Preface

These Proceedings contain papers based on a selection of talks presented at the XIIIth International Symposium on Nuclear Quadrupole Interactions, which was held at Brown University in Providence, Rhode Island, USA, during the period 23–28 July 1995. This was the first Symposium to carry the expanded title Nuclear Quadrupole Interactions in place of the Nuclear Quadrupole Resonance Spectroscopy employed for the twelve prior meetings. The breadth of topics and experimental techniques evident in the papers of these Proceedings reflect that broadening of the scope of the symposia to embrace all experimental and theoretical work on nuclear quadrupole interactions. This change was adopted by the International Committee on NQR Spectroscopy at the XIIth International Symposium in Zurich, Switzerland in July 1993. In a corresponding action, the name of the Committee was changed to the International Committee on NQI. Some 170 papers were presented at the XIIIth Symposium which involved more than 120 participants and their guests from 28 countries, including 15 scientists from Russia, the Ukraine, and Armenia. The papers in the Proceedings are organized in the following sections:

- (A) Advanced Techniques in NQR and NMR 321
- (B) Mössbauer Spectroscopy 368
- (C) Perturbed Angular Correlations 396
- (D) Electric Field Gradients: Calculations and Experimental Values 442
- (E) Structure and Bonding in Crystalline Solids and Glasses 572
- (F) Phase Transitions, Atomic Motions, Dynamics, Relaxation, Temperature Dependence 677
- (G) Superconductors 786

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Professor Philip J. Bray (Chairman) Brown University
Professor Tara P. Das State University of New York at Albany
Professor Robert A. Marino Hunter College
Dr. Gary L. Petersen RITEC, Inc. and Brown University
Professor Alexander Pines University of California at Berkeley
Professor P. Craig Taylor University of Utah
Professor Gary P. Wulfsberg Middle Tennessee State University

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