

CONTENTS Vol. 2

Lect. n. 54 :	The electric charge	pag. 6
Lect. n. 55 :	Electrization by rubbing and by contact	8
Lect. n. 56 :	Electrization by induction	10
Lect. n. 57 :	Coulomb's force	12
Lect. n. 58 :	Electric charge measure unit	14
Lect. n. 59 :	Coulomb's force produced by a set of charges	18
Lect. n. 60 :	Electric field	22
Lect. n. 61 :	Electric field produced by a set of charges	26
Lect. n. 62 :	Why do I introduce the electric field	30
Lect. n. 63 :	Force lines of the electric field vector	32
Lect. n. 64 :	What is the use of the force lines of the electric field vector	34
Lect. n. 65 :	Charges surface density on a conductor	36
Lect. n. 66 :	Electric field produced by a charge distribution on a plane conductor	38
Lect. n. 67 :	Electric field laid on a conductor and on a dielectric	40
Lect. n. 68 :	Dielectric rigidity	44
Lect. n. 69 :	Potential energy	46
Lect. n. 70 :	Electric potential	53
Lect. n. 71 :	Same potential surfaces and electric field force lines. Bound between electric field and potential difference	56
Lect. n. 72 :	Electric capacitance of a conductor	60
Lect. n. 73 :	Capacitors	63
Lect. n. 74 :	Capacitors connected in parallel	66
Lect. n. 75 :	Capacitors connected in series	68
Lect. n. 76 :	Electrostatic energy of a capacitor	72
Lect. n. 77 :	Electric current	74
Lect. n. 78 :	Actual and conventional current	78
Lect. n. 79 :	The current intensity is a vector quantity	80
Lect. n. 80 :	Generator	82
Lect. n. 81 :	Electric resistance	84

Lect. n. 82 :	What is the physical meaning of the electric resistance. Electric power	88
Lect. n. 83 :	Resistor connected in parallel	90
Lect. n. 84 :	Resistor connected in series	92
Lect. n. 85 :	How the current places itself in two connected in parallel resistors	96
Lect. n. 86 :	What is the potential difference at the ends of two connected in series resistors	100
Lect. n. 87 :	Joule effect	104
Lect. n. 88 :	Natural magnetism. Oersted experiment	108
Lect. n. 89 :	Magnetic induction	110
Lect. n. 90 :	Force line of \underline{B}	112
Lect. n. 91 :	Magnetic induction \underline{B} produced by a wire, gone along by direct current	114
Lect. n. 92 :	Two wires, gone along by direct current	118
Lect. n. 93 :	Magnetic induction generated by a turn, gone along by direct current	120
Lect. n. 94 :	Magnetic induction generated by a solenoid	123
Lect. n. 95 :	Matter effects on the magnetic induction	126
Lect. n. 96 :	The \underline{H} magnetic field vector	132
Lect. n. 97 :	Lorentz's force	134
Lect. n. 98 :	Flux of the magnetic induction vector	137
Lect. n. 99 :	Faraday-Lenz's law	140
Lect. n. 100 :	Closing and opening extracurrents	142
Lect. n. 101 :	Inductance	144
Lect. n. 102 :	Electric network and Kirchhoff's laws	146
Lect. n. 103 :	Induced ΔV in a rotating turn	150
Lect. n. 104 :	Alterned current	154
Lect. n. 105 :	Alterned current transformers	156
Lect. n. 106 :	Ruhmkorff's spark-coil	160
Lect. n. 107 :	Geometrical optics. Light reflection	162
Lect. n. 108 :	Light refraction	164
Lect. n. 109 :	The light is a wave	168
Lect. n. 110 :	Light polarization	171