



1864 – 1938

## OSKAR HECKER

Founder of the Imperial Institute for Earthquake Research in Jena

Oskar Ernst August Hecker was born in Bersenbrück near Osnabrück on May 21, 1864. From 1887 to 1891 he studied astronomy at the universities of Bonn, Berlin and Munich. In 1891, Hecker received his doctorate from the University of Munich for his thesis on the proper motion of fixed stars and the motion of the solar system. He received his first employment in the same year at the Prussian Geodetic Institute on the Telegrafenberg in Potsdam, where he worked for Robert Helmert.

After the death of Ernst von Reber-Paschwitz in 1895, Oskar Hecker took over his activities at the horizontal pendulum located on the Telegrafenberg. He discovered, for example, that a pendulum originally intended for tracking the perturbation of the vertical could also be used to register nearby blast vibrations. In 1896, the earthquake house of the Potsdam Geodetic Institute, which was built according to his plans, was opened. The building is still located on the Telegrafenberg today. During his time in Potsdam, Oskar Hecker investigated a microseismic 2Hz signal and recognized that it was caused by the surge on the Norwegian coast. He also worked on measuring the Earth's gravity on the oceans during numerous cruises from 1902 to 1910, gaining new insights into isostatic mass balance and gravity anomalies over deep-sea trenches.

In 1910, Hecker left Potsdam to become director of the Imperial Main Station for Earthquake Sciences in Strasbourg and of the International Seismological Association (ISA). Together with his co-workers Beno Gutenberg, Carl Mainka and August Sieberg, he succeeded in adapting the old instrumental equipment to the state of the art. From 1911 he also took over the publication of *Gerland's Beiträge zur Geophysik* and from 1915 he was honorary professor of geophysics at the University of Strasbourg. However, after the end of the 1<sup>st</sup> World War, the Imperial Main Station was closed and international scientific cooperation was reorganized, leading to the dissolution of the ISA and the establishment of the Seismology Section within the International Union of Geodesy and Geophysics (IUGG). Thereupon, Oskar Hecker decided to establish an institution similar to the Imperial Main Station in Germany and so the Imperial Institute for Earthquake Research (*Reichsanstalt für Erdbebenforschung*) was opened in Jena in 1923. Hecker as its director endeavored to work not only on seismological but also on seismic and gravimetric topics. In 1922 he became an honorary professor at the University of Jena and he was one of the co-founders of the German Seismological Society, later DGG, and in 1924 he became its chairman and he was also one of the founding editors of the *Zeitschrift für Geophysik*.

In 1932 Oskar Hecker retired and he died in Munich on September 19, 1938 at the age of 74.

*DGG PRO – Public Relations & Outreach, Hannover*

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