

Selected topics from the 29th International Symposium on Shock Waves Madison, Wisconsin, USA, July 14–19, 2013

R. Bonazza¹ · D. Ranjan²

Published online: 16 May 2015
© Springer-Verlag Berlin Heidelberg 2015

This issue contains a selection of papers that were presented at the 29th International Symposium on Shock Waves, held in Madison, WI, USA, from July 14 to July 19, 2013. The symposia originated in Boston in 1957 under the original name “International Symposium on Shock Tubes”, they are held biennially, and rotate among hosting countries all over the world. The International Symposia on Shock Waves are the definitive meetings of the scientific community devoted to the study and application of high-speed flows and shock-wave phenomena of all kinds. At the time of the call for abstracts, 291 abstracts were submitted and sent out to 90 reviewers. The conference had 9 invited presentations, 220 contributed presentations (divided into 70 parallel sessions, in 23 different areas), and 50 poster presentations. A student competition included 46 of the oral presentations and 9 posters.

Based on recommendations by the paper reviewers and the chairperson of the session in which the papers/posters were presented, the authors of 35 of the 270 contributions were invited to submit extended versions of their conference paper to *Shock Waves Journal*, and 13 accepted. These submissions were put through the same rigorous evaluation process (by at least two reviewers and an editor) as any other manuscript

received by the journal. Nine of these papers appear in this issue while the other four, if accepted, will be published in a later one.

Here, Attal and Ramaprabhu report on the chemically reactive Richtmyer–Meshkov instability (RMI); Henry de Frahan et al. present a numerical study of the RMI in multilayered systems; Wang et al. describe experiments on shock interaction with helium-filled polygonal cylinders; Georgievskiy et al. analyze shock interaction with elliptical bubbles; Hryniewicki et al. discuss highly resolved numerical simulation of oblique shock reflections; Malkov and Ivanov showcase a numerical solution of the Boltzmann equation for shock wave structure; Meng and Colonius numerically investigate the break-up of liquid cylinders accelerated by a shock wave; Gebel et al. study experimentally the interaction of blast waves with liquid droplets; Lee et al. evaluate the effect of a throat plug in shock tunnel testing.

We extend our sincere gratitude to all the authors and referees for their thorough work in preparing, reviewing, and revising the manuscripts. The quality and variety of these articles attest to the importance of the ISSW and to the excitement it generates among all generations of shock wave scientists.

✉ R. Bonazza
bonazza@engr.wisc.edu

¹ Department of Engineering Physics,
University of Wisconsin-Madison, Madison, WI 53706, USA

² Department of Mechanical Engineering,
Georgia Institute of Technology, Atlanta, GA 30332, USA