## Otto Liebermann (1898-1974)

A short biography of Dr. Otto Liebermann is given here to commemorate his invaluable contribution to the solution of what was known during more than two centuries as "the dolomite problem".

Otto Liebermann was born on 24 November 1898 in Jaslo (Galicia, in those days part of Austria-Hungary, now Poland). His father Alois came originally from Pilsen (Czech Republic) and had started out working in the Oderfurter Mineralölwerke at Ostrau (near Halle-Saale, Germany); he subsequently went to Galicia to work as a manager in the oil fields there and eventually became Technical Director of Nafta A.G. in Lemberg (now Lviv, Ukraine). Eventually Alois Liebermann started developing oil fields in Galicia, first on his own and then with partners.

Otto Liebermann was educated from 1904 to 1908 at the elementary school of Lviv, and at the Gymnasium of Lviv from 1908 to 1914. In 1914 his parents and their children (Otto, his two brothers Karl and Arthur and his sister Olga) moved to Vienna, where on 4 May 1916 Otto graduated from the Staatsgymnasium. Being a citizen of Vienna, Otto Liebermann was conscripted into the Austrian army and served from 1916 to 1918. (One year later Otto Liebermann officially became a citizen of Austria.) The end of World War I made it possible for him to enroll at the University of Vienna to study chemistry and physics, where he obtained his Ph.D. on 30 October 1922. (The title of his dissertation was Über die Einwirkung von Schwefelsäure auf höhere diprimäre Glykolen.) From 1922 to 1925 Dr. O. Liebermann worked as a chemist at the Allchemin (Allgemeine Chemische Industrie A.-G.) factory of Vienna. From 1925 to 1928 Otto Liebermann was employed by the Aktiengesellschaft für Mineralöl-Industrie (formerly David Fanto \& Co.), Vienna.

Otto Liebermann married Stella Schacherl in 1929 ; two daugthers were born to them: Eva Eugenia in 1931 and Luiza in 1933.

Otto Liebermann became involved with the family business in 1928 and worked as the Managing and Technical Director of his father's oil fields in Potok (Galicia) from 1929 to 1939, and prospected for oil in the surrounding areas. His daugther Luiza now remembers how her father became greatly interested in dolomite rocks because of the close association with oil deposits.

In May 1939 the Liebermann family was able to board the last boat leaving from Gdynia (Poland) before the outbreak of the Second World War. This chilling episode has been sketched by Otto Liebermann as follows: "In September 1938 Austrian passports were declared invalid and had to be exchanged for German ones. Failure to obey would result in deportation by the Polish Authorities. In autumn 1938 the Germans expelled people originating from Poland who lived in Germany and Austria. Thereupon the Polish Authorities made preparations to have their own back by doing the same and forcibly deported Austrian and German residents. Our passports were taken away, but after several days these were returned. At the same time it was made clear that we should leave Poland as soon as possible. In the late winter of 1938, when the threat of deportation was made, a tip-off by an acquaintance (a very old man) enabled me to hide in a wooden hut in the forest, until it was safe to return home. However this resulted in double pneumonia which combined with my
angina made life very difficult. After much effort visas for emigration to Bolivia were obtained and we left Poland in early June 1939 with transit visas via England and Chile. We were only able to take vital personal belongings and no money, as exporting money was strictly forbidden. On arrival in England some complications developed and our departure was delayed and the German visas almost expired. In August 1939 the visas were extended, but the outbreak of war in September prevented our departure for Bolivia.

During the war I had enormous difficulties to fund our existence. In June 1940 I was interned on the Isle of Man as an enemy alien, and was released on medical grounds a year later. After internment I worked in a chemical laboratory of a metal factory carrying out very boring repetitive analytical work. At the end of the war I joined the firm of Jenson and Nicholson, who manufactured Berger paints, as a research chemist developing new paints and varnishes for the domestic and commercial markets. It took many years until we managed to have a modest home and in 1947 I was granted British nationality".

The Liebermann family lived in a house in Ilford (Essex), at the address mentioned in Otto Liebermann's 1967 paper in the science journal Nature: 29 de Vere Gardens, Cranbrook, Ilford. Unfortunately, Otto Liebermann was not able to obtain employment in the oil industry and spent the years after the war until retirement working as Chief Chemist at a paint factory. Only after retirement he could do what he had always wanted to do: his own research on dolomite.

As his daugther Luiza recalled: " 29 de Vere Gardens was a large house and when my sister and I left home my parents let the upstairs as a flat, converting a small bedroom into a kitchen. I can't remember the exact sequence of events but eventually they ceased to have tenants and Dad took over the upstairs kitchen as his laboratory. He was completely self financed and it was in the kitchen of 29 de Vere Gardens that he synthesised dolomite, the work he had had to leave for so many years because of the war."

On 17 March 1974 Otto’s wife Stella died, and only three weeks later on 6 April 1974 Otto Liebermann died in Ilford.


Acknowledgement: This biography could not have been written without the help of Mrs. Luiza Brook (née Liebermann) and her sister Mrs. Eva Rosner (née Liebermann); the portrait of Otto Liebermann (aged 56) featured here was also supplied by Mrs. Luiza Brook. Their help is greatly appreciated.

## Reference:

Liebermann, O. (1967): Synthesis of dolomite. Nature, vol.213, pp.241-245.

## External link:

Deelman, J. C. (1999): Low-temperature nucleation of magnesite and dolomite. Neues Jahrbuch f. Mineralogie, Monatshefte, Jg.1999, pp.289-302.

