

## ON THIS ISSUE

I am pleased to introduce this special issue of *Mechanical Systems and Signal Processing* which concentrates on problems of signal processing, control, identification, and estimation in mechanical systems. Although the collection of papers appearing in this issue is somewhat distinct from the papers in the areas of classical dynamics, analysis of vibrations, etc., which have typically appeared in the journal, there are some commonalities. Similarities exist in the methodologies used, and the applications are in mechanical systems. This special issue should be helpful in providing a common forum for experimental mechanical systems research regardless of the particular methodologies or application focus of that research. *Mechanical Systems and Signal Processing* does not intend to become a "Control" journal, or a "Manufacturing" journal. However, I hope that experimental studies of mechanical systems from these areas will become a regular part of the mix of articles appearing in the journal.

This issue contains three articles which focus on control of mechanical systems. The article by Hwang *et al.* considers force control in a metal cutting process, whereas the articles by Byun and Lee and by Firoozian and Stanway consider active vibration control. The issue also contains three articles addressing problems of signal processing in manufacturing processes: parameter estimation in slot milling by Turkay and myself, pattern recognition for chatter detection in milling by Cho and Eman, and cutting process monitoring and diagnostics by Li and Wu.

I hope you will enjoy this special issue, and I personally look forward to seeing additional reports of experimental mechanical systems research with an emphasis on control, identification, and estimation. I also look forward to interesting application papers from areas such as manufacturing processes, robotics, automotive engineering, etc.

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