

Wilhelm Weber's Works Translated into English

A bibliography compiled by A.K.T. Assis



Wilhelm Eduard Weber (1804-1891)

Wilhelm Eduard Weber (1804-1891) was one of the main scientists of the 19th Century. His complete works were published in six volumes between 1892 and 1894 [1, 2, 3, 4, 5, 6]. Here we cite all of his works and letters known to us which have been translated into English.

The joint book of Wilhelm Weber and his brother, the anatomist Eduard Friedrich Weber (1806-1871), originally published in 1836, has recently been translated [7].

Weber wrote eight major Memoirs between 1846 and 1878 under the general title *Electrodynamic Measurements, or Determination of Electrodynamic Measures*: [8, 9, 10, 11, 12, 13, 14, 15]. The eighth Memoir was published only posthumously in his collected papers.

Three of these eight Memoirs have already been translated, namely, the first [16], the sixth [17], and the last one [18]. In 1848, an abridged version of the First Memoir was published [19]. This work is extremely important as it introduces for the first time Weber's potential energy, which is a function not only of the distance between the interacting charges, but also of their relative radial velocity. This paper has also been translated [20].

A joint paper by Weber and Kohlrausch of 1856 [21], has recently been translated [22].

Three of his works related specifically to diamagnetism have already been translated. One is a paper of 1848 [23], translated into [24]. The second one is a paper of 1852 [25], translated

into [26]. It is an abridged version of Weber's third major Memoir, [10]. The last one is a letter from Weber to John Tyndall (1820-1893) related to the theory of diamagnetism [27].

A paper of 1851 on the measurement of electric resistance according to an absolute standard [28] was been translated in 1861 [29].

There is a translation of the results of the observations made by the Magnetic Association in the year 1836 [30].

There is a translation of a paper of 1837 with observations on the arrangement and use of the bifilar magnetometer [31], namely, [32].

Likewise, there is a translation of a paper of 1838 on a transportable magnetometer [33], namely, [34].

There is a translation of an extract from remarks on the term-observations for 1839, of the German Magnetic Association [35]. An extremely rich exchange of letters between C.F. Gauss (1777-1855) and Weber has been recently translated [36].

Weber's aphorisms, published only posthumously [37], have recently been translated [38].

Acknowledgments

The author wishes to thank the Institute for the History of Natural Sciences of Hamburg University and the Alexander von Humboldt Foundation of Germany for a research fellowship in 2009 during which this work was accomplished. He thanks also Faepex/Unicamp for financial support.

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