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PETROGRAPHY AND MINERALOGY

Balances.- The department possesses one chemical balance which has been in use for 25 years and probably very much longer than that. A new one is required; also one or two improved Joly balances for determination of specific gravity. (Estimate, 1 Chemical balance \$200) \$300)
 2 Joly balances 100)

This Section of Work.- That was said of rock specimens existing equally to this extent. Systematic collections of all types of rocks are being arranged and this section of them must be made for their petrographic study.

Microscopes.- The department possesses one research model petrographical microscope, 3 better grade student microscope and 10 ordinary student models of older style. There are sufficient of the latter for present needs for the undergraduate work, but they should be repaired and supplied with modern equipment, but they should be repaired and supplied for graduate work at least at about \$25 each. These are also used for graduate work at present, but three more of the better grade are urgently required. (Estimate, 10 x \$25 = \$250; 3 x \$450 = \$1350; total, \$1600). There is immediate need for one or two additional research microscopes. (1 x \$1250 = \$1250). An extensive personal list of members of the department available for the extensive personal use of members of the staff, and the one research model is in necessity used by students who require precision in their investigations of the material of their theses.

Besides the above, a number of instruments are required for research work; these are noted in the general list attached.

It should be noted that the equipment on the top floor of the Chemistry and Mining building for cutting, grinding and polishing rocks and minerals for study purposes is practically worn out so well as being antiquated. An item of \$1000 has been added to rehabilitate this equipment, but the proposed report is adverse to spending any large sum except to replace the equipment entirely.