Dr. Long T. Phan

Dr. Long T. Phan is the leader of the Structures Group of the Materials and Structural Systems Division (MSSD) at the National Institute of Standards and Technology (NIST). He received his Ph.D. and Master of Science in Civil Engineering degrees from Washington University and began working at NIST as a member of the MSSD since 1984.
At NIST, Dr. Phan has conducted research on a wide range of topics, in both analytical and experimental fields. These include performance of high-performance concrete under extreme loadings (fire and ice-floes impact), field measurements of structural responses to ambient and strong motion vibrations (earthquake and wind), and investigations of damage to the built environment caused by natural or man-made disasters, including earthquakes (Kocaeli, Turkey (1999) and Northridge (1994)), hurricanes (Katrina, (2005) and tornadoes (Jarrel, Texas (1997); Orlando, Florida (1998); Alabama (1998); Spencer, South Dakota (1998); Joplin, Missouri (2011); and Newcastle-Moore, Oklahoma (2013)).

He published widely in the area of structural and material performance in fire, and has more than 90 technical papers in refereed journals and conferences. He is a coauthor of the ASCE Pentagon Building Performance Report (ASCE, 2003). His current research interest is on developing tools for quantifying design risks posed by (1) the combined effects of hurricane wind, storm surge, and waves, and (2) tornado hazards.

He is the recipient of several NIST and external awards, including the U.S. Department of Commerce Gold Medal (2014); U.S. Department of Commerce Silver Medal (2007); the U.S. Department of Commerce Bronze Medal (2006); the American Concrete Institute (ACI) Wason Medal (2004); the U.S. Army Corps of Engineers Award for Valuable Contribution to the Pentagon Rebuilt Retrofit Program (2002); and the U.S. Department of Commerce Bronze Medal (1990).

Dr. Phan is a Fellow of the American Concrete Institute (ACI) and a registered Professional Engineer (P.E.) in the State of Virginia. He is also an adjunct professor at the Civil Engineering department of Catholic University of America. He is a Senior Member of RILEM Technical Committee HTC (High Temperature Concrete) and was the former chairman of the joint ACI-TMS Technical Committee 216 (Fire Resistance and Fire Protection of Structures). He is also a voting member of ASCE/SFPE Standard Committee 29, and the current chairman of ASCE's Fire Protection committee.