

**Special 50th
Anniversary
Design Issue**

Editorial

This combined issue of the Journal of Mechanical Design and the Journal of Vibration and Acoustics commemorates the 50th Anniversary of the Design Engineering Division of ASME. It is designed to provide a glimpse of the state of the art in the field of Mechanical Design as it has been developed through the activities of various committees within the division. The papers in this issue were selected by solicitation from key researchers, and the authors were asked to include some of the following elements in their papers:

- (1) A tutorial of some of the most advanced techniques in the subfield of the paper.
- (2) A review of the relevant work and other approaches including older methods.
- (3) Some new results or at least a recasting of some of the existing results in a format consistent with the paper.
- (4) High relevance to Mechanical Design.
- (5) An indication of some of the future areas of research and research trends.

All the papers have gone through the review process. The authors have had to work with a very tight page allocation for each paper, making it impossible for them to provide a comprehensive list of references. Instead, we have asked them to refer to only a few of the important papers in the literature with the hope that the readers will be able to obtain a more comprehensive view of each area by tracing the bibliography of each of the referenced papers.

It has also been very difficult to include, in a single issue, all the areas of Mechanical Design that have been covered by the activities of the Design Engineering Division over the last fifty years. We have tried to obtain papers in more of the areas of current interest as indicated by recent publications in the two journals. There are also areas that are not included either because some of the authors who had promised papers could not meet the publication deadlines, or because some papers did not receive favorable reviews, and there was no time for rewriting and review.

With all these shortcomings, we still hope that this special issue will serve as a record of lasting value for researchers interested in the field of Mechanical Design as well as one of tutorial value to the students and newcomers to the field.

At present, the two journals of Mechanical Design and Vibration and Acoustics, the annual ASME Design Technical conferences, and the yearly National Design Engineering Conference and Show in Chicago, are the primary vehicles of disseminating technical information within the field of Mechanical Design through the Design Engineering Division of ASME. The first fifty years of this Division have brought many technical advances to the field of Mechanical Design, and in this special issue we have tried to give our readers a snapshot of the current state of the field. We are looking forward to the activities of the Division for the next half century, and we hope that the papers in this special issue will help lead us into this next period.

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