

# Preface

**T**his is a collection of sixteen papers that were presented at the Thirty-First International Workshop on Human Subjects for Biomechanical Research which was held in San Diego, California at the Hilton San Diego Resort. The workshop was intended to provide a forum for the exchange of ideas and the presentation of the current injury research centered around experiments involving human volunteers or surrogates.

As in the past, papers presented at this workshop generally reflect the key problems facing the automobile safety community at the time. The 31<sup>st</sup> Workshop is no exception to this. But unlike years past, where the majority of papers focused on injuries to the particular body region, this year's papers covered a wide range of topics in the field of injury biomechanics research. The contributions range from impact injuries to thorax, head/neck, and lower extremity regions to the new instrumentation technique in detecting rib fracture. A new method to measure air bag control load was presented along with a new technique for developing corridors from individual subject responses.

It is our hope that the publication of these proceedings will be useful to researchers in the field of Injury Biomechanics. But we would like to emphasize that these papers should be considered as workshop or non-formal publications, i.e., they should not be referenced in the open literature. No scientific body has screened these papers for accuracy and/or refereed them.

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# Acknowledgements

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I would also like to express my appreciation to Dr. Jeff R. Crandall, of the University of Virginia Center for Applied Biomechanics for chairing the afternoon session of the meeting. I acknowledge the Stapp Conference Advisory committee for its support. However, it should be noted that this Advisory committee neither sanctions nor approves the Workshop papers.

Thanks are also extended to the authors and presenters for their contributions to making this Workshop a very useful and beneficial experience for all the participants.

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