Second memorial issue in honor of Dr. Meng-Sing Liou

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Since the announcement of a special issue of *Shock Waves* in honor of Dr. Meng-Sing Liou, the outpouring of manuscripts from his collaborators, colleagues, and friends around the globe has been a fitting tribute to Dr. Liou for his outstanding lifelong achievements and contributions. We received 30 papers in total. The accepted papers are organized into two separate issues. The first issue mainly includes the manuscripts related to the AUSM-family schemes, which was Dr. Liou's crowning work that had the most profound impact. This second issue consists of papers from Meng-Sing's old friends and colleagues, which cover a wide range of topics: numerical methods, gas dynamics, combustion, turbulent flows, hypersonic flows, etc. We are delighted to present these manuscripts as a testimony to Dr. Liou's contributions and accomplishments in these research areas.

All 30 submitted papers were subjected to the same rigorous peer review procedure as any regular contribution to *Shock Waves*. Each paper was reviewed by at least two or more international experts. As a result of peer review, 23 papers were accepted for publication, six papers were rejected, and one was withdrawn by the author. Out of the 23 accepted papers, 14 were accepted after one revision, six papers—after two revisions, and three papers—after three revisions. Ten accepted papers were published in the first issue (volume 29, issue 5), and the remaining 13 papers are included in the present second issue (volume 29, issue 8).

Among the contributions of the second issue, we would like to bring our readers' attention to Eleuterio Toro's review paper on the HLLC scheme [1]. The HLLC scheme was originally published in *Shock Waves* in 1994 [2], at about

the same time when the first AUSM scheme was proposed. Similar to the AUSM scheme, the HLLC scheme provides a simple, efficient, accurate, and robust method to compute the numerical fluxes for hyperbolic systems. We are grateful to Eleuterio Toro for sharing his retrospective view in *Shock Waves* 25 years later. We are also pleased to present three papers, which Meng-Sing had been working on during the last years of his life. The paper by Kim and Liou [3] presents their efforts on simulating three-dimensional free-interface flows. The manuscript by Miki et al. [4] summarizes Meng-Sing's contributions to combustor simulations. The last paper of this issue (Liou et al. [5]) presents the work on the optimization design of a hybrid wing body aircraft. Dr. Liou was extremely passionate about developing the next generation of high-efficiency, low-emission, and low-noise airplanes. We thank Meng-Sing's wife, May-Fun Liou, and her colleagues at NASA for their efforts to continue and finish this important work.

Finally, we would like to express our sincere gratitude to all contributors and reviewers for their outstanding efforts. In particular, we wish to thank Evgeny Timofeev and Andrew Higgins for their flexibility to allow us to include a few manuscripts, which probably do not fit perfectly to the theme and scope of *Shock Waves*, as well as the authors of these manuscripts for their willingness to publish their work, which otherwise might reach broader readership by publishing them in journals of their own fields.

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