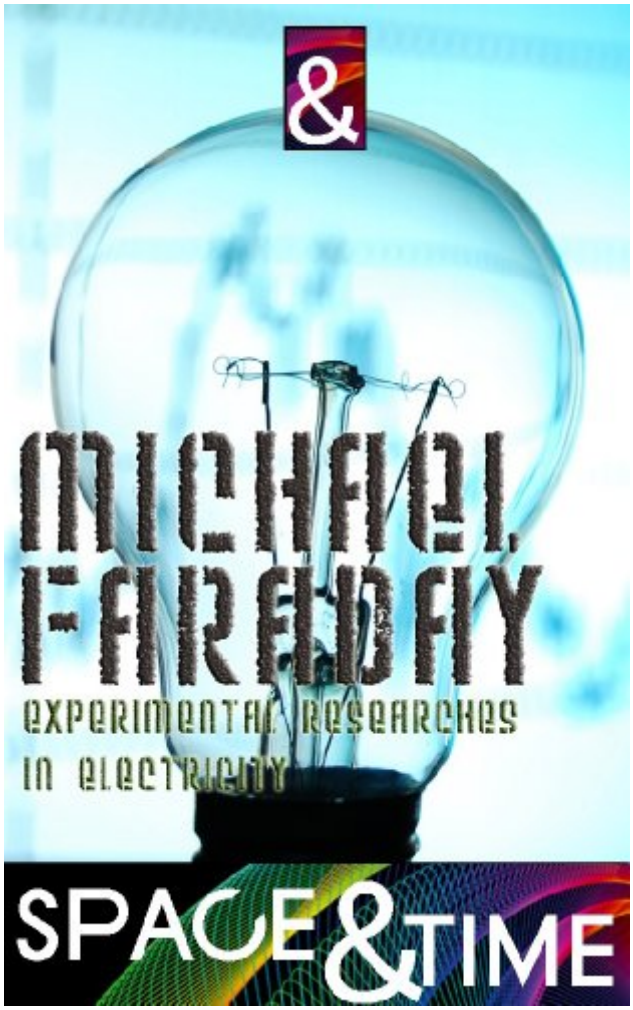
Experimental Researches In Electricity



Synopsis

Space and Time are pleased to bring you Michael FaradayÃ¢â ¬â„¢s Ã¢â ¬ËœExperimental Researches in ElectricityÃ¢â ¬â„¢. This classic is presented as a wonderfully presented edition with a fully interactive table of contents.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 the basis for the concept of the electromagnetic field in physics. Faraday also established that magnetism could affect rays of light and that there was an underlying relationship between the two phenomena. He similarly discovered the principle of electromagnetic induction, diamagnetism, and the laws of electrolysis. His inventions of electromagnetic rotary devices formed the foundation of electric motor technology, and it was largely due to his efforts that electricity became practical for use in technology.As a chemist, Faraday discovered benzene, investigated the clathrate hydrate of chlorine, invented an early form of the Bunsen burner and the system of oxidation numbers, and popularised terminology such as anode, cathode, electrode, and ion. Faraday ultimately became the first and foremost Fullerian Professor of Chemistry at the Royal Institution of Great Britain, a lifetime position.Faraday was an excellent experimentalist who conveyed his ideas in clear and simple language; his mathematical abilities, however, did not extend as far as trigonometry or any but the simplest algebra. James Clerk Maxwell took the work of Faraday and others, and summarized it in a set of equations that is accepted as the basis of all modern theories of electromagnetic phenomena. On Faraday's uses of the lines of force, Maxwell wrote that they show Faraday "to have been in reality a mathematician of a very high order Ã¢â ¬â œ one from whom the mathematicians of the future may derive valuable and fertile methods." The SI unit of capacitance, the farad, is named in his honour.Albert Einstein kept a picture of Faraday on his study wall, alongside pictures of Isaac Newton and James Clerk Maxwell. Physicist Ernest Rutherford stated; "When we consider the magnitude and extent of his discoveries and their influence on the progress of science and of industry, there is no honour too great to pay to the memory of Faraday, one of the greatest scientific discoverers of all time".

Book Information

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Customer Reviews

Faraday was the great experimenter and an excellent communicator who didn’t engage in the obfuscating BS that is present in our discourse today as it was in his time. Mike laid the foundation for modern science as we know it today, field theory, wave theory and the experience/experiment foundation of science technique/technology. He passed this to Maxwell, who wrote it in the mathematical language that is used today to represent and map out our observations of the world outside of the virtual universe of our minds and to provide us with connections to what we call "the real world".If you want to understand something, go to the source and Micheal Faraday is the source of our "modern" world. I would like to understand his view of the world that his experiments enabled him to see.

