

PREFACE

The International Conference on Flexible Automation and Intelligent Manufacturing (FAIM) has a rich tradition: The first conference, "Factory Automation and Information Management," was hosted in March 1991 by the University of Limerick. Authors from more than 18 countries contributed over 100 papers. The second conference, "Flexible Automation and Information Management," was hosted by Virginia Tech in Washington, DC June, 1992. The third conference, "Flexible Automation and Integrated Manufacturing," was hosted in June, 1993 by the University of Limerick, Ireland. The fourth conference was held at Virginia Tech in Blacksburg, Virginia in May, 1994. The fifth conference was held at the Fraunhofer Institute for Manufacturing and Management, University of Stuttgart, Germany in June, 1995. The sixth international conference was conducted May 1996 at the Georgia Institute of Technology in Atlanta, Georgia. Last year's FAIM conference was sponsored by the European Process Industries Competitiveness Centre (EPICC) at the University of Teesside in Middlesbrough, United Kingdom in June, 1997. FAIM 98 is being hosted this year by Portland State University in Portland, Oregon, with generous support by Oregon State University and the Oregon Center for Advanced Technology Education. Next year, FAIM 99 will be organized by the Center for Economic Research at Tilburg University in the Netherlands, June 23-25, 1999.

This year, authors from approximately 20 countries have contributed 70 papers, and as in the case of previous FAIM conferences, each paper has been reviewed. The papers cover the following themes:

- Technology Management
- Economic and Decision Analysis
- Total Quality Management
- Emerging Trends in Manufacturing
- Flexible Manufacturing Systems
- Cellular Manufacturing
- Electronics Manufacturing
- Engineering Design
- Design for Manufacture and Assembly (DFM/DFA)
- Applications in Mechanical Manufacturing
- Control Systems
- Machine Vision
- Production Scheduling
- Transportation Systems
- Human Factors

Manufacturers today must compete in dynamic markets which demand excellence in areas of cost, quality, and time to market. They must master rapidly changing materials and process technologies. They need to achieve short product development cycles, expand product lines, and combat shrinking product life cycles in a global economy marked by rapid fluctuations and increasing competition.

Flexible Automation and Intelligent Manufacturing is based on advanced technologies, computer integrated product and process development, and related organizational methods that meet these changing conditions. FAIM 98 addresses applications of these technologies and methods to the manufacturing environment, from industrial and academic perspectives.