EDWARD SYDNEY SIMPSON:
FIRST GRADUATE
OF THE UNIVERSITY OF WESTERN AUSTRALIA

by Jenny Bevan, Honorary Research Fellow at The University of Western Australia

EDWARD SYDNEY SIMPSON:

Born:

11th March 1875 at Woollahra, a suburb of Sydney, NSW, into a reasonably well-to-do household.

He had several older siblings, William Walker, who never married; Evangeline who married a Lindsay; Mabel who died in her teens; and Elizabeth, who married a James Fitch, a civil engineer in London.

Woollahra, around 1910.

Woollahra, now.

Family:

His father was Irish-born William Henry Simpson, a saddler turned merchant. He had arrived as a 14-year-old with his family on the emigrant ship *Navarino* in 1848.

His mother was Anne Taylor Simpson, nee Walker, from London.

Education (pre-UWA):

Simpson had a brilliant career at the Sydney Grammar School and the University of Sydney, winning numerous prizes and scholarships. He graduated in 1895 with the degree of B.E. with Honours in mining and metallurgy.

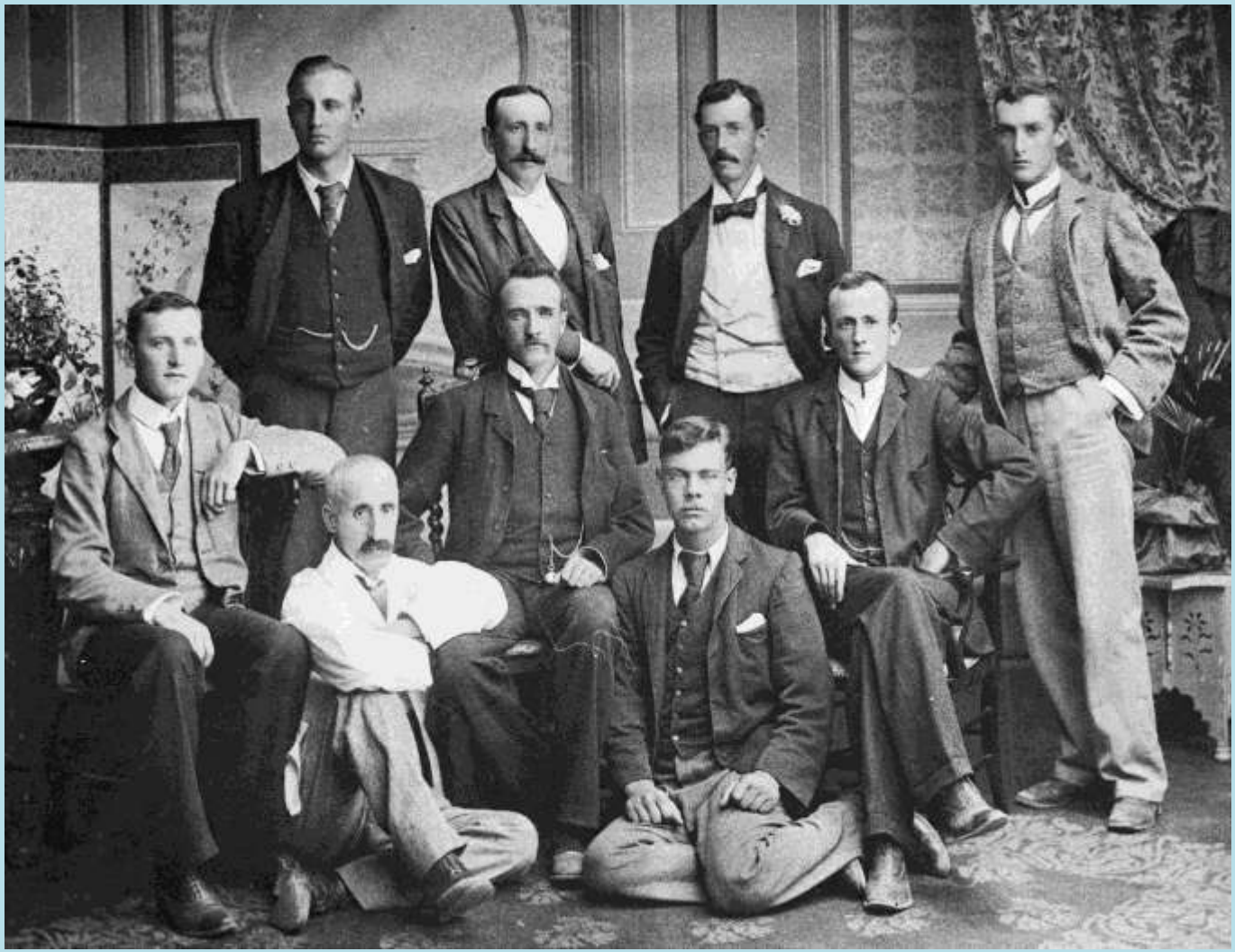
Sydney U Engineering Department, 1896.

