. She continued her studies at the University of Cambridge, where she earned her PhD in 1936. A second doctorate was awarded, from the University of Sydney, in 1950.

Her career included work as an assistant lecturer in geology at the University of Sydney, curator of the University's Geological Museum, a researcher thanks to a Macleay Fellowship from the Linnean Society, and a position with the Bureau of Mineral Resources.

These positions paved the way to her appointment as a Research Fellow at the ANU in 1952. In the early 1950s the ANU established a Department of Geophysics. Dr Joplin was the first academic appointed. As well as supervising PhD students, she compiled chemical data on Australian rocks and wrote "highly-acclaimed text books on Australian igneous and metamorphic petrology, in which she reintroduced the concept of the 'shoshonite' suite of rocks that continues to be studied."<sup>3</sup>

Dr Joplin retired from the ANU in 1968 and collaborated with two other scientists in her final text book, *Finding the Age of Rocks*, in 1972. She died in Sydney in 1989.

---

<sup>1</sup> Chris Brennan-Horley, *The Biography of Germaine Anne Joplin*, unpublished.

<sup>2</sup> Germaine Joplin quoted in *The Canberra Times*, 6 August 1968, p. 10.

<sup>3</sup> David Branagan, *Germaine Anne Joplin*, ESHG Biographies, Geological Society of Australia.

Sources:

Some images gratefully received from Dr Joplin's niece Jocelyn Brennan-Horley

Series 15 Box 674 Germaine Joplin

*Aurora Australis* magazines

