largely responsible for the expansion of its facilities in recent years. In 1922 he gave funds for the construction and endowment of the Jesse Metcalf Memorial Laboratory, named in memory of his father. At the same time he endowed a series of graduate fellowships and scholarships. His brother, the late Manton B. Metcalf of the class of 1884, also gave $100,000 for the endowment of the department of chemistry. With these gifts and the new facilities and financial support the department has developed into one of the strongest in the university. The opening of the Jesse Metcalf Memorial Laboratory in 1923 led to the introduction of a specialized undergraduate course of study leading to the degree of bachelor of science in chemistry, and to the expansion of the program of graduate work in the field of chemistry.

In a statement made by Professor Charles A. Kraus, research professor of chemistry, he said that the principal investigations to be carried on will be on problems in photochemistry, on the properties of electrolytes and dielectrics and on problems in organic and physical chemistry.

THE NEW BUILDING OF MELLON INSTITUTE

THE new building of Mellon Institute, the gift of Andrew W. and Richard B. Mellon, will be dedicated on May 6. It is outwardly classic in form, but within it contains laboratories and equipment of modern design. These new facilities will eliminate the overcrowded condition of the past and will increase the activities of the institute in both industrial research and research in pure science. The requirements of the institute made necessary a building of about six and one half million cubic feet. It is of limestone and granite.

Because of the massive exterior of the building, which has a rectangular row of sixty-two Ionic columns, it would have been impossible to place sufficient windows in the outside walls to provide adequate light for the numerous laboratories and offices. For this reason it was designed to include four interior courts as the main natural light sources. It is in the form of a hollow square, wider at the front than in the rear and with center and connecting wings in the form of a cross. The outside sections which surround the hollow square are nine stories high. The center wing, intersecting the square from front to rear, is of the same height. The cross wings, which connect the center wing with the east and west outside sections, are four stories high.

The fifth to eighth floors, inclusive, are devoted to laboratories for investigators on the staff of the institute. Each floor has special rooms for the use of all fellows, but most of the space is devoted to laboratories of two types—small laboratories for individual workers opening into the marble corridor, and larger laboratories arranged in suites, each with an office. The laboratories have exceptionally large windows and the courts on which they face are surfaced with glazed ivory terra cotta having high light reflectance.

The interior of the building is said by specialists to have the best arrangement and grouping of research laboratories possible. Back of the columns are abundant facilities intended to be both useful and convenient. There are in fact beauty and utility in all parts of the building and particularly in the library, the social room and the auditorium, which will make possible the holding of important scientific meetings at the institute. Automatic elevators, with massive but light aluminum doors opened and closed by photoelectric cells, connect conveniently all floors.

The same administrative procedure that is the day-by-day practice in the laboratories was applied to the construction and equipment of the new building. Test laboratories, for instance, were installed in a temporary building, and for two years details of equipment and arrangements were studied for possibilities of improvement. As a result, the wiring, piping and other systems were evolved, the wall brackets and removable cabinets designed and other details worked out. Piping is accessible, yet out of the way. Wall brackets are so built that shelves may be placed at will and instantly removed. Cabinets are constructed so that a complete unit may be removed and shifted to another laboratory when desired. Furniture is made without bolts or screws—only a rubber mallet is needed to take apart the laboratory tables or to add to them.

Among other special features are the constant-temperature, constant-humidity rooms, facilities for nutritional studies, a section of laboratories devoted to ceramic furnaces, ample room for the grouping of unit or experimental plants for basic production research in evolving chemical manufacturing processes, an analytical department, machine, instrument and glass-blowing shops and x-ray and spectroscopic facilities, all available for the use of fellows of the institute.

According to Dr. Edward R. Weidlein, director of the institute, more fundamental knowledge is to be sought through the expansion of the staff and facilities in those departments dealing with research in the pure sciences. The institute has maintained a department of research in pure chemistry since 1924 and has made important contributions to that science and to public health. It will now be able to devote attention to major problems in the fields of pure physics and biology. Industrial research for which it is best known will continue to be encouraged fully and will be benefited by the research in the pure sciences. At present sixty-five industrial fellowships are in operation.