



PROFILE

Principal Member of Technical Staff
Sandia National Laboratories

CITATION

Outstanding and sustained contributions in impact mechanics and advancing experimental and diagnostic techniques in support of Sandia National Laboratories' missions, defense, and national security programs

BO SONG

Asian American Engineer of the Year

Dr. Bo Song joined Sandia National Laboratories (Sandia) in 2008 and has been the principal investigator and lead of the Experimental Impact Mechanics Lab since that time. The Experimental Impact Mechanics Lab Dr. Song built is now the most active Dynamic Material Testing facility at Sandia and is one of the top Hopkinson bar labs in the world, serving nuclear deterrence, homeland security, transportation, nuclear launch safety, and defense programs. In addition to winning two Sandia Employee Recognition Awards, Dr. Song led his team to win a 2015 National Nuclear Security Administration Defense Programs Awards of Excellence for this work.

Dr. Song is a world-recognized expert in experimental impact mechanics and dynamic response of materials and structures. He has published a book (which has been translated into Chinese), six book chapters, over 130 international peer-reviewed journal articles and conference papers, 12 SAND Reports (which are sent to the US Office of Science and Technical Information) and memos, and seven Department of Energy Technical Advances. He currently holds a patent on "Mechanical Testing Equipment for Material Characterization."

Dr. Song is highly active in professional societies and has served as Secretary (2008-2010), Vice Chair (2010-2012), and Chair (2012-2014) of the Society for Experimental Mechanics' (SEM) Dynamic Behavior of Materials Technical Division. Dr. Song was also a Secretary of American Society of Mechanical Engineers' (ASME) Dynamic Response of Materials Technical Committee. As a technical committee/division lead, Dr. Song was responsible for coordinating international conferences, publishing conference proceedings, and other society-related business. Currently, Dr. Song is serving as an Associate Editor for a prestigious international peer-review journal—*Mechanics of Materials*—and is a Founding Associate Editor for *Journal of Dynamic Behavior of Materials*. Dr. Song was elected as a Fellow of ASME in 2014.

Dr. Song enjoys participating in community services and volunteer activities. He is an invaluable supporter of Sandia's Asian-American activities; Dr. Song is now Vice-President of Chinese Institute of Engineers-New Mexico Chapter. He has supported K-12 science, technology, engineering and math (STEM) activities and performance through the annual regional Future City Competition program and New Mexico Chinese School of Arts & Language as a volunteer and a mentor. Additionally, Dr. Song supports youth sports volunteering as a coach, a photographer of youth soccer teams, and a certified US Soccer Federation referee.

