

binning Proportions, Chemical Nomenclature, and Notation; Heat and Electricity being only slightly touched on. Especial attention will be directed to Inorganic Chemistry, and the Organic division given only in outline:

(*Text-books*—Chemistry in Chambers's Educational Course; Fownes' Elements.)

The course will be illustrated by experiments.

CHEMISTRY AND CHEMICAL PHYSICS.

SECOND YEAR.

Origin and history of Chemistry—connexion with other sciences.

General properties of matter—adhesion and cohesion—crystallization—specific gravity, &c.

Heat—expansion—thermometers—ventilation—change of state of aggregation—vapours.

Light—as a chemical agent—photography, &c.

Statical Electricity—Galvanism—Magnetism—Electro-Magnetism.

Electric Telegraph—Thunderstorms, &c.

Chemical affinity—nomenclature—law of equivalents—atomic theory.

Non-metallic elements—their combinations.

Vegetable Chemistry.

Animal Chemistry.

Application of Chemistry to Agriculture and to Physiology.

The Lectures will be illustrated by experiments, specimens, diagrams, and an extensive collection of models and physical apparatus.

The usual application of the science to manufactures, the arts, pharmacy and medicine, will be made particularly prominent. The detection of poisons and adulterations, as well as testing in general, will also be fully considered.

(*Text-books*—Fownes' Elements of Chemistry; Graham's Elements of Inorganic Chemistry; Lardner's Hand-book of Heat and Electricity, or Miller's Chemical Physics.)

APPLIED CHEMISTRY.

THIRD YEAR.

In this course, the application of Chemistry to the arts and manufactures, and to the ordinary purposes of life, will be more fully