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Edited by T. Caliński and W. Klonecki



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FOREWORD

An International Statistical Conference on Linear Inference was held in Poznań, Poland, on June 4-8, 1984. The conference was organized under the auspices of the Polish Section of the Bernoulli Society, the Committee of Mathematical Sciences and the Mathematical Institute of the Polish Academy of Sciences.

The purpose of the meeting was to bring together scientists from various countries working in the diverse areas of statistical sciences but showing great interest in the advances of research on linear inference taken in its broad sense. Thus, the conference programme included sessions on Gauss-Markov models, robustness, variance components, experimental design, multiple comparisons, multivariate models, computational aspects and on some special topics. 38 papers were read within the various sessions and 5 were presented as posters. At the end of the conference a lively general discussion session was held.

The conference gathered more than ninety participants from 16 countries, representing both parts of Europe, North America and Asia. Judging from opinions expressed by many participants, the conference was quite successful, well contributing to the dissemination of knowledge and the stimulation of research in different areas linked with statistical linear inference. If the conference was really a success, it was due to all its participants who in various ways were devoting their time and efforts to make the conference fruitful and enjoyable. First who deserve thanks are all the speakers and authors, the chairmen of sessions, and the discussants. They made a good job, highly appreciated by the majority of the conference attendants. A smooth run of the conference is to be attributed to the efforts of the local organizing committee skillfully headed by Dr. R. Kala from the Department of Mathematical and Statistical Methods of the Poznań Academy of Agriculture and Dr. R. Zmyślony from the Wrocław branch of the Mathematical Institute of the Polish Academy of Sciences.

This volume contains about a half out of the number of 43 papers presented at the conference, and represents its main features and results. We would like to express thanks to all authors who decided to undertake the task of preparing their papers for publishing in the proceedings.

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The standard of the papers owes very much to the work of a number of referees (a list of their names being included at the end of the volume) to whom not only the editors, we think, but also the authors are very grateful. We apologize, if some of the authors of submitted papers have possibly found the referee demands too restrictive.

In the final editorial work we were very much helped by many of our co-workers in Wrocław and in Poznań, and also by the administrative staff of the Mathematical Institute of the Polish Academy of Sciences in Warsaw. It is impossible to mention the names of all of them, to whom we owe so much, but we would like to thank in particular Dr. S. Zontek. Also we would like to thank Ms. A. Goździk and Ms. T. Rejnie-
wicz for their excellent typing work. Last, but not least, let us express sincere thanks to the Publisher for their efficient and friendly co-operation.

T. Caliński

W. Klonecki

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