SVC Meeting, 1 – 2 March 2018

SVC Posters

	Title	Presenter	Advisor
SVC #40A:	Characterization and modeling of passive and adaptive bushings and mounts: rubber bushings	L. Fredette	R. Singh
SVC #40E:	Characterization and modeling of passive and adaptive bushings and mounts: automotive system isolation	V. Ravi	S. Noll
SVC #45:	Development of morphing panels for adaptive vehicle aerodynamics	S. Chillara	M. Dapino
SVC #46:	Mechanoluminescent paintable light sources in automotive lighting systems	S. Krishnan	V. Sundaresan
SVC #49:	Embedded fiber optic sensors for structural health monitoring	S. Chilelli	M. Dapino
SVC #51B:	Ultrasonic additive manufacturing for automotive Structures: UAM process modeling	G. Venkatraman	M. Dapino, L. Headings
SVC #51C:	Ultrasonic additive manufacturing for automotive structures: UAM for structural reinforcement	Y. Rong, B. Gingerich	M. Dapino, L. Headings
SVC #52:	Design of matrix and particulates for simulcure 3D printing technique	R. Northcutt	V. Sundaresan
SVC #54:	Magnetic Additively-Manufactured Structural Hybrid (MASH)	I. Nas	M. Dapino, Z. Deng
SVC #55:	Multiscale finite element simulation of the mechanical behavior of fiberglass insulation packs	M. Ji, M. Yang	S. Soghrati
SVC #56:	Dynamic friction characterization of icy road surfaces	L. Fredette	R. Singh
SVC #57:	Flexible piezoelectric sensors for vehicle applications	A. Ramanathan	M. Dapino, L. Headings
SVC #58:	Architecture for mechanoluminescent structural sensors and sensing platforms	P. Vijayaraghavan	V. Sundaresan

Related Research Posters

Title	Presenter	Advisor
Shape Morphing Arm Robotic (SMART) manipulators for simultaneous safe	Y. Zhou	M. Dapino
human-robot interaction and high performance manufacturing		
Metal matrix composites, parts, and components made with ultrasonic additive manufacturing	B. Gingerich	M. Dapino
Mechanical characterization and microstructure analysis of ultrasonic additive	T. Han	M. Dapino,
manufactured steel		L. Headings
Electrical power management and optimization with nonlinear energy harvesting	W. Cai	R. Harne
structures		
Tunable acoustic energy dissipation by fluid-structure interaction in elastomeric,	S. Cui	R. Harne
resonant metamaterials		
Modeling and experimentation of hyperdamping metamaterials in tubular structures	S. Yeh	R. Harne
for broadband vibration suppression		
Foldable acoustic arrays from piecewise linear, conformal, and tessellated topologies	C. Zou	R. Harne
On the feasibility of a temperature state observer for powder bed fusion additive	N. Wood	D. Hoelzle
manufacturing		
A cable driven mechanism for a continuously tunable stiffness arm towards	Y. She	H. Su
safe human-robot interactions		



