

# SCIENCE

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## CHEMISTRY AND MODERN LIFE

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It is my privilege to address you upon this important and auspicious occasion—the opening and dedication of the magnificent chemical laboratories created by the munificence of your generous and far-sighted donor, Mr. Jesse H. Metcalf. It is a gift which will have far-reaching consequences and which will exert influences that will continue to increase and broaden after we ourselves have gone.

Let me consider with you the purpose which these buildings will serve and the position which chemistry and science in general bid fair to attain in the life of mankind.

A chemical department flourishes most when side by side with strong departments of all faculties. It must be filled with the spirit of humanity, its teachers with the spirit of research. They should be a body of men whose zeal for knowledge and desire to increase it are principles of life; and its teaching should be such as to fit the student to be his own teacher and to continue the study of his subject on his own account after he has taken his degree.

Next to personnel comes the necessity for equipment. This is a factor which is seldom adequately taken into account and upon which it is impossible to lay too much stress. Lack of equipment means that work is stultified or crippled and that a building, however good, may become an empty shell; whereas with it the possibilities of the future are infinite.

Again it is perhaps not generally appreciated that a well-furnished library is as indispensable to workers in science as to those in any other faculty. Indeed, there are but few scientific theories whose significance and limitations can be fully understood without some idea of their historical development, which is only obtained by access to the original literature. This is frequently in a foreign language. Mere text-books appear dogmatic and infallible, and the more intelligent student rebels or may be repelled. It is when he turns to the original record that the subject becomes alive. Doubts are fairly met instead of being repressed, the exact implications and possible lines of extension are much more clearly seen.

May I remind you that chemistry has now become a vast subject far beyond the power of any one man, however gifted, to grasp. There are about 40,000

<sup>1</sup> Address delivered at the dedication of the Jesse Metcalf Chemical Laboratory, Brown University.

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