

Marie Moralde
Senior Associate

Professional Profile

Ms. Marie Moralde is a Senior Associate in Exponent's Vehicle Engineering practice and is based in the Test and Engineering Center in Phoenix, Arizona. Ms. Moralde has spent her career analyzing motor vehicle accidents and accidental injuries. She is experienced in the reconstruction of motor vehicle accidents, including the investigation and reconstruction of low and high severity planar impacts, roll-overs, motorcycle and bicycle accidents, and pedestrian impacts. Her analyses have addressed issues of impact severity, impact speed, potential for avoidance, and causation. She has experience using traditional methodologies as well as computer programs and simulations in accident reconstruction analyses. Ms. Moralde's education, experience, and training also allow her to address issues related to occupant dynamics, injury biomechanics, and occupant crash protection. She has significant experience researching injury mechanisms and injury potential in these various accident scenarios, including analysis of restraint systems to determine probable usage.

Ms. Moralde's specialized training has included traffic accident reconstruction coursework through Northwestern University. She is also a certified as a Crash Data Retrieval (CDR) system operator.

Academic Credentials and Professional Honors

B.S.E., Bioengineering, Biomechanics Emphasis, Arizona State University, 1998

Specialized Training

Engineering Dynamics Corporation, *2008 HVE Forum*, 2/2008

Northwestern University Center for Public Safety, *Traffic Accident Reconstruction*, 9/2007

Society of Automotive Engineers, *Occupant and Vehicle Kinematics in Rollovers Seminar*, 8/2005

Collision Safety Institute, Inc., *Crash Data Retrieval (CDR) System Operator Certification Course*, 5/2005

MacInnis Engineering Associates, Ltd., *PC-Crash & PC-Rect Training Workshop*, 3/2003

Association for the Advancement of Automotive Medicine, Specialized seminar: *Biomechanics of Impact – Understanding the Limits of Human Tolerance*, 2002

Publications

Davee D, Van Arsdell WW, Raasch C, Moralde M. Seat belt buckle release by inadvertent contact. SAE 2008-01-1236, SAE 2008 World Congress, Detroit, MI, 2008.

Kuzel M, Krauss D, Moralde M, Kubose T. Comparison of subjective ratings of slipperiness to the measured slip resistance of real-world walking surfaces. Proceedings, International Conference on Slips, Trips and Falls 2007—From Research to Practice, Hopkinton, MA, August 23–24, 2007.