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Applied Science Faculties by want of laboratory accommodation, or of funds to support higher teaching and research. What is required is not more abundant mediocrity but a fully sufficient supply of those who will be captains of industry. The persons who need technical education are the masters much more than the men. In the terrible contest for superiority with the United States and Germany towards which this country is advancing, nothing will avail us unless the young men who are to be masters of works, foremen, heads of departments, and directors of industries based on applications of scientific knowledge, are equipped with the most thorough knowledge of the arts they direct. The law of evolution will mercilessly eliminate the unfit. . . . That the question of a Teaching University for London took so long to settle was a national disgrace. Even now the proper organisation of its technical side will be a work of time. Meanwhile London has nothing to compare with the Berlin Technische Hochschule with its 5000 students, and a teaching staff of professors, assistants and workmen, numbered by hundreds.

Next hear the opinion of another expert, this time Dr. Meldola, the well-known Professor of Chemistry at Finsbury. He writes to me of what he saw and heard at the Paris Exhibition concerning German progress, in reply to a question which I knew he could answer with effect, why has Germany all her own way in the newer chemical industries, worth many millions a year, and why are the English out of it?

The reasons for the great progress in German chemical industry are obvious to all who are acquainted with the facts of the case, and who have kept watch on the various lines of development. It is often stated that the main cause of this lies in the intimate association between science and industry in that country. This, however, scarcely embodies the whole truth, inasmuch as before there can be an association between science and industry, there must be science to begin with, and it is the superiority in the scientific training of the German manufacturers, as compared with that of our own men, which has imbued them with the true spirit of progress, which recognises the essential principle that success depends on alliance with science. Our people in the same position are by no means alive to the true state of things, and only call in scientific assistance when some branch of industry is in extremis. The reason why we hear of large staffs of highly trained chemists and of splendidly equipped research laboratories attached to Continental factories, is because the heads of these foreign firms, unlike our own, know the necessity for these things, and owe that knowledge to their own scientific training. The extraordinary development in Germany of the coal-tar industry may be said to have culminated in their exhibit in the Paris Exhibition, and the lesson conveyed by this exhibit