

Summary

When Ravi Deo and I began to assemble this conference, we intended to emphasize hardware fabrication and testing, as well as lessons learned and problems overcome by industry, in the use of composite materials. The economic, liability, and political climate of the world today would not support this type of sharing in an international conference. This was reflected, not only in the types of papers submitted, but in the removal of a number of papers after presentation because of the concerns of industry over exposing any shortcomings in their products or operations.

In addition to the reluctance of industry to share either problems or solutions in an international forum, the conference also reflects the low level of research funding existing in the United States. Industry in all countries is beginning to feel the pressure of a worldwide marketplace and the uncertainties of positions and security in this marketplace preclude the type of technical interchange that we used to take for granted. We may see it return again, but not until industry once again feels secure of its markets and futures.

In spite of these pressures to reduce sharing and presentation of problems or solutions, good work continues to be performed and applications of composite materials continue to expand. Problems continue to be solved. While the open sharing is less evident, the papers contained herein reflect the overall movement of the technology.

The primary areas of interest evidenced in this conference were high temperature behaviors, durability for long term use of composites, damage tolerance—which drives an emphasis toward textile materials, tougher resins, and transverse stiffening of composite laminates. Very high temperature applications drive the technology toward metal matrix composites and ceramic matrix composites. Test techniques were proposed, evaluated, and used to determine design allowables for composite structures.

Good design and test practices are required to achieve successful applications of composites. Industry continues to look to ASTM for guidance and a starting point toward the test and design standards required to achieve the successful applications that industry needs. ASTM, through conferences and technical interchanges like this one, continues to provide the best independent forum for exchange between industry, academia, and government organizations for the development of testing and design characterization of materials and standards.

It is our hope that industry will recognize the importance of these data exchanges with government and academia and the value of the peer review process to provide technical development of its people so that industry becomes technically challenged to push the boundaries of understanding and use of composite materials.

We look forward to that day.