Mt Morgan Gold Mine, 1890.

Employment:

His first appointment was as a research chemist at the Russell Silver Mine, Rivertree, NSW; then followed a period as assayer at the Mt Morgan Gold Mine, Q.

In 1897, when **only 22 years of age**, he was offered the position of **Mineralogist and Assayer and Chief Chemist** to the WA Mines Department at a salary of £350 per annum.



Western Australian Geological Survey, 1897.

Family Life:

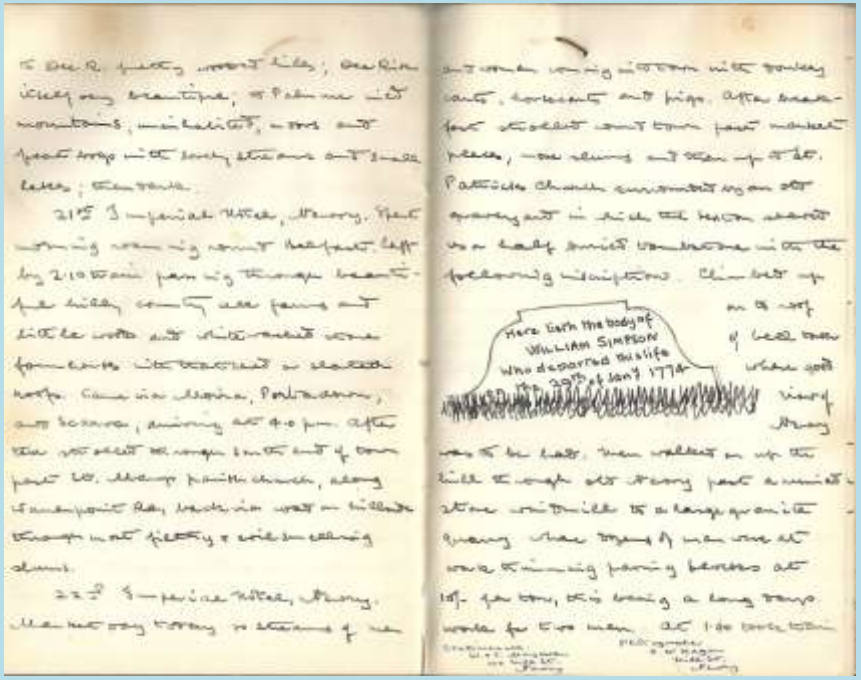
In London, on 26 October, 1904, Simpson married **Muriel Helen Griffiths**, a skilled violinist.

Simpson had left Perth on April 29th, 1904, on a world trip via Hawaii and the USA, arriving in the UK in late September in time to put up the banns. The newlyweds honeymooned in SW England before setting off for Australia on a leisurely journey by train through Europe and by ship and various exotic ports to Perth, arriving mid-January 1905.

Family Life:

Simpson's diary of the trip, illustrated with sketches, and including sprigs of plants, gives a further insight to his character.

"Took gondola and came down Grand Canal to Rialto, then by divers small back canals to this hotel on the Riva Schiavoni. Venice seen by night in this way ***and in such company*** *exceeded all expectations. The different lights sparkling in the water, marble houses on either side, the swish of the oar in the ears, the black gondolas with a single light gliding past, the little vistas up narrow side canals, all combined to form a dream of romantic beauty."*



Over the years they had a daughter (Betty Corona, Mrs St Aubyn Barrett-Lennard) and two sons (Mr Brian Simpson and Mr William Simpson) and several grandchildren. Muriel died, at the age of 59, in 1934, and was buried in Karrakatta Cemetery.

