

# SVC Meeting Poster List, 26-27 March 2020

## 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	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	B. Gingerich	M. Dapino B. Gingerich L. Headings
#51D	Ultrasonic additive manufacturing for automotive structures: UAM steel builds	T. Han (G)	M. Dapino L. Headings
#51E NEW	Ultrasonic additive manufacturing for automotive structures: Joining of metal and fiber reinforced polymers	H. Guo (G)	M. Dapino L. Headings
#52	Multifunctional structural polymer composites for vehicle electrification	P. Vijayaraghavan	V. Sundaresan
#54	Robust Integrated