Preface

The general theme of the Mathematics of Program Construction Conferences is the use of crisp, clear mathematics in the discovery and design of algorithms and in the development of corresponding software or hardware. The previous two Conferences were held in 1989 at Twente, Netherlands, organised by the Rijksuniversiteit Groningen, and in 1992 at Oxford, United Kingdom. With the third Conference, held at Kloster Irsee, Germany, in Summer 1995, the topic has been firmly established.

We are most grateful to Michel Sintzoff, the Editor-in-Chief of this journal, for providing us with the opportunity to present a selection of the papers of the Conference, both contributed and invited. We are particularly honoured that this volume is even the anniversary one. To meet the respect that thereby is shown to the field of Mathematics of Program Construction, all the authors have invested considerable effort to achieve a maximum in lightness of touch without of loss of precision. The fact that they have succeeded so well shows that the field is entering the stage of maturity.

The main body of papers is on calculational design of sequential and parallel Software, leading, in one case, even to hardware, viz. a microprocessor. Further topics are programming techniques, program development using type theory and mathematical foundations. The volume would not be complete without the pleasant after-dinner speech of Wład Turski and an introduction by Roland Backhouse that explains the aims of the Mathematics of Program Construction enterprise in more detail.

It is our sincere hope that others will be enticed by the elegance and efficiency of calculation that is exhibited in these papers, so that the field will thrive and eventually permeate into everyday practice. I wish to thank all contributors for their efforts and their ready Cooperation. The only sad thought that comes to mind is that Jan van de Snepscheut, who together with Roland Backhouse founded the MPC Conferences, did not live to witness this development.

<div align="right">

Bernhard Möller
Augsburg
November 1995

</div>