
Editorial

Mustafa Alsaleh

Machine Performance,
Virtual Product Development, Caterpillar Inc.,
14009 Old Galena Rd.,
Mossville, IL 61552, USA
Email: Alsaleh_Mustafa_I@cat.com

Paramsothy Jayakumar

U.S. Army RDECOM-TARDEC,
6501 E. 11 Mile Road,
Warren, MI 48397-5000, USA
Email: paramsothy.jayakumar.civ@mail.mil

Biographical notes: Mustafa Alsaleh is an Engineering Specialist at Caterpillar Inc. Virtual Product Development Technology; he has been focused on the area of Machine Simulation for research and development purposes for over 12 years. During his career at Caterpillar Inc., he had published more than 30 papers, designed and taught several special courses on soil-machine interaction, co-advised several graduate students, edited multiple proceedings, co-organised and co-chaired multiple international and national workshops and conferences. He obtained his Bachelor and Master's degrees in Geomechanics from Jordan University of Science and Technology and in 2004 he obtained his PhD in Geomechanics from Louisiana State University.

Paramsothy Jayakumar is a Senior Technical Expert and SAE Fellow at U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC). He began his career with the U.S. Army TARDEC in 2009 following employment with Ford Motor Company and BAE Systems. He has worked in research, development, and engineering of ground vehicle mobility, on- & off-road, and intelligent vehicles. He is the recognised leader in the field of mobility and vehicle dynamics M&S in the DoD and automotive communities. He has written more than 125 technical publications and holds two patents. He is a Member of the U.S. Army Acquisition Corps, an Honorary Fellow of the Department of Mechanical Engineering at the University of Wisconsin – Madison, an Associate Editor of the *ASME Journal of Computational and Nonlinear Dynamics*, and an Editorial Board Member of the *International Journal of Vehicle Performance*. He received his MS and PhD from Caltech, and BSc Eng. from the University of Peradeniya, Sri Lanka.

Mobility of off-highway vehicles is a very interesting area of research. Many scholars have been focusing on the development and validation of mobility models, whether it is for wheeled and/or tracked vehicles. This becomes a real challenge when the terrain is not as friendly as a paved highway. The *International Journal of Vehicle Performance* is

a perfect venue for active researchers to share their findings in this field among their peers in the community of vehicle performance. This special issue on *Mobility of Off-Road Vehicles* contains the following papers:

- IJVP-127483, 'Development of a multi-year database to assess off-road mobility algorithms in fine-grained soils', Vahedifard et al.
- IJVP-127933, 'Full-featured ground vehicle mobility analysis using different soil moisture sources', Stevens et al.
- IJVP-133773, 'Integration of ANCF continuum-based soil plasticity for off-road vehicle mobility in multibody system dynamics', Contreras et al.
- IJVP-145023, 'Predicting wheel forces using bearing capacity theory for general planar loads', Hambleton and Stanier
- IJVP-146001, 'Energy analysis of powertrain and chassis integrated simulation using a military duty cycle', Rizzo et al.

The editors of the IJVP would like to sincerely thank all authors who participated in this special issue. Special thanks to reviewers who took time out of their busy schedule to review these papers to ensure high quality.