

Feb. 10th, 1813.

## Scientific Institution.

PRINCES - STREET, CAVENDISH - SQUARE.

Mr. SINGER will commence his LECTURES ON VOLTAIC ELECTRICITY, and ELECTRO-CHEMICAL SCIENCE, on TUESDAY, the 2<sup>d</sup> of FEBRUARY, at Eight o'Clock in the Evening.

LECTURE 1st.—TUESDAY, 2<sup>d</sup> FEBRUARY.—Introduction to the Subject. Nature of Chemical Inquiry. Application of Electricity as a Chemical Agent. Origin and progress of Electro-Chemical Discovery, illustrated by numerous Experiments.

LECTURE 2<sup>d</sup>.—FRIDAY, 5<sup>th</sup> FEBRUARY.—Effects of Electricity on Metals, evinced by the Oxidation of Gold, Silver, Platinum, Copper, Iron, Tin, and Lead. Resistance opposed by different Metals to Electrical Action. Comparison of these Effects, with the relative fusibility of various Metals.

LECTURE 3<sup>d</sup>.—TUESDAY, 9<sup>th</sup> of MARCH.—Mechanical action of Electricity. Revival of Metals from their Oxides. Experiments on Fluids and Gases. Conducting Power. Resistance. Decomposition and Recombination. Extensive application of Electricity as a Chemical Agent.

LECTURE 4<sup>th</sup>.—FRIDAY, 12<sup>th</sup> MARCH.—Connection of Electrical Light, with its Chemical Agency. Phosphoric appearances produced by Electricity. Penetrability of Electric Light. Its extraordinary effect on some opaque Bodies.

LECTURE 5<sup>th</sup>.—TUESDAY, 15<sup>th</sup> MARCH.—Discovery of the Voltaic Battery. Progressive Improvement in its Structure. Its influence on Animals. Early discovery of the Chemical Agency of Voltaic Electricity.

LECTURE 6<sup>th</sup>.—FRIDAY, 18<sup>th</sup> MARCH.—Effect of various Voltaic Combinations. Efficient methods of employing them. Effect of Number and of Surface in Voltaic Combinations. Their action on Metals and Fluids. Analogous effects of Electricity.

LECTURE 7th.—TUESDAY, 16th of MARCH.—Effect of the interrupted Voltaic Circuit. Production of Heat. Evolution of Brilliant Light. Combustion of Metals. Peculiarities attendant on these Phenomena.

LECTURE 8th.—FRIDAY, 19th of MARCH.—Action of Voltaic Electricity on Infusions containing Vegetable Colours. Experiments of the early Experimenters. Researches of Professor Davy. Agency of Voltaic Electricity in cases of Fluid Decomposition.

LECTURE 9th.—TUESDAY, 23rd of MARCH.—Hypothesis of Electric Energy. Experiments applicable to this Hypothesis. General application of the Methods of Electro-Chemical Analysis. Separation of the Constituents of various natural and artificial Compounds.

LECTURE 10th.—FRIDAY, 26th of MARCH.—Decomposition of the Alkalies. Singular properties of their Metallic Bases. Evidence of the Compound nature of the Earths. Metallization of Ammonia.

LECTURE 11th.—TUESDAY, 30th MARCH. State of our Theoretical Knowledge in Voltaic Electricity. Opinions of the principal British, and Foreign Philosophers. Hypothesis of Professor Davy. Mr. De Luc's Analysis. Experiments opposed to the Hypothesis of Electric Energy.

LECTURE 12th.—FRIDAY, 2nd of APRIL. Further consideration of the Theories of Voltaic Electricity. Effects of the Voltaic Battery compared with other sources of Electricity. Voltaic and Electric Charge. Voltaic and Electric Ignition. De Luc's Electric Column. Experiments with Twenty Thousand Pairs of Zinc and Silver Plates. New Experiments and Researches. Conclusion of the Course.

SUBSCRIPTION TO THE COURSE, ONE GUINEA.  
TWO LECTURES, FIVE SHILLINGS.

*The Lectures commence punctually at Eight o'Clock.*

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James, Printer, 24, Wardour-Street, Soho.