larger industrial and manufacturing establishments are themselves conducting independent laboratories of research, and there is an increasing demand for men who have not only the training of the technical school, but the attitude of mind to attack new problems; men who have not simply a basis of theoretical and practical knowledge to begin research, but who have the spirit of research as well.

This demand for research in engineering and for men capable of undertaking such work has long been recognized, and the Institute has for some years looked toward the inauguration of a department of engineering research. The installation this year of the Lowell Electrical Engineering Laboratories, with the additional facilities which are thus offered, makes the present an opportune time to undertake this work.

A graduate school of research will therefore be established as a distinct department of the Institute immediately after the opening of the next academic year,—namely, on Oct. 7, 1903,—under conditions which are given in the following pages.

An examination of these conditions will make it clear that the intention of the authorities of the Massachusetts Institute of Technology is to provide in the Graduate School of Engineering Research facilities for a small number of advanced students who show capacity for research.

The administration of the School is vested by the Corporation and Faculty in a Council of members of the Faculty, including the President as Chairman.

The Staff will consist of professors and instructors of the Institute and other persons actually engaged in engineering enterprises.

Opportunities for advanced study and research will be provided in the following branches of Engineering:

- Civil Engineering.
- Sanitary Engineering.
- Mechanical Engineering.
- Electrical Engineering.
- Naval Architecture and Marine Engineering.
- Mining Engineering and Metallurgy.
- Chemical Engineering [and Industrial Chemistry].

"In these subjects the degree of Doctor of Engineering (Eng. D.) will be awarded. As heretofore the Institute will offer courses of advanced study and research in pure science, e.g., Mathematics, Mechanics, Physics, Chemistry, Biology and Geology, leading to the degree of Doctor of Philosophy (Ph.D.). These advanced courses will be open also to students of engineering research."

So far as facilities and means allow, it will be the aim of the Faculty to direct the work of those who enter the Graduate School toward the solution of problems of practical importance. It is hoped that persons who are interested in particular investigations may here find opportunities to advance the solution of such questions by the aid of research funds contributed for a special investigation for a limited number of years. A friend of the Institute has offered to furnish $5,000 a year for a period of three years, to be expended in the study of efficient and economical methods for dealing with the sewage of large cities.

Members of the Graduate School of Engineering Research will be freely admitted to the libraries and laboratories of the Institute, and provided with facilities for individual work. The Institute laboratories are extensive and thoroughly equipped, and Boston and the vicinity afford unusual opportunities for advanced studies of both private and public engineering works.

There will be formed in each department of the Graduate School of Engineering Research a Seminar, including in its membership the professors, instructors and graduate students concerned in the work of that department. Every member of the Graduate School will be expected to connect himself with a Seminar, and to take part in the presentation of papers, reports of recent advances in science, the examination of original sources of scientific or technical literature, and in such other work of the Seminar as may be assigned to him by the officer in charge.

Four fellowships of $500 each from the Edward Austin foundation will be available from the beginning of the year 1903-04, for candidates for the Doctor's Degree, and will be awarded by the Corporation on recommendation of the Council. Holders of these fellowships will be exempt from tuition fees. After 1903-04 preference will be given to candidates who have been one year or more in residence.

Candidates for admission to the Graduate School of Engineering Research will in general be expected to have such training as is represented by the degree of Bachelor of Science of the Massachusetts Institute of Technology or of other institutions of corresponding grade. Greater importance will be attached,