Further Reading: Michael Faraday

General reading


Published books by Faraday, mainly collections of papers and lecture notes, some published after his death:

*Chemical Manipulation, Being Instructions to Students in Chemistry*. (1827).

*Experimental Researches in Electricity, Vol I, II & III* (1837, 1844, 1855)

*Experimental Researches in Chemistry and Physics* (1859).

W. Crookes. ed. *A Course of six lectures on the Various Forces of Matter* (1860)

W. Crookes. ed. *A Course of six lectures on the Chemical History of a Candle*, (1861)


The liquefaction of gases (1896.)

Published texts by Faraday


The complete correspondence of Michael Faraday is currently being compiled. Five volumes have been published with the sixth in progress. Frank A.J.L. James, *The Correspondence of Michael Faraday*, (London, 1991-2008).

In-depth reading:


David Gooding, ‘Experiment and concept formation in electromagnetics and technology in England in the 1820s’, History and Technology, 1985, 2: 151-176,


Frank A.J.L. James, “the civil-engineer’s talent”: Michael Faraday, science, engineering and the English lighthouse service, 1836-1865’, *Transactions of the Newcomen Society*, 1999: 70: 153-60


José Romo and Manuel G. Doncel, ‘Faraday’s initial mistake concerning the direction of induced currents, and the manuscript of Series I of his Researches’, Archive for the History of the Exact Sciences, 1994, 47: 291-385.


Ryan Tweney, ‘Toward a Cognitive-Historical Understanding of Michael Faraday’s Research: Editor’s Introduction’, Perspectives on Science 2006, 14: 1-6,


Michael Faraday FRS (/ˈfærədeɪ, -di/; 22 September 1791 – 25 August 1867) was an English scientist who contributed to the study of electromagnetism and electrochemistry. His main discoveries include the principles underlying electromagnetic induction, diamagnetism and electrolysis. Although Faraday received little formal education, he was one of the most influential scientists in history. It was by his research on the magnetic field around a conductor carrying a direct current that Faraday established Michael Faraday, English physicist and chemist whose many experiments contributed greatly to the understanding of electromagnetism. Among his achievements, he was the first to produce an electric current from a magnetic field and invented the first electric motor and dynamo.

Faraday's mother stayed at home to take care of Michael and his three siblings, and his father was a blacksmith who was often too ill to work steadily, which meant that the children frequently went without food. Despite this, Faraday grew up a curious child, questioning everything and always feeling an urgent need to know more. Because of his early reading and experiments with the idea of force, he was able to make important discoveries in electricity later in life and eventually became a chemist and physicist. Michael Faraday (1791-1867) is the famous British scientist who became famous in the field of experimental physics. It is known for the opening of electromagnetic induction which formed later the basis of industrial production of electricity. Faraday was a member of the numerous scientific organizations, including the London royal society and St. Petersburg academy of Sciences. He is considered by right the largest scientist-experimenter in the history of science. From poverty to science. Michael Faraday was born on September 22, 1791 in working family. His father and the elder brother were en