

ment has been compelled to advise them to go elsewhere. The fundamental and natural relation of the subject to all engineering courses makes the demands in this direction of first importance and necessitates serious restrictions to the general demand.

Even with this limitation, the drain on available resources to meet laboratory requirements, particularly in electrical work, has prevented an adequate equipment for lecture room instruction. Our neighboring institutions of rank, such as Texas, Kansas, Minnesota, Wisconsin, Michigan, etc., can each of them boast of at least double our own outfit in this respect, together with buildings generally especially designed for the subject.

Physical science is not a text-book subject. It can only be taught by appealing to the senses. No amount of logic will convey an idea what "blue" is or what heat is till it is seen or felt. If it is to be understood, it must be produced before a class, with proper demonstrations. This means equipment, and of a very expensive order. In well equipped universities the physical plant is usually much the greatest departmental expense, while the buildings must be constructed with special reference to stability and internal appliances. The writer recalls at least five physical laboratories in construction the past year in this country, two costing over \$200,000 and none less than \$50,000, and these generally in institutions with which Nebraska easily ranks. In the writer's experience in several laboratories, has no such numbers per equipment and floor space, into several times, been observed, nor is there any information of such crowded condition elsewhere.

With no provision for regular instruction in astronomy, and only occasional courses now possible, the necessity of an adequate departmental building, together with equipment for these two associated subjects, can no longer be ignored.

OUR CHEMISTRY DEPARTMENT.

The department of chemistry has outgrown the capacity of its present building and equipment. The chemical laboratory originally designed as a laboratory of instruction finds itself at present compelled to provide almost as many facilities for investigation, and for general analytical work, as if it were intended simply as a laboratory for investigation.

It was built to accommodate two hundred and fifty students and give to each room for advantageous work. For the last three years the building has been overcrowded with students, and now to such an extent that two, three, and even four students are working in the space designed originally for the accommodation of one person.

Instead of the normal limit of two hundred and fifty we are now giving instruction in this building to over four hundred students. We need today a building of double the capacity of the present laboratory. A makeshift compromise could be made by adding another story or by building an addition to the present building.

Specifically, we are in need of a room and its equipment for a pharmaceutical laboratory in which a class of from twenty-four to thirty-six students could be handled at one time. There has been an increasing demand for instruction in pharmaceutical chemistry for the last four or five years. As many as sixteen applicants were recorded the beginning of the last winter semester.

Room and equipment for laboratory for gas analysis is also one of the present necessities. The growth of the various technical departments in the University creates, and has created, a demand for instruction in technical chemistry. With a large amount of experiment station chemical work, especially that pertaining to the sugar beet and beet sugar industry, we have no special laboratory in which this work can be carefully and expeditiously carried out.

Another pressing demand is for a laboratory for metallurgical operations, especially