PREFACE

This volume contains the papers presented at the International Conference on Thermodynamics which was held at University College, Cardiff, 1 to 4 April 1970. There were about 180 participants, half of them from abroad. For the purposes of the Conference it was desirable to start with the bulk of the papers in section B which, it was felt, would help to allow participants to warm to the subject as a whole. Also, some slight illogicalities were brought about by requirements of the time table, by late papers, etc. In the Proceedings presented here the order of the papers has, therefore, been adjusted.

The Conference contained three lively discussion sessions, which were given focus by signed statements. These were invited by the Organizing Committee, who asked for such statements to be 'provocative' in the notices for the meeting. All participants had copies of the statements beforehand. Judging by the attendances, even at the last session (on Saturday morning), this seemed a popular procedure. The contributions at these three discussion sessions were tape recorded, even though they were spontaneous, and a debt is owed to the three gentlemen who kindly agreed to write the reports for the present volume. They were asked to insert in square brackets any comments of their own which they included in the report in their capacity as experts in the field, but which were not raised in the discussion. Apart from this request they were given a free hand to handle the reports as they thought fit, and the result does convey very well the flavour of these sessions.

A second unusual feature of the meeting was that one complete session was devoted to the problems raised by the teaching of the subject. A third unusual feature was that manuscripts were sent in early and proofs were read at the meeting. The willing cooperation of the publishers and authors was a great help in this connection.

The first and decisive encouragement for the idea of this Conference came from the Royal Society, who made a sum of money available. The following organizations also contributed financially:

British Petroleum Company Limited, Imperial Chemical Industries Limited, Monsanto Chemicals Limited, Rolls-Royce Limited, Shell International Petroleum Company Limited, South Wales Electricity Board, Wales Gas Board.

The International Union of Pure and Applied Physics and the International Union of Pure and Applied Chemistry allowed us to use the authority of their names. The Organizing Committee planned the scientific programme, and in addition Dr D. J. Morgan, Dr A. Harvey and a host of other helpers assisted in the actual running of the Conference. The Institute of Physics and the Physical Society helped with the organizational details of the Conference. All these forms of help towards the success of the Conference were given with unstinting generosity for which grateful acknowledgement is made here.

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