On September 15th, 1936, Simpson was married again, to **Ruth Blanche Alcock**; she survived him.

In 1922, after he had run the Geological Survey Laboratory for 25 years, it was amalgamated with the Government Chemical Laboratory, and Simpson was appointed **Government Mineralogist and Analyst, with charge of the combined Health, Mineral, and Agricultural laboratories**.

He and his family lived on the foreshore in South Perth and he travelled to work by ferry.

As a consequence of his position, he served for many years on various departmental committees connected with water supplies, foods, drugs and oils.

Simpson was well-known for his “first-class brain”. His earlier work in Western Australia had involved rocks carrying the chief gold deposits, the exploitation of which had boosted the State's development. His pioneering work on the **rocks and minerals of the Golden Mile** and throughout the Eastern Goldfields was of the utmost scientific and industrial importance. Later his **research into ceramics** preceded the establishment of factories making drain pipes, roofing tiles and white ware.

Over his lifetime he described and named a number of minerals new to science and wrote over a hundred learned papers and monographs. In 1932 he published ***A Key to Mineral Groups, Species and Varieties.***

Perhaps his best-known scientific contributions were in connexion with the rare radioactive minerals of the Pilbara and with the **tantalum** and **beryllium**-bearing minerals. Finding his work hampered by the lack of accurate methods for the determination of tantalum and niobium, he devised one which for many years was the standard commercial method. In 1910, he became the first geologist to attempt to determine the **age of a West Australian uranium mineral** based on radioactive decay, but despite the interest that it provoked, he did not persist in that line of research.

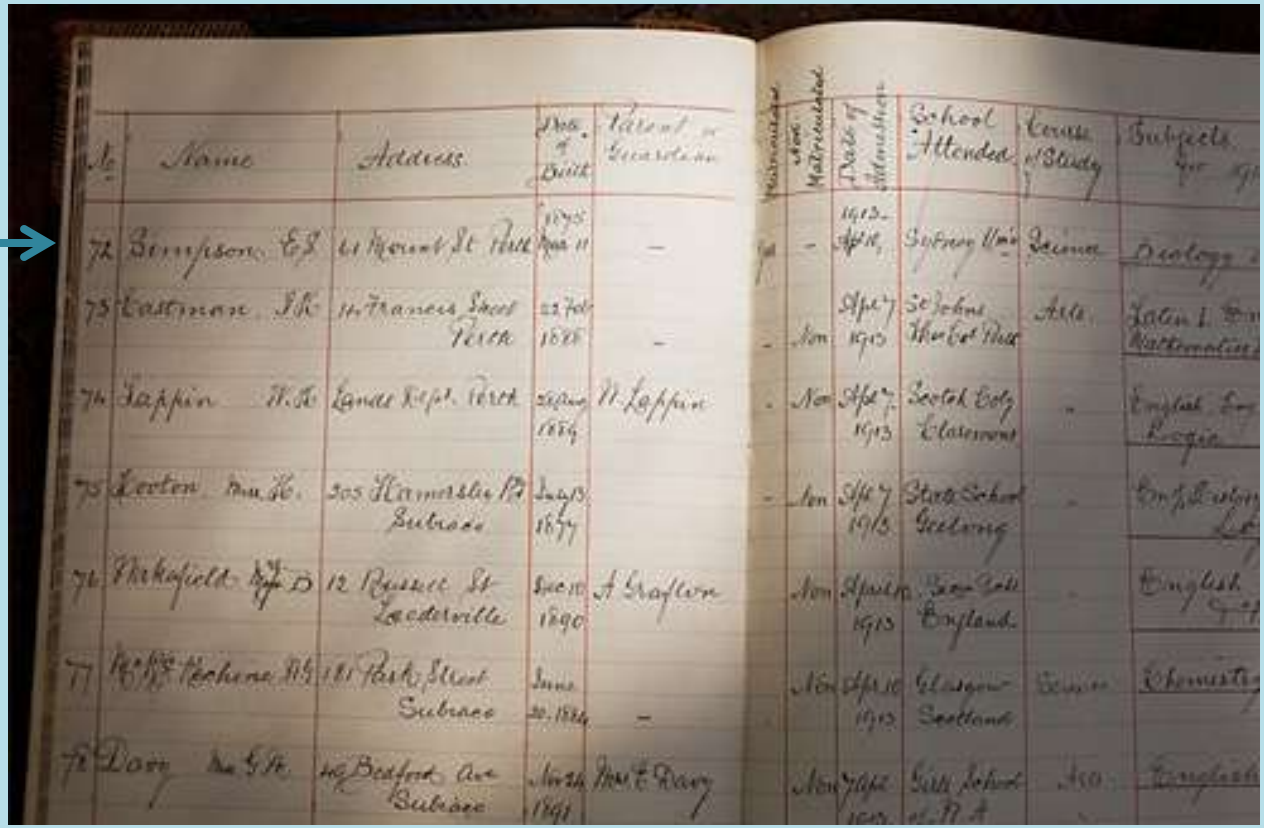
Simpson helped to provide the technical and scientific expertise indispensable to a group of active field geologists, and showed that, despite his isolation in Perth, he was at the cutting edge of laboratory research.

