Significant Occurences in the Development of Electromagnetism

1 1269

Petrus Peregrinus published the "Epistala and Sigeam de Foucaucourt moletom de magnete".

2 1600

William Gilbert published the "Magneticisque Corporibus, et de Magno Magnete Tellure".

3 1665-1666

Newton performed experiments on optics and light.

4 1672

Isaac Newton released a paper on light and colours.

5 1743

Alexis Clairant suggested the idea of the potential.

6 1745

Ewald Georg von Kleist invented the Kleistian jar (capacitor).

7 1746

Petrus van Musschenbroek invented the Leyden jar (capacitor).

8 1745-1748

William Watson published a number of papers to the Royal Society.

9 1751

Benjamin Franklin published the "Experiments and Observations of electricity".

10 1752

Benjamin Franklin conducted the Kite-and-key experiment,

11 1753

Benjamin Franklin published the "Pour Richard's Almanack", which talked about the lightning rod.

12 1762

Johann Wilcke invented the electrophours.

13 1765

Alesandra Volta wrote his first scientific paper.

14 1767

Joseph Priestley published "The history and Present State of Electricity".

15 1768

Joseph Priestly published "Familiar introduction to the Study of Electricity".

16 1769

Alesandra Volta published "On the Attractive Force of the Electric Fire, and on the Phenomena Dependent On It".

17 1771

Henry Cavendish published an early version of his theory of electricty.

18 1772

Joseph Priestley published "The history and Present state of Discussion Relating to Vision, Light and Colours".

19 1775

Alesandra Volta wrote letter to Joseph Pristely that he invented a device thet produced static electricity.

20 1778

Alesandra Volta discovered that the voltage in a capacitor is proportional to electric charge.

21 1782

Alesandra Volat wrote about his invention of the capacitor.

22 1784

Pierre-Simon Laplace published the "Mechanique celeste", which introduced the potential.

23 1791

Luis Galvani published the "De viribus electrictricitates in motu muscalari commentirius".

24 1800

Alesandra Volta invented the voltaic pile.

25 1820

Hans Christian Oersted discovered that a magnetic needle aligns itself perpendicularly to a current-carrying wire.

26 1821

Michael Faraday published his work on electromagnetic rotation.

27 1827

Andre Marie Ampere published his "Memoire sar la theorie mathematique des phénomènes electrodynamique uniquement dedcte de L'expereince".

28 1828

George Green published "An Essay on the Application of Mathematical Analysis to the Theories of Electricity and Magnetism".

29 1831

Michael Faraday discovered electromagnetic induction.

He discovered that a change in current resulted in a change in the magnetic field.

He discovered that a current could be created by moving a magnet.

He invented the ancestor of the lectric motor.

30 1832

Wilhelm Weber and Carl Friedrich Gauss published a joint paper which introduced absolute units of measurements of magnetism for the first time.

31 1833

Heinrich Friedrich Emil Lenz reported investigations into the way electrical resistance changes with temperatures.

Wilhelm Weber and Carl Friedrich Gauss constructed the first electromagnetic telegraph.

32 1834

Heinrich Friedrich Emil Lenz discovered Lenz's law.

33 1839

Michael Faraday brought forth a new and general theory of electrical action.

Heinrich Friedrich Emil Lenz produced several medallions using elctrotyping.

34 1840

Wilhelm Weber and Carl Friedrich Gauss published the "Atlas Des Erdmagnetismus: Nach Der Elemente Der Theorie Entwerten".

35 1845

Michael Fraday discovered diamagnetism.

36 1846

Wilhelm Weber published the "Elektrodynamische Massenbestimmungen".

37 1847

Hermann von Helmholtz published his theory of electrodynamics in "Über die Bewegungsgleichungen der Elektrizität für ruhende Leitende Körper".

38 1848

Armand-Hippolyte-Louis Fizeau predicted the red shifting of electromagnetic waves.

39 1849

Armand-Hippolyte-Louis Fizeau calculated the speed of light, getting a value of better precision than the previous value determined by Ole Romer in 1676.

40 1851

Armand-Hippolyte-Louis Fizeau carried out experiments to detect the luminiferous ether.

41 1853

Armand-Hippolyte-Louis Fizeau described the use of the capacitor as a means to increase th efficiency of the induction coil.

42 1854

Rudolf Kohlrausch introduced the relaxation phenomena and used the streched exponetial function to explain relaxation effects of a discharging Leyden jar (capacitor).

43 1855

James Clerk Maxwell published "On Faraday's lines of force".

44 1856

Wilhelm Weber and Rudolf Kohlrausch demonstrated that the ratio between the electrodynamic and electrostatic units of charge is very close to the speed of light. They also used the letter "c" to denote the speed of light.

45 1857

Wilhelm Weber and Rudolf Kohlrausch published the "Elektrodynamische Manβbistimmongen: insbesondere Zuruektuhrong der Strominsituts - Messungin aut mechanisches Mauss".

46 1861

James Clerk Maxwell published "On Physical Lines of Force".

47 1862

James Clerk Maxwell calculated the speed of light.

48 1864

Wilhelm Weber published the "Electrodunamic Proportional Measures".

Armand-Hippolyte-Louis Fizeau made the first suggestion that the "speed of a light wave be used as a length standard".

James Clerk Maxwell stated that light was an electromagnetic waves.

James Clerk Maxwell proposed a comprehensive theory of electromagnetism, now called Maxwell's equations.

James Clerk Maxwell published "A Dynamical Theory of the Electromagnetic Field".

49 1865

James Clerk Maxwell published "A Dynamical Theory of the Electromagnetic Field".

50 1873

James Clerk Maxwell published "A Treatise on Electricity and Magnetism".

51 1876

Hermann von Helmholtz published "On the Limits of the Optical Capacity of the Microscope".

52 1877

Albert Abraham Michelson conducted experiments on the speed of light.

53 1879

Albert Abraham Michelson measured the speed of light in air.

David Hughes produced radio waves, but his work was ignored.

54 1881

Albert Abraham Michelson invented the interferometer, for the purpose of discovering the effect of the Earth's motion on the velocity of light.

55 1886

Heinrich Rudolf Hertz discovered radio waves.

He constructed apparatus that produced and detected radiowaves.

56 1887

Albert Abraham Michelson and Edward Morley carried out the Michelson-Morley experiment.

Heinrich Rudolf Hertz made observations of the photo electric effect.

Heinrich Rudolf Hertz published "Electromagnetic Effects Produced by Electrical Disturbances in insulators".

57 1888

Heinrich Rudolf Hertz demonstrated that one could produce and detect electromagnetic radiation.

58 1892

Heinrich Rudolf Hertz showed that cathode rays could penetrate a very thin metal foil.

59 1899

J.J Thomson discovered the electron.

60 1902

Albert Abraham Michelson published the "Velocity of Light".
He also published the "Light waves and their uses".

61 1905

Einstein proposed that light came in packets of energy.

62 1927

Albert Abraham Michelson published the "Studies in Optics".
To be continued