Introduction

This report is the ninth of a series of quarterly progress reports issued by the Research Laboratory of Electronics, and contains a review of the research activities of the Laboratory during the period, January 1, 1948 through March 31, 1948. It is a preliminary report of current progress, and no results should be considered as final.

The outline which has been used in previous reports has been radically revised in order to conform to the present work of the Laboratory.

The eighth M.I.T. Physical Electronics Conference was held on April 1, 2, and 3 under the general direction of Professor W. B. Nottingham. Visitors from all parts of the United States and representatives from Canada, England, The Netherlands, and France were present. Discussions centered on photoelectric emission, thermionic emission, secondary emission, and gas-discharge phenomena, and in addition, an active interest was shown in subjects relating to the techniques used in physical electronics, including such aspects as high-vacuum processing. The reaction to the Conference was again so favorable that it strongly indicated the desirability of having another one next year.