



1880 – 1956

LUDGER MINTROP

Co-founder of Applied Geophysics

Ludger Benedictus Mintrop was born in Essen-Heidhausen on July 18, 1880. After leaving school, he became a miner and at the same time began an apprenticeship as a mine surveyor. After he had caught up with his high school diploma, Mintrop studied mine surveying at the Technical University of Aachen from 1902 to 1905 and also attended lectures at the Royal Prussian Mining Academy in Berlin. In 1905 Ludger Mintrop became a state-approved mine surveyor and he started to work at the TH Aachen as an assistant to Karl Haussmann and he also supervised the earthquake station. In 1907, however, Haussmann sent him to Göttingen to do his doctorate under Emil Wiechert. Mintrop began pioneering experiments in 1908 to generate artificial earthquakes using a 4-ton drop weight. In the same year, he also became a teacher and department head at the mining school in Bochum and head of the earthquake station there. In 1911, Ludger Mintrop received his doctorate from the University of Göttingen on ground vibrations of steam engines. One year later he published his well-known textbook "Einführung in die Markscheidekunde".

After the beginning of the 1st World War, Mintrop worked as a sound measurement technician in the artillery, where he succeeded in continuing his scientific work. In 1917, for example, he developed a field seismograph and in 1919, after the end of the war, he submitted his well-known patent specification "Verfahren zur Ermittlung des Aufbaus von Gebirgsschichten," which is considered the birth of refraction seismics and the Mintrop wave.

Ludger Mintrop recognized early on the economic benefits of the methods he discovered, and so in 1921 he founded the Seismos GmbH in Hannover, which in 1923 was able to detect oil deposits on salt dome flanks in Mexico and Texas. Thereupon the worldwide triumph of seismics began.

In 1928, Mintrop received an appointment at the University of Breslau and became professor and director of the Institute for Mine Surveying and Geophysics. He had to resign from the management of Seismos GmbH in 1933, as he was prohibited from managing a company due to his work at a university. In 1946 he moved to the TH Aachen and became professor for Mine Surveying, Engineering and Geophysics.

In the course of his outstanding career in applied geophysics, Mintrop was awarded numerous honors. Among others, he received the honorary membership of the Society of Exploration Geophysicists in 1930, the honorary membership of the DGG in 1950, and the Grand Cross of the Federal Republic of Germany in 1955.

Ludger Mintrop died in Heidelberg on January 1, 1956 at the age of 75 after a short serious illness and found his final resting place in his hometown of Essen.

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Modified after Kertz W. (1991): Ludger Mintrop, der die Angewandte Geophysik zum Erfolg brachte, DGG-Mitteilungen 3/1991, 2-16; Jacobs F. & Börngen M. (2019): Wiechert, Mintrop & Co. – Die 24 Gründungsväter der Deutschen Geophysikalischen Gesellschaft. Publisher EAGLE.