given by Professor Clair E. Turner and the course in sanitary biology by Professor Marshall W. Jennison. Students will be required to present a satisfactory thesis dealing with some original investigations.

ESTABLISHMENT BY THE AMERICAN MATHEMATICAL SOCIETY OF A NEW PERIODICAL

THE American Mathematical Society has received grants from two foundations to found a new international mathematical abstracting journal to be known as *Mathematical Reviews*. During the past quarter of a century while the United States and Canada have been gradually assuming a more prominent part in mathematical research, there has been sentiment expressed from time to time among mathematicians that there should be a review journal sponsored by American organizations. But doubts as to whether the scientific and financial resources could be spared caused the postponement of the undertaking. However, the rapid growth of American mathematical resources and the availability of funds have resolved these doubts, and it has been decided to proceed immediately.

The first number of *Mathematical Reviews* is to appear late in 1939 or early in 1940; the material to be reviewed begins with the latter half of 1939. It is proposed to review all fields of pure mathematics and also those of applied mathematics and mathematical physics which are of pronounced interest to mathematicians. The new journal, which will be issued approximately once a month, will contain several thousand reviews annually and will run to approximately eight hundred large double-column pages. Professors J. D. Tamarkin and Otto Neugebauer will be the first editors. A strong group of collaborators for the initial period is assured.

The Carnegie Corporation has appropriated $60,000 for the new journal. The Rockefeller Foundation has made a gift of $12,000 to cover some of the initial costs. Brown University is housing the project and aiding in the editorial work. The American Mathematical Society and the Mathematical Association of America are each starting off with a subsidy of $1,000 for the first year. Annual subsidies are being sought from other organizations, and plans for the permanent financing of the project are being considered. On account of the subventions, the subscription price will be set below actual cost.

Partly with a view to aiding indirectly in the support of this journal, the Rockefeller Foundation has made a gift to Brown University for an experiment in the dissemination of mathematical publications through the distribution of microfilm. This money is to be used to augment the mathematical library at that university, a collection which is already internationally known as outstanding. Out-of-print journals will be put on film and made available to mathematicians; rare books of general use will be filmed; on request from a subscriber to the new journal, any article reviewed will be sent on film or as film-print. This service will be extended to all parts of the world at a price not exceeding cost.

AWARD OF THE CHANDLER MEDAL

THE seventeenth Charles Frederick Chandler Medal of Columbia University has been awarded to Thomas H. Chilton, director of the technical division of the engineering department of E. I. du Pont de Nemours and Company, Wilmington, Del.

Mr. Chilton was chosen "for his outstanding achievements in the discovery and formulation of principles underlying the unit operations of chemical engineering, and in the application of these principles to process development, equipment design and chemical plant construction and operation," according to the citation of the award committee. The medal will be presented to him on November 16, when he will deliver the annual Chandler Lecture on "Engineering in the Service of Chemistry."

The committee has issued the following statement in which it gives grounds for the award:

Mr. Chilton's studies have brought to light unknown facts concerning distillation, heat transfer, fluid flow and absorption—factors which are present in nearly every manufacturing process.

His published works are to the chemical engineer what the classics are to the student of literature. Principles discovered by his researches are used in the design and operation of chemical plants. There are few industrial processes involving chemical reactions in which his researches can not be applied.

In addition to conducting these researches, Mr. Chilton has developed a method of producing formaldehyde, of prime importance in the manufacture of synthetic resins, from methane, the chief constituent of natural gas. Because of the wide use of formaldehyde, this development has made many chemical processes more economical to operate.

The efficiency of the process by which nitric acid is manufactured from the oxidation of ammonia has been increased through Mr. Chilton's work. With the introduction of the nitrogen-fixation process into industry, ammonia became a relatively cheap and plentiful product. Its use as raw material for the production of nitric acid has greatly lowered the cost of the latter.

Heat and fluids are associated with nearly all chemical apparatus. In attacking the problem of how heat flows through various substances and determining the characteristics of fluid flow under different circumstances, he has clarified these fundamental subjects.