

# Presentation of the first FRITZ LONDON AWARD

By J. G. Daunt

IT is my very pleasant duty this afternoon to make the presentation of the First Fritz London Award to Dr. Nicholas Kurti. In doing so, I shall act on behalf of the 1957 Fritz London Award Committee which has the following members: Dean F. G. Brickwedde, Professor W. M. Fairbank, Dr. E. F. Hammel, and Dr. H. O. McMahon, and myself as chairman. I am also acting on behalf of the whole organization of the Fifth International Conference on Low-Temperature Physics and Chemistry, at which biennial conferences these awards are to be, we hope, a regular feature. I also act on behalf of the sponsors of the award, the Arthur D. Little Foundation.

The occasion is a great one, particularly when we remember that we are also honoring the late Fritz London, and I know that all those persons whom I represent are pleased that this award is being made to Dr. Kurti at this time. Personally it is a particular pleasure to carry out this presentation to a friend whom I have known for so many years.

Many of you here have the good fortune to know Dr. Kurti personally and to appreciate at first hand not only his ability and versatility as a scientist, but also his warm and outgoing personality as a friend. To those of you therefore there is no need to introduce him to you, nor to remind you of his many accomplishments in the field of low-temperature physics research.

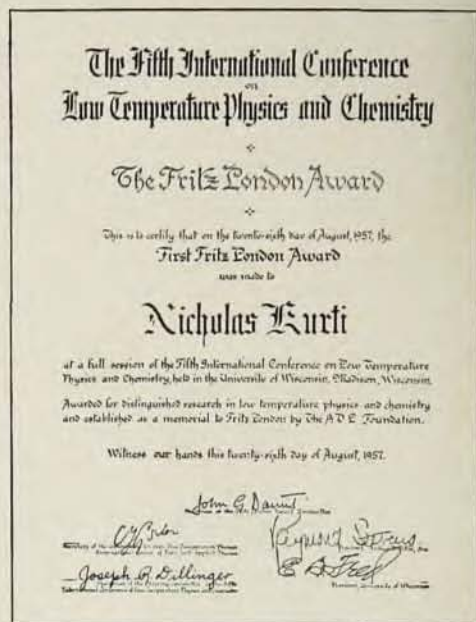
On the other hand, there are others of you who have not been so fortunate, and it is to you to whom I would talk, and tell you of the many accomplishments of the man to whom this award is given today. Dr. Kurti received his Licence es Sciences Physiques at the Sorbonne in 1928 and his PhD degree at Berlin University in 1931, and for two years after he was on the staff at the Technische Hochschule in Breslau working with the late Professor Sir Francis Simon. In 1933 he left Germany, to settle in Oxford, where he became one of the founders of its distinguished school of low-temperature physics research in The Clarendon Laboratory. During the war he worked for five years with the United Kingdom Atomic Energy Project, spending part of the time at Columbia University, and since 1945 he has held two distinguished positions in Oxford University, as Senior Research Fellow of Brasenose College and University Lecturer in Physics.

I should remark here parenthetically that such titles in Oxford reflect with characteristic English understatement positions of academic greatness and in no way must be confused with their American homonyms.

To continue, Dr. Kurti holds another Fellowship, namely that of The Royal Society, a distinction which illustrates the esteem in which his research work is held.

In the early thirties, together with the late Sir Francis Simon, Dr. Kurti initiated investigations in the temperature region below  $1^{\circ}\text{K}$  in The Clarendon Labora-

The photograph at right shows N. Kurti of the Clarendon Laboratory receiving the first Fritz London Award on August 26, 1957, during the 5th International Conference on Low-Temperature Physics and Chemistry at Madison, Wisc. J. G. Daunt, whose presentation remarks are included here, is dean of chemistry and physics at the Ohio State University.



tory, using the magnetic cooling method that was at that time a novel process. In this work he pioneered the difficult road leading to the establishment of absolute temperature thermometry down to a few thousandths of one degree and he left for us who have followed welcome and much used signposts along the path. Since that time his research activities have been concerned with the properties of various substances below  $1^{\circ}\text{K}$  and these have led to an understanding of many of the magnetic phenomena occurring in this temperature region. Since 1951 much of his work has been concerned with nuclear orientation, which he and his co-workers first experimentally performed in The Clarendon Laboratory.

Very recently together with Robinson, Simon, and Sphor he has pioneered a further step in magnetic cooling techniques and has succeeded in reaching temperatures of a few microdegrees absolute by use of the magneto-caloric effect in assemblies of nuclear spins. This extension of the cooling method to nuclei, proposed more than twenty years ago independently by Gorter and by Simon and Kurti, represents a great achievement and opens up a new area of research in low temperatures.

For these his many distinguished contributions in the field of low-temperature physics research, the First Fritz London Award is now made to him.