FOUNDATIONS OF CONTINUUM THERMODYNAMICS

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Edited by

**J. J. DELGADO DOMINGOS, M. N. R. NINA AND
J. H. WHITELOW**

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	J. H. WHITELAW, LONDON

Preface

The contributions contained in this volume were presented at an International Symposium on the Foundations of Continuum Thermodynamics held at Bussaco, Portugal, from 22 to 26 July 1973. The symposium had its origin in informal discussions between Professors Domingos and Kestin early in 1971; these discussions led to the formation of the Organisation Committee which formulated the following purposes for the symposium:

to arrange a thorough exchange of views on the Foundations of Continuum Thermodynamics between a small number of the most active contributors to this field, and so to make it possible for representatives of different approaches to understand the other's point of view.

to attempt to work out a commonly agreed point of view on the physical foundations of the subject.

to make the results of these deliberations available to the scientific community at large.

This volume of proceedings is intended to fulfill the last of these purposes.

The symposium programme is closely reflected in these proceedings. Sixteen papers were presented and, of these, five were designed specifically to comment and expand upon a topic discussed in a previous paper. A seventeenth lecture was presented by P. Germain and had the purpose of reviewing the achievements of the symposium. This lecture was subsequently written as a paper and is included here; it represents an up-to-date review of the state of the art. The programme included eleven open forum sessions which allowed lively and extensive discussions: a selection of the more important comments is included in these proceedings in the form of dialogue presented in discussion sections which follow the relevant lectures.

We hope that these proceedings will assist teachers and researchers in thermodynamics and related subjects to appreciate the current views of the leading workers in continuum thermodynamics and to learn from their efforts. This volume cannot completely communicate the stimulating atmosphere of the symposium but we hope that the discussion sections, particularly, will provide an indication.

JJDD
MNRN
JHW

Participants

BORGES, A. J.	Universidade de Coimbra, Portugal
BROTAS, A.	Instituto Superior Técnico, Lisboa, Portugal
CALLEN, Herbert B.	University of Pennsylvania, USA
CHAVES, M. R.	Universidade do Porto, Portugal
COSTA, J. A. M. P.	Instituto Superior Técnico, Lisboa, Portugal
COSTA, J. Providência e	Universidade de Coimbra, Portugal
DOMINGOS, J. J. D.	Instituto Superior Técnico, Lisboa, Portugal
FALCÃO, A. F. O.	Instituto Superior Técnico, Lisboa, Portugal
FILIPPE, M. A.	Faculdade de Ciências de Lisboa, Portugal
GERMAIN, Paul	Université de Paris, France
GLANSDORFF, Paul	Université Libre de Bruxelles, Belgium
DE GROOT, S. R.	Instituut voor Theoretische Fysica, Amsterdam, Netherlands
KESTIN, Joseph	Brown University, USA
LARANJEIRA, M. F.	Universidade de Luanda, Angola
LEAL, A. B.	Universidade de Luanda, Angola
LEE, Erastus H.	Stanford University, USA
LEMOES, A. M. F. T.	Instituto Superior Técnico, Lisboa, Portugal
MANDEL, J.	Ecole Polytechnique de Paris, France
MASON, E. A.	Brown University, USA
MEIXNER, Joseph	Institut für Theoretische Physik, Aachen, West Germany
MILLER, Donald G.	University of California, USA
MÜLLER, Ingo	The Johns Hopkins University, USA
NASSER, S. Nemat-	Northwestern University, USA
NINA, M. N. R.	Instituto Superior Técnico, Lisboa, Portugal
PINA, H. L. G.	Instituto Superior Técnico, Lisboa, Portugal
PINHEIRO, M. F.	Universidade do Porto, Portugal
PORTELA, A. G.	Instituto Superior Técnico, Lisboa, Portugal
PRIGOGINE, I.	Université Libre de Bruxelles, Belgium
REIS, M.	Université Libre de Bruxelles, Belgium
RIVLIN, Ronald S.	Lehigh University, USA
SCHLÖGL, F.	Institut für Theoretische Physik, Aachen, West Germany
SIDOROFF, F.	Université de Paris, France
SILVA, J. Machado da	Universidade do Porto, Portugal
SILVA, J. Ferreira da	Universidade do Porto, Portugal
SILVA, J. F. Azevedo e	Faculdade de Ciências de Lisboa, Portugal
SOUSA, A. C. Mendes de	Universidade de Lourenco Marques, Mozambique

SOUSA, J. A. B. Menezes	Universidade do Porto, Portugal
TELLES, A. Silva	Universidade Federal do Rio de Janeiro, Brazil
TISZA, Laszlo	Massachusetts Institute of Technology, USA
VENTURA, M. T.	Laboratório Nacional de Engenharia Civil, Lisboa, Portugal
WHITELOW, J. H.	Imperial College, United Kingdom

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