Besides his valuable contributions to the **gold** industry, Simpson made many individual contributions to Earth science, for example describing **meteorites** found on the Earth's surface, and **fulgurites** or "lightning stones" formed where lightning had struck sand and soil.

fulgurites: hollow tubes of fused sand

At UWA:

By the start of 1913, Simpson had been working in responsible positions for around 18 years and was coming up to his 38th birthday. He was encouraged by his colleagues at the Geological Survey to undertake a BSc. Geology degree at the new University.



No.	Name	Address	Date of Birth	Parent or Guardian	Matriculated	Date of Admission	School Attended	Course of Study	Subjects for
72	Simpson E.S	41 Mount St Perth	1895	–	–	1913 April	Sydney Univ	Science	Geology
73	Eastman F.K	14 Frances Street Perth	22 Feb 1895	–	Nov	April 1913	St Johns Church of England	Arts	Latin I Mathematics
74	Lappin W.H	Lands Dept. Perth	1894	W. Lappin	Nov	April 1913	Scotch College Claremont	–	English Logic
75	Lorton Miss M.	305 Hamersley Rd Subiaco	June 1894		Nov	April 1913	State School Geelong	–	Eng. Lit. Logic
76	Pitchfield Miss D	12 Russell St Cottesville	Dec 10 1890	A Grafton	Nov	April 1913	[illegible] England	–	English
77	[illegible]	181 Park Street Subiaco	June 20. 1894	–	Nov	April 1913	Glasgow Scotland	Science	Chemistry
78	Dow Miss E.M.	46 Bedford Ave Subiaco	March 1891	Mrs E Dow	Nov	April 1913	Girls School of A	Arts	English

Register of Students Attending the University of Western Australia, March 1913.

At UWA:

Simpson, at nearly 38, would have been among the oldest of the 184 new students in 1913, and was nearly a year older than the Geology Professor.

Because of the geological units he had completed in his Sydney Bachelor of Engineering degree, for which he was credited, he was able to obtain his BSc. (in geology, with First Class Honours) by 1914. He was the first student to obtain a degree of any kind from UWA.

At UWA:

In 1917 he applied for admission to the degree of Doctor of Science and was awarded his DSc. in April 1919 for his geological thesis ***The Minerals of Western Australia***. Again, he was the first student to earn a Doctorate of Science at UWA.

He continued throughout the rest of his life to collect and arrange systematically every fresh piece of information on the mineralogy of the State that came to his notice, in order to publish a complete *Minerals of Western Australia* monograph based on his original DSc. However, he died before he could do this.

Additional Positions:

From arriving in WA, until his death, he devoted himself to the service of the State and to the Commonwealth, specializing in mineralogy and geochemistry.

- Between 1899 and 1905 Simpson helped to establish the **Western Australian School of Mines** and joined its advisory board (1902-15).
- During World War I he was a member of the **Western Australian State Munitions Committee** and a **director of the State's 18-pounder Shell Factory** (1914-19).
- He took an active part in **inaugurating the Perth Technical School**.
- From 1920 to 1926 he was a **member of the University Senate.**
- From 1927 he was government representative on the **Western Australian committee** of the **Council for Scientific and Industrial Research.**

Simpson supported local science institutions. He was:

- **Founder** of the Natural History and Science Society of Western Australia, and of the Royal Society of Western Australia which **grew out of it (and which has its centenary in 2014);**
- **President** of both of the above societies
- **President** of the Chemical Society of Western Australia
- **President** of the State branch of the Australian Chemical Institute.
- **Trustee** of the Western Australian Museum and Art Gallery (from September 1935 until his death in 1939).

Society Honours:

The Medal of the Royal Society of Western Australia, the **Kelvin gold medal** (1929)

The Medal of the Royal Society of New South Wales, the **W B Clarke memorial medal** (1934)

Life Fellow of the **Chemical Society of London** (1914)

Fellow of the **Mineralogical Society of America** (1926)

To honour him for his researches into minerals, a new mineral, ***simpsonite***, with the formula: $Al_4Ta_3O_{13}(OH)$, and first discovered in the Pilbara, was named for him.

An uncommon mineral, simpsonite can be found in Australia, Brazil, Zimbabwe, the Congo, Russia, and Canada. It occurs as an accessory mineral in tantalum-bearing granite pegmatite.

Simpsonite from Brazil.

Simpsonite from Tabba Tabba, Pilbara, WA

Simpson's interests embraced art, music, archaeology, yachting and motoring. He enjoyed home carpentry and was a Freemason.

An ardent disciple of precision and thoroughness, and a man of very high ideals, he brought into all his dealings a rare culture and knowledge in many branches of learning.

However, his heavy workload came at a cost to his health: even at the relatively young age of 29 he was medically diagnosed with nervous exhaustion from overwork.

His file suggests that he became sensitive to perceived slights, and could at times be a difficult colleague.

Final years:

Simpson died of a heart attack on 30th August, 1939, at the relatively young age of 64.

(left) Simpson at a tea party for the 90th birthday of his aunt, Mrs Helen Pretty, in 1938.

Simpson's will directed that he should be buried with his first wife, Muriel, in Karrakatta Cemetery.

Simpson's Legacy: the Simpson Collection

Mineralogical samples accumulated during his working life (eventually known as the ***Simpson Collection***, and comprising about 5500 specimens) were transferred from the Government Chemistry Laboratories to the Western Australian Museum in 1995.

This invaluable collection, augmented by samples collected by the Government Chemistry Laboratory post-Simpson, is still available for reference (by appointment) at the Museum's Collections area in Welshpool.

Simpson's Legacy: the Edward Sydney Simpson Prize

After his death, his family funded the award of the ***Edward Sydney Simpson Prize*** annually to the third-year student who was the best in mineralogy at The University of Western Australia.

It was the first geological award of its kind at the University, and is still being awarded.

Simpson's Legacy: *Minerals of Western Australia*

After his death, and as requested in his will, the vast amount of data collected by him for his ***Minerals of Western Australia*** monograph was prepared for publication by Dr Dorothy Carroll and H T Phillipps, paid for by the State Government and the Council for Scientific and Cultural Research.

The work was published in three volumes in 1948, 1951 and 1952, and is **still the primary source of information on minerals in the State.**

Acknowledgements for illustrations:

1: Geological Survey of Western Australia
2: www.wollahra.nsw.gov.au ; www.century21.com.au
3: Simpson family
4: http://sydney.edu.au/engineering/civil/about/history/past-and-future.shtml ; trove.nla.gov.au
5: Geological Survey of Western Australia
6: Simpson family
7: http://www.murraymitchell.com/2011/04/venice-at-night/
8: Simpson family
9: Simpson family
10: Simpson family
11: http://periodictable.com/Items/Jensan.Tantalite/index.html copyright 2008 Theodore Gray
12: Dr A Bevan ; Dr A Bevan ; paltry-sage.blogspot.com
13: The University of Western Australia
14: Geological Survey of Western Australia
15: The University of Western Australia
17: J. Bevan ; The Western Australian Museum
18: www.coinarchives.com ; rswa.org.au
19: The Western Australian Museum
20: Simpson family
21: nla.gov.au ; Minerals of Western Australia Volume 1 (Government Printer, Perth, WA 1948)
22: J Bevan
23: J Bevan
24: J Bevan
25: J Bevan