

Further Reading: Michael Faraday

General reading

Geoffrey Cantor, *Michael Faraday: Sandemanian and Scientist. A Study of Science and Religion in the Nineteenth Century*, (London, 1991).

David Gooding, *Experiment and the Making of Meaning: Human Agency in Scientific Observation and Experiment*, (Dordrecht, 1991).

David Gooding and Frank A.J.L. James (eds.), *Faraday Rediscovered: Essays on the Life and Work of Michael Faraday, 1791-1867*, (London, 1985).

Frank A.J.L. James (ed.), *'The Common Purposes of Life': Science and society at the Royal Institution of Great Britain*, (Aldershot, 2002).

Frank A.J.L. James, *Michael Faraday: A very short Introduction*. (Oxford, 2010)

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)

W. Crookes. ed. *On the Various Forces in Nature*. (1873)

The liquefaction of gases (1896.)

Published texts by Faraday

The vast majority of Faraday's manuscripts, apart from letters, have been published on microfilm and cd. Frank A.J.L. James, *Guide to the Microfilm edition of the Manuscripts of Michael Faraday (1791-1867) from the Collections of the Royal Institution, The Institution of Electrical Engineers, The Guildhall Library [and] The Royal Society*, (2nd ed., Wakefield, 2001).

A typescript edition of Faraday's experimental notebooks has been published. Thomas Martin, *Faraday's Diary*, 7 volumes and index, London, 1932–36.

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:

Ronald Anderson, 'The Crafting of Scientific Meaning and Identity: Exploring the Performative Dimensions of Michael Faraday's Texts', *Perspectives on Science*, 2006, **14**: 7-39.

Ronald Anderson, 'The Referees' Assessment of Faraday's Electromagnetic Induction Paper of 1831', *Notes and Records of the Royal Society of London*, 1993, **47**: 243-56,

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

Giovanni Boato and Natalia Moro, 'Bancalari's role in Faraday's discovery of diamagnetism and the successive progress in the understanding of magnetic properties of matter', *Annals of Science*, 1994, **51**: 391-412.

Brian Bowers and Lenore Symons, *'Curiosity Perfectly Satisfied': Faraday's travels in Europe 1813-1815*, (London, 1991).

- Z. Buchwald, 'William Thomson and the mathematization of Faraday's electrostatics', *Historical Studies in the Physical Sciences*, 1977, **8**: 101-136
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- Geoffrey Cantor, 'The Scientist as Hero: Public Images of Michael Faraday', in M. Shortland and R. Yeo (eds.), *Telling Lives in Science: Essays on Scientific Biography*, (Cambridge, 1996), 171-93.
- Geoffrey Cantor, 'How Michael Faraday brought law and order to the West End of London', *Physis*, 1992, **29**: 187-203
- Geoffrey Cantor, 'Educating the Judgment: Faraday as a Lecturer', *Bulletin for the History of Chemistry*, 1991, **11**: 28-36,
- Geoffrey Cantor, 'Faraday's Search for the Gravitoelectric Effect', *Physics Education*, 1991, **26**: 289-93
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- June Z. Fullmer and Melvyn C. Usselman, 'Faraday's Election to the Royal Society: A Reputation in Jeopardy', *Bulletin for the History of Chemistry*, 1991, **11**: 17-28.
- Graeme Gooday, 'Faraday Reinvented: Moral Imagery and Institutional Icons in Victorian Electrical Engineering', *History of Technology*, 1993, **15**: 190-205.
- David Gooding, 'From Phenomenology to Field Theory: Faraday's Visual Reasoning', *Perspectives on Science*, 2006, **14**: 40-65.
- David Gooding, 'Mathematics and Method in Faraday's Experiments', *Physis*, 1992, **29**: 121-147
- David Gooding, 'Mapping Experiment as a Learning Process: How the First Electromagnetic Motor Was Invented', *Science Technology and Human Values*, 1990, **15**: 165-201.
- David Gooding, "'Magnetic curves' and the Magnetic Field: Experimentation and Representation in the History of a Theory' in David Gooding, Trevor Pinch and Simon Schaffer (eds.), *The uses of experiment: Studies in the natural sciences*, (Cambridge, 1989), pp.183-223,
- David Gooding, 'History in the laboratory: Can we tell what really went on?' in Frank A.J.L. James (ed.), *The Development of the Laboratory: Essays on the Place of Experiment in Industrial Civilisation*, (London, 1989), pp.63-82
- David Gooding, 'Experiment and concept formation in electromagnetic science and technology in England in the 1820s', *History and Technology*, 1985, **2**: 151-176,
- David Gooding, "'He Who Proves Discovers': John Herschel, William Pepys and the Faraday Effect', *Notes and Records of the Royal Society of London*, 1985, **39**: 229-44,
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- L. Hannah, *Electricity before Nationalisation: A Study of the Development of the Electricity Supply Industry in Britain to 1948*, (London, 1979),
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- Frank A.J.L. James, 'Harriet Jane Moore, Michael Faraday, and Moore's mid-nineteenth century watercolours of the interior of the Royal Institution', in James Hamilton (ed.), *Fields of Influence: Conjunctions of Artists and Scientists, 1815-1860*, (Birmingham, 2001), pp.111-128.
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Herbert T. Pratt, 'Michael Faraday's Bible as Mirrors of his Faith', *Bulletin for the History of Chemistry*, 1991, **11**: 40-7.

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Oliver Stallybrass, 'How Faraday "Produced Living Animalculae": Andrew Crosse and the Story of a Myth', *Proceedings of the Royal Institution*, 1967, **41**: 597-619.

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Frans van Lunteren, *Framing Hypotheses: Conceptions of Gravity in the 18th and 19th centuries*, (Utrecht, 1991).

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Michael Faraday achieved his early renown as a chemist. He made many important contributions to chemistry. In 1820, Faraday produced the first known compounds made from carbon and chlorine, hexachloroethane (C₂Cl₆) and tetrachloroethene (C₂Cl₄).[^] Michael Faraday provided evidence for this fact by applying pressure to liquefy chlorine gas and ammonia gas for the first time. These were till then believed to be "permanent gases", or gases incapable of liquefaction. During ammonia liquefaction, Faraday also noted that when he allowed the ammonia to evaporate again, it caused cooling. Michael Faraday attended a local school until he was 13, where he received a basic education. To earn money for the family he started working as a delivery boy for a bookshop. He worked hard and impressed his employer.[^] Published by FamousScientists.org. Further Reading Alfred Marshall Mayer Henry and Faraday Popular Science Monthly, Volume 18, November 1880. More from FamousScientists.org: Jane Marcet. Michael Faraday: Further reading. Biographies, books and papers about Michael Faraday. Credit: Anna Gordon. Papers. A large proportion of Faraday's personal and experimental papers are held at the Royal Institution of Great Britain. Find out how to view the material.[^] Faraday published only one book, Chemical Manipulation, Being Instructions to Students in Chemistry (1827). His other publications are collections of papers or lecture notes; his famous Chemical History of a Candle (1861) was edited and published by his friend William Crookes. Michael Faraday's books and manuscripts published after his death - Download the list. Downloads. Faraday reading list. Faraday publications list. Related links. Michael Faraday: A Very Short Introduction. Share this. 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 Michael Faraday was one of the most important scientific minds of human history, discovering various electromagnetic and chemical principles.[^] Without the work of Michael Faraday, we wouldn't have Teslas or nearly any modern mechanical thing for that matter. Faraday's work and invention in the realm of electricity changed the world forever. Faraday is the inventor of electrolysis, balloons, electric motors, generators, dynamos, and more.