ments of basic value in solar research have been built at Kodaikanal, largely through improvisation and local ingenuity at a negligible financial cost. These can and are being utilised for dealing with a variety of problems within their reach; but improvisation, however ingenious, cannot produce the very complex and expensive apparatus of modern astro-physical research which the enormous strides in technological development in the western world have made possible. To mention only the most immediate needs, Kodaikanal Observatory requires a really large solar spectrograph with an adequately powerful cœlostat and other accessories, and a Lyot Coronagraph for modernising its activities in solar physics. These requirements can be met only when adequate funds become available."

The Astronomical Planning Committee of 1945 and the Advisory Board of 1948 have made a number of definite recommendations for the improvement of the Observatory. It is learnt that something has been done towards implementing these recommendations; but a great deal more remains to be done to hasten the pace of astronomical research in this country. It is not merely sufficient to remove the disabilities which existing observatories may be lying under. More observatories must also be established in different parts of the country, staffed by competent and enthusiastic astronomers, and equipped with instruments capable of yielding results of abiding interest and importance.

In this connection it is appropriate to refer to the spirited plea* made by Sir C. V. Raman some time ago on behalf of astronomical research in India, in the course of which he observes :

"It may be asked, why trouble about astronomy? Why spend money on making great telescopes and building great observatories? These are pertinent questions for which my answer would be that an interest in astronomy is a part of the cultural heritage of India, and that we would be unworthy recipients of that heritage if we did not cherish that interest and do our utmost to promote that science. Astronomy is not only the oldest but the grandest of the sciences. Broadly, it may be described as the investigation of the nature of the physical universe. Defined in that way, we begin to realise that astronomy occupies the premier position among the sciences. Indeed, it may be described as a heaven-born river of knowledge which flows to the earth and fertilises the fields of learning and culture."

* *Curr. Sci.*, 1943, **12**, 197, 298, 313.

THE OXFORD CONFERENCE ON LOW TEMPERATURE

AN International Conference on Low Temperature Physics was held in the Clarendon Laboratory at Oxford, from the 22nd to the 28th of August, 1951. The conference was conducted with funds made available by the UNESCO, Union de Physique and Institut International du Froid and was attended by more than two hundred delegates from different parts of the world. Fourteen countries, namely, Australia, Belgium, Canada, China, France, Germany, Holland, India, Japan, Spain, Sweden, Switzerland, United Kingdom and the United States of America were represented. About one hundred delegates were from the United Kingdom and thirty-five each from Holland and the United States. The four Indian delegates were Prof. R. S. Krishnan, Prof. F. C. Auluck, Dr. K. G. Ramanathan and Mr. Chandrasekharan.

Lord Cherwell inaugurated the conference. Prof. F. Simon of the Clarendon Laboratory welcomed the delegates. Introductory speeches were made by Dr. Bleany (Oxford) on 'Recent Advances in Paramagnetism' and by Prof. F. London (Duke University) on the 'Two Fluid Theory of Liquid Helium'. The week of crowded programme consisted of reading and discussion of over one hundred scientific papers dealing with different fields of current research near the absolute zero of temperature. The papers contributed by different delegates dealt with the thermal, electrical and magnetic properties of solids at very low temperatures and on the extraordinary properties of liquid helium. The wide variety of the problems being tackled indicated the enthusiasm with which physicists are using low temperatures for investigating the physics of the solid state. On the last day of the conference, Prof. Fröhlich gave a brief resumé of his theory of supra-conductivity. The general feeling was that considerable amount of both experimental and theoretical work has yet to be done in Low Temperature Physics before one can give a satisfactory explanation of some of the peculiar phenomena observed very near the absolute zero. One was also surprised to find that very little work appears to have been done so far on the optical properties of solids at very low temperatures.

A detailed report of the Conference is being published by the organisers in a few weeks' time.

R. S. K.