PREFACE

The Twenty-ninth Annual International Solid Freeform Fabrication (SFF) Symposium – An Additive Manufacturing Conference, held at The University of Texas in Austin on August 13-15, 2018, was attended by 680 researchers from 18 countries. The number of oral and poster presentations increased to 517 this year. The meeting was held on the Hilton Austin in the downtown area and consisted of a Monday morning plenary, 59 parallel technical sessions, and a poster session.

The conference attendance continued to grow, reflective of the interest at large in the area. The plot shows the conference attendance over its 29 year history.

The recipient of the International Outstanding Young Researcher in Freeform and Additive Manufacturing Award was **Dr. Guha Manogharan** from Penn State University. **Dr. Chee Kai Chua** from Nanyang Technological University in Singapore received the International Freeform and Additive Manufacturing Excellence (FAME) Award.



There are 212 papers in the conference proceedings. Papers marked "REVIEWED" in the title area were peer reviewed by two external reviewers. The proceedings papers are stored individually on a flash drive in pdf format by sequential order in the proceedings. The Table of Contents has links to all the papers. We have sequentially numbered the pages of the papers to facilitate citation. Manuscripts for this and all preceding SFF Symposia are available for free download at the conference website: http:// sffsymposium.engr.utexas.edu/archive.

The editors would like to thank the Organizing Committee, the session chairs, the attendees for their enthusiastic participation; and the speakers both for their significant contribution to the meeting and for the relatively prompt delivery of the manuscripts comprising this volume. We look forward to the continued close cooperation of the additive manufacturing community in organizing the Symposium. We also want to thank the Office of Naval Research (N00014-18-1-2558) and the National Science Foundation (CMMI-1826959) for supporting this meeting financially. The meeting was co-organized by the Mechanical Engineering Department/Lab for Freeform Fabrication under the aegis of the Advanced Manufacturing and Design Center at The University of Texas at Austin.

The 2019 SFF Symposium is set for August 12-14, 2019 in Austin, Texas USA.

The editors.