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THE RELATION OF PHYSICS TO CHEMISTRY¹

By Dr. N. V. SIDGWICK

OXFORD UNIVERSITY, NON-RESIDENT LECTURER IN CHEMISTRY AT CORNELL UNIVERSITY UNDER THE GEORGE FISHER BAKER FOUNDATION

I AM very grateful to Cornell University and to Professor Dennis for inviting me to join your staff as non-resident lecturer and for the kindness with which you have received me. It is a high honor to have one's name added to the distinguished list of the Baker lecturers. A lectureship of the kind founded by Mr. Baker is, I think, of real service both to the hosts and to the guests. Francis Bacon gives as one of the three chief conditions of scientific progress "conjunction of labor," the intercourse of scientific men, whereby, as he says, "the frailty of man may be supplied." With the progress of knowledge every branch of it becomes more specialized and yet at the same time more dependent on other branches,

¹ Introductory public lecture.

and the only way in which the workers in any laboratory can get a true sense of the values of the different kinds of chemical work which are being pursued all over the world is by intercourse with chemists from elsewhere. The benefit to the visitors is equally great, especially when it makes them acquainted with so admirable a laboratory and so distinguished a staff of chemists as you have here. I also appreciate greatly the opportunity of studying your methods of teaching and administration; the only way to find out how a university works is to join its staff, and take part in its labors.

I have chosen "The Relation of Physics to Chemistry" as the subject of my introductory lecture, because it seems to me that there is none on which, in

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