

Preface

The 4th International Symposium on Research in High Magnetic Fields was held on 29–31 August at the University of Nijmegen as a satellite of the International Conference on Magnetism ICM '94 (Warsaw, Poland, 22–26 August 1994). The meeting in Nijmegen firmly established the tradition which started with earlier ICM satellites in Osaka, Japan (1982), Leuven, Belgium (1988), and Amsterdam, The Netherlands (1991). Starting with the meeting in 1988, the scope of this series of conferences has been gradually widened beyond the original fields of interest of the 'magnetism'-community, and now includes high-field magnetism, organic conductors, semiconductors, correlated electron systems and superconductivity, and magnet technology and high-magnetic-field measurement techniques.

At the Symposium, in 32 oral presentations and 110 posters results were presented of recent high magnetic field studies in the general fields of 'magnetism', 'semiconductors', 'correlated electron systems', and 'magnet technology'. All major magnet laboratories presented their facilities with poster presentations, exhibits and demonstrations, and these remained on display for the duration of the Symposium. There was also a special session devoted to the plans that are being developed for 100-tesla long-pulse facilities.

More than 180 scientists from 19 countries attended the Symposium, and the present volume contains all the refereed papers presented at the Symposium which were accepted for publication, and it certainly serves as a good overview of the lively activities in the community of high magnetic field physics. The results of an extensive inventarisation with questionnaires to magnet facilities worldwide are presented in a review paper that opens this volume, and the observations underline a general feeling of anticipation: new and large facilities are opening their doors in the USA and in Japan, and in static magnetic fields rapid and significant progress is expected in the field strength of purely resistive coils and of hybrid magnet systems.

In conclusion, the Organising Committee is much indebted to the Faculty of Science of the University of Nijmegen for making available the facilities and manpower necessary to organise and host this Symposium, and to all other sponsors for their generosity.

Jos A.A.J. Perenboom
Editor