

# CRELLIN LABORATORY OF CHEMISTRY DESCRIBED

The new Crellin Laboratory will be a five story structure with a floor plan of approximately 60x129 ft. The construction is of earthquake-proof and fire-proof reinforced concrete. The exterior architecture will be similar to that of the present chemistry units.

The Crellin Laboratory will communicate with the existing units through three passage ways. The first floor will communicate directly with the first floor of the present chemistry annex. The basement floor of the new unit will communicate with the present Seminar room. The sub-basement floor will communicate with the basement floor of Gates by a long ramp. This is provided primarily for the purpose of transporting supplies from one building to the other.

The sub-basement floor will be devoted to the study of spectroscopy, X-rays, electron diffraction, and proton diffraction. The basement floor will be devoted to physical chemical research including photochemistry. A laboratory for micro-analysis is also included on this floor. The first floor will contain a lecture hall with 65 seats and class room for 25 students. In addition there will be physical chemical laboratories and studies for members of the staff. The second and third floors will be devoted entirely to organic chemistry.

Particular attention has been paid to providing special facilities for research. All laboratories will be generously equipped with water, gas, and compressed air, A.C. and D.C. outlets. A large bank of storage batteries and several electrical generators will provide a wide variety of direct current voltages. Many photographic dark rooms are provided. The chemical vault for the storage of inflammable solvents is equipped with automatic fire extinguishing system and explosion panels designed to prevent damage to the building in case an explosion should occur. The organic laboratories are equipped with a large refrigerated room in which low temperature experiments may be performed. On the roof of the building special organic laboratories are provided in a pent house. In these laboratories experiments involving dangerous chemicals or offensive odors may be performed.

One important feature of the design is the provision for future rearrangement of laboratory facilities. Experience has shown that it is impossible to predict the future trends of research and for this reason, the laboratories are not designed for a specific function, but are designed to be generally useful for almost any type of research. The distribution of the plumbing and electrical services is such that connections may be made easily at any time in the future.

The ventilating system will deliver cleaned and washed air at constant temperature of 68°. Each room is provided with an individual hot water radiator so that the occupant may adjust the temperature to suit his own desires.