PREFACE

This Proceedings of the Fifth Solid Freeform Fabrication Symposium, held at The University of Texas in Austin on August 8-10, 1994, was the best attended and continued the dynamic nature of the first four. Intense interest was shown by researchers for the latest in the basic aspects of Solid Freeform Fabrication (SFF) that highlighted the papers presented at this Symposium. The speakers addressed problems in computer software, machine design, materials synthesis and processing, and SFF in integrated manufacturing. The continued growth in the research, application and development of SFF approaches was readily apparent from the additional papers presented and the attendees from industrial users, SFF machine manufacturers, universities, and government. There was a very large international involvement in the meeting, both as attendees and as contributors. Research presented in the Symposium showed the continued movement forward toward the goal of structurally sound parts using a wide range of SFF techniques. This continued advancement in the state-of-the-art of SFF and the drive for continually improving and reaching out for standardization of the technology will continue to drive its exponential growth and cooperative efforts. The excitement generated at the Symposium reflects the participants' total involvement in SFF and the future technical health of SFF. The Symposium organizers look forward to its being a continued forum for technical exchange among the expanding body of researchers involved in SFF.

The Symposium was again organized in a manner to allow the multi-disciplinary nature of the SFF research to be presented coherently, with various sessions emphasizing computer aspects, machine topics, and the variety of materials aspects of SFF. Application-related efforts were scattered throughout the Symposium. To avoid parallel sessions, a poster session was organized, and a panel session on SFF was held. The dynamic, loosely organized panel discussion on "Where does SFF go in the Next Five Years?" was led by Joel Barlow, Michael Cima, Thomas Pang, Fritz Prinz, Sean O'Reilly, and Michael Wozny. The written versions of the presented papers are incorporated into these Proceedings. The editors would like to thank the speakers for their timely delivery of the manuscripts. We believe that documenting the constantly changing state of the SFF art as represented by these Proceedings will serve both the people presently involved in this fruitful area as well as the large flux of new researchers and users entering the field of SFF. The evenings were highlighted with Texas-style vittles and entertainment featuring the Geezinslaws.

The editors again would like to extend a warm "Thank You" to Renee Loyless-May for her extensive efforts in the detailed handling of the logistics of the meeting and the Proceedings and the support efforts of Vicki Lehmeier and Cindy Pflughoft throughout. We would also like to thank the organizing committee, the speakers, the session chairmen, panel members, and the attendees for their enthusiastic contributions. We look forward to the continued close cooperation of the SFF community in organizing the Symposium. We also want to thank ONR through Grant No. N00014-94-1-0829, ARPA, and The Minerals, Metals and Materials Society for co-sponsoring the Symposium with the Mechanical Engineering Department and the Center for Materials Science and Engineering at the University of Texas at Austin. The editors.

Organizing Committee: