

The school owns several petrographical microscopes of the latest and most improved designs.

Text-Books and Books for Reference:

Rosenbusch—*Die Massige Gesteine*.

Zirkel—*Lehrbuch der Petrographie*. Vols. I, II and III.

Levy and Lacroix—*Les Mineraux des Roches*.

Rosenbusch-Iddings—*Microscopical Physiography of Rock-Forming Minerals*

Iddings—*The Origin of Igneous Rocks*.

Van Hise—*Correlation Papers, Archæan and Algonkian*.

ECONOMIC GEOLOGY.

Lectures on the origin, modes of occurrence and uses of the metals and their ores; materials used in the production of light and heat; minerals used in chemical manufactures; fertilizers; mineral pigments; salt, brine and mineral waters; building materials; cements; refractory materials; abrasive materials; gems and precious stones; miscellaneous.

MINING ENGINEERING AND METALLURGY.

Professor: Courtenay De Kalb.

Engineer:

These courses are given by lectures and text-book work supplemented by models, drawings, photographs, the actual examination of mines and works, and practical work in gold milling, ore dressing, and sampling, in the mining laboratory.

THE COURSE IN MINING.

Before taking these classes students must have passed in junior and senior mathematics and in junior and senior physics.

The lectures on the art of mining are designed to make the student familiar with the operations in vogue in this and other countries for finding, developing, extracting and mechanically treating minerals of economic value. It brings to a practical issue the information acquired by the lectures on mathematics, mechanics, surveying and physics. A knowledge of chemistry and mineralogy is also necessary to give a satisfactory appreciation of the character of the ores searched for or extracted. Connected with the mining of the ore, its geological association is considered.

The topics discussed are the following:

Ore Deposits. A brief review of the manner of occurrence of economic minerals, and their relations to the enclosing country rocks, so far as such relations can be generally stated. Also the influence of ore deposits under certain conditions upon topography,