

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
- Geoffrey Cantor, 'Michael Faraday Meets the "High-Priestess of God's Works": A Romance on the Theme of Science and Religion' in Matthew Eddy and David Knight (eds.), *Science and Beliefs: From Natural Philosophy to Natural Science, 1700-1900*, (Aldershot, 2005), pp.157-170.
- 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
- Geoffrey Cantor, David Gooding and Frank A.J.L. James., *Faraday*, London, 1991.
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- B. C. Blake-Coleman and R. Yorke, 'Faraday and Electrical Conductors: an Examination of the Copper Wire Used by Michael Faraday between 1821 and 1831', *Proceedings of the Institution of Electrical Engineers*, 1981, **128A**: 463-71.
- Isobel Falconer and Frank A.J.L. James, 'Fame and Faraday', in Elaine Moohan (ed.), *Reputations*, (Milton Keynes, 2008), pp.85-122.
- 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,
- David Gooding, 'Empiricism in practice: Teleology, economy, and observation in Faraday's physics', *ISIS*, 1982, **73**: 46-67
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- David Gooding, 'Final steps to the field theory: Faraday's study of magnetic phenomena, 1845-1850', *Historical Studies in the Physical Sciences*, 1981, **11**: 231-75
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- Robert A. Hadfield, *Faraday and his Metallurgical Researches, with special reference to their bearing on the development of alloy steels*, (London, 1931).
- 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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