The great work by the great man himself. Only hope Dover follows up this terrific work with part two.

Very informative, I love reading about electrical experiments done before there was much knowledge in the subject, true pioneering.

Michael Faraday was a genius and first rate Scientific mind. He was also a wonderful communicator: all too uncommon a quality in Scientific writing.

This is NOT Faraday’s complete works, despite the implications of its title. A reprint of a 1914 publication, this is the Faraday of the chemical equivalent and the Law of Electrolysis, not the Law

of Electromagnetic Induction. The price is right for the Master's own words on investigations into the equivalence of all different sorts of electricity, and his work on electrolysis and voltaic cells. In this work we get to see the reasoning and experiments of this most inquisitive man; we get to see how his discoveries were made, and how Nature slowly yielded her secrets to his simple, persistent inquiries. Here he gives us "cation" and "anion" and also destroys Volta's view of the voltaic cell as an inexhaustible power source. This work shows why chemists rank Faraday as the greatest experimental chemist of the 19th century.Perhaps "Faraday's Experimental Researches in Electricity: Guide to a First Reading", by Howard J. Fisher, would be more like what a physicist would want. I have not read it myself, but I have heard from a reliable source that this is what physicists would care for. Fisher's work is published by Green Lion Press, which has published a number of other historically important scientific works.In particular, Green Lion Publishes, in three volumes, the unabridged version of "Faraday's Experimental Researches in Electricity." This is what the real history maven would want. (...)

Got burned on this one.... bummer. The entire book is a list of experiments which meant absolutely nothing to me. Probably my fault for not taking heed to a few of the reviews, but I was hoping for a glimpse into the life of this extraordinary man and maybe learn something from it. I read a few pages which describe monotonous experiments in electricity, then read a few more hoping to get to the heart of the book but it just goes on and on and on about procedure after procedure and goes nowhere. My bad for buying this book.

THIS BOOK IS EXCELLANT FOR THE SERIOUS STUDENT OR EXPERIMENTOR,AS WELL AS FOR SHEER DELIGHT OF LIESURE READING;MUCH OF THIS WORK IS OBVIOUSLY SET OUT FOR THE BENEFIT OF FUTURE STUDENTS,AND SUCH STUDIES AS THE VOLTAIC PILE AND EARLY ELECTROMAGNETS,CAN BE REPRODUCED WITH EASE-I RECOMMEND THIS AS AN ABSORBING BOOK FOR ALL TO ENJOY:FARADAY THE MASTER!--REGARDS,ALBERT ANDREWS

Where the heck is his book on time travel? Also, why does he wear a tie while stranded on an island? This man is fascinating!PS - The artist who painted his picture on the cover should be fired. Faraday looks nothing like that.

Current Electricity, and Magnets (Expanding Science Skills Series) Shocking! Where Does Electricity Come From? Electricity and Electronics for Kids - Children's Electricity & Electronics 25 Uses of Electricity 4th Grade Electricity Kids Book | Electricity & Electronics Experimental Psychology (PSY 301 Introduction to Experimental Psychology) Experimental Structural Dynamics: An Introduction to Experimental Methods of Characterizing Vibrating Structures Experimental and Quasi-Experimental Designs for Generalized Causal Inference What Are Insulators and Conductors? (Understanding Electricity) (Understanding Electricity (Crabtree)) What Is Electricity? (Understanding Electricity (Crabtree)) Electricity for Kids: Facts, Photos and Fun | Children's Electricity Books Edition Conductors and Insulators Electricity Kids Book | Electricity & Electronics Static Electricity (Where does Lightning Come From): 2nd Grade Science Workbook | Children's Electricity Books Edition Glencoe Physical iScience Modules: Electricity and Magnetism, Grade 8, Student Edition (GLEN SCI: ELECTRICITY/MAGNETIS) Science Fair Projects With Electricity & Electronics: Electricity & Electronics Naval Researches: Or a Candid Inquiry into the Conduct of Admirals Byron, Graves, Hood and Rodney, into the Actions Off Grenada, Chesapeak, ... of April, 1782 (American Revolutionary) Selected Works for Keyboard: Music for Two Keyboard Instruments (Recent Researches in the Music of the Pre-Classical, Classical, and Early Romantic Eras, Volume 1) The Inventions, Researches and Writings of Nikola Tesla The Voyage of the Beagle: Journal of Researches into the Natural History and Geology of the Countries Visited During the Voyage of H.M.S. Beagle Round the World (Modern Library Classics) Geometrical Researches on the Theory of Parallels Inventions, Researches And Writings Of Nikola Tesla