Preface

Ten years after the break down of the “Iron Curtain” in Europe, the University of Leipzig was honoured to host the “XVth International Symposium on Nuclear Quadrupole Interactions” (XVth NQI 99) from July 25 to July 30, 1999.

The conference site was the Geschwister-Scholl-Haus of the University. The University of Leipzig was founded 1409 and is one of the oldest universities in Europe. Since the conference site was situated directly in the heart of this lively city, every participant could feel the impact of the city – called by J. W. v. Goethe “Little Paris” – on the cultural and economic life of Europe over the last centuries and could witness the efforts of the city after more than 40 years of decline to recover its former status as an important centre of Central Europe.

The symposium was chaired by Prof. Dr. Tilman Butz, Faculty of Physics and Geosciences, University of Leipzig. The co-chairman was Prof. Dr. Stefan Berger, Faculty of Chemistry and Mineralogy, University of Leipzig, and the Local Organising Committee consisted of:

- U. Schröder University of Leipzig
- W. Tröger University of Leipzig (Symposium Secretary)
- T. Ulbricht University of Leipzig
- S. Wenzel University of Leipzig

XVth NQI 99 followed the scope of this impressive long series of conferences to provide a congenial forum of discussion on all aspects of nuclear quadrupole interactions in the fields of chemistry, physics, biology, and medicine as well as materials and earth sciences covering both experiments and theories. At XVth NQI 99 almost all types of techniques that measure NQI like Mößbauer spectroscopy, perturbed angular correlation, nuclear orientation, NQR, NMR and EPR with different variants aiming at higher sensitivity and reduced line width were presented.

The 94 participants from 21 countries presented 120 papers at XVth NQI 99. Among the participants were 10 scientists from Russia, Ukraine, and Armenia. The Programme Committee selected 14 invited plenary lectures, 31 oral presentations and 75 poster presentations. The members of the Program Committee were:

- S. Berger University of Leipzig, Germany (Co-Chair)
- P. Boolchand University of Cincinnati, U.S.A.
- T. Butz University of Leipzig, Germany (Chair)
- S. H. Choh Korea University, Korea
- C. Forte ICQEM – CNR, Italy
- K. Kumagai Hokkaido University, Japan

The presentation of the contributed papers at the symposium was organised in the sections “A) Resonance and other NQI Techniques”, “B) Structure, Bonding, and Phase Transitions”, “C) Theory of Nuclear Quadrupole Interactions” and “D) Advanced Materials and Surfaces”. The 64 papers of these Proceedings are presented under these headings.

We would like to thank all participants and referees for contributing to the success of the XVth NQI Symposium 1999 and for their combined efforts to ensure the high scientific standard of the journal ZEITSCHRIFT FÜR NATURFORSCHUNG A.

The Local Organising Committee would like to thank the University of Leipzig for its hospitality, and the Ministry of Higher Education, Research and Culture of the Freestate of Saxony, as well as Bruker-Analytik GmbH, Germany, for their generous financial support.

Last but not least we gratefully acknowledge the excellent co-operation of the staff of Zeitschrift für Naturforschung, especially the endless patience and stamina of the Editor, Prof. Dr. A. Klemm, and the prudent handling of the manuscripts by the Managing Editor, Mrs. Tamara Littmann.

T. Butz, S. Berger, W. Tröger
Guest Editors
Leipzig, November 1999