

ORE DEPOSITS.

Lectures on the origin, modes of occurrence and uses of metalliferous minerals, with mention of the chief localities. The characters by which ore bodies are sometimes indicated to the prospector will be described. A sketch will be given of the geology of some of the leading mining districts.

Each student is to provide himself with a copy of Kemp's Ore Deposits of the United States and Canada (price \$5.00.)

*Text-books and Books for Reference:*

Philips' Ore Deposits.

Mineral Statistics, Geological Surveys of Canada and the United States.

Rothwell, The Mineral Industry. Vols. I, II, III, IV and V.

*Fourth Year.*

GEOLOGY.

A study will be made of structural and dynamical geology in connection with their bearings on economic problems.

Opportunities will be offered for those wishing to prosecute any special line of investigation.

Students are advised to devote as much time as possible to field work during the preceding long vacation, and to collect material for study in the laboratory during the winter.

*Text-Books*—Geikie's Text-Book of Geology.

Dana's Manual of Geology.

Geikie's Field Geology.

Geikie's Founders of Geology.

Nicholson's Palæontology.

Williams' Geological Biology.

PETROGRAPHY.

A course of lectures will be given on the microscopic characters and classification of the igneous rocks and on the characters, origin and classification of the pre-Cambrian formations.

Special attention will be paid to the metamorphic series of the Kingston district, as exceptional opportunities are here offered for the study of the field relations of these rocks, and for attacking those problems as to their origin which are now attracting the attention of geologists.

The *petrographical laboratory* is supplied with electrical power and provided with diamond saws and other apparatus needed in the preparation of thin sections of minerals and rocks for examination with the microscope.

Laboratory facilities are also provided for micro-chemical tests, and for the use of heavy solutions in separating the constituents of the rocks.