

SVC Meeting Poster List, 19-20 September 2019

SVC Posters

SVC #	Title	Presenter	Project Leader(s)
#46	Mechanoluminescent paintable light sources in automotive lighting systems	S. Krishnan (G)	V. Sundaresan
#49	Embedded fiber optic sensors for structural health monitoring	S. Chillelli J. Morris (G)	M. Dapino
#51B	Ultrasonic additive manufacturing for automotive structures: UAM process modeling	G. Venkatraman (G)	M. Dapino L. Headings
#51C	Ultrasonic additive manufacturing for automotive structures: UAM for structural reinforcement	Y. Rong (G)	M. Dapino B. Gingerich L. Headings
#51D	Ultrasonic additive manufacturing for automotive structures: UAM steel builds	T. Han (G)	M. Dapino L. Headings
#52	Multifunctional structural polymer composites for vehicle electrification	P. Vijayaraghavan	V. Sundaresan
#54AB	Robust Integrated Magnetic Composites (RIMaC) for Magnetic Gears: Magnetic Additively-Manufactured Structural Hybrid (MASH) and Magnetic Gear Drives (MGDs) for automotive applications	I. Nas (G) B. Losey (G) M. Moore (U)	M. Dapino
#57	Flexible piezoelectric sensors for vehicle applications	A. Ramanathan (G)	M. Dapino L. Headings
#58A	Optical multifunctional materials – Architectures for structural sensors: Architecture for mechanoluminescent structural sensors and sensing platforms	S. Gupta (G) A. Mohamed (U)	V. Sundaresan P. Vijayaraghavan
#58B	Optical multifunctional materials – Architectures for structural sensors: Photoluminescent phosphors for visualizing thermomechanical stress in power electronic devices	V. Venkatesh (G) S. Krishnan (G)	V. Sundaresan P. Vijayaraghavan
SEED	Integrated hyperdamping material systems for vibration, noise, and shock attenuation applications	C. El-Helou (G)	R. Harne
SEED	On the feasibility of a temperature state observer for powder bed fusion additive manufacturing	N. Wood (G)	D. Hoelzle
SEED	Aeromechanic analysis and optimization of boundary layer ingestion turbomachinery	A. Wernick (G)	J.P. Chen
REU	Investigation of metal corrosion by in-situ electrochemical force microscopy	C. Joyce (U)	H. Cho
SEED	Solution processing of thermochromic vanadium dioxide smart windows	P. Crosby (U)	V. Doan-Nguyen

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Related Research Posters

Title	Presenter	Project Leader(s)
Metal matrix composites, parts, and components made with ultrasonic additive manufacturing	B. Gingerich	M. Dapino
Joining of carbon fiber reinforced polymers and metals	H. Guo (G)	M. Dapino L. Headings B. Gingerich
Ultrasonic additive manufacturing of shape memory metal composites	J. Morris (G)	M. Dapino
Modeling the large deflection bending behavior of stranded electrical wires for digital manufacturing applications	S. Vemula (G)	M. Dapino
Shape Morphing Arm Robotic (SMART) manipulators for simultaneous safe human-robot interaction and high performance manufacturing	Y. Zhou (G)	M. Dapino
Flexible electronic elastomeric materials with liquid metal microchannels	Z. Nick (G)	R. Harne
Mechanical design of active origami structures for deployable systems applications	N. Zhao (G)	R. Harne
Robust kinetic energy harvesting in complex vibration environments	W. Cai (G)	R. Harne
Broadband panel vibration suppression with lightweight elastomeric metamaterials	S.L. Yeh (G)	R. Harne