Further Reading: Michael Faraday

General reading


Alan E. Jeffreys, Michael Faraday: A List of His Lectures and Published Writings, (London, 1960).

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:


Henry Bence Jones, Life and Letters of Faraday, 1st and 2nd editions, 2 volumes, London, 1870


David Gooding, ‘Experiment and concept formation in electromagnetic science 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,

Ryan Tweney, ‘Stopping Time: Faraday and the scientific creation of perceptual order’, Physis, 1992, 29: 149-164,


MICHAEL FARADAY, the hero of James Hamilton's studious if slightly bewildering new biography, was one of the greatest experimental scientists ever. He invented the electric motor, generator and transformer -- thus, as Hamilton notes, putting "the Age of Steam . . . on notice to quit." He discovered the basics of electromagnetism, from which sprang everything from the electronics industry to Einstein's relativity. Originally Answered: When reading Maxwell, Faraday, Lord Kelvin and more recently Nikola Tesla and Richard Feynman. All of them, seem compared to other, to explain quite complex phenomena with words and without exclusively relying on mathematics why? Michael Faraday's discoveries of electromagnetic induction and of the laws of electrolysis led to the invention of the first electric motor. 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 (September 22, 1791 – August 25, 1867) was an English physicist and chemist who is one of the most influential scientists of all time. His most important contributions, and best known work, were on the closely connected phenomena of electricity and magnetism, but he also made very significant contributions in chemistry. Faraday was principally an experimentalist; in fact, he has been described as the "best experimentalist in the history of science". He did not know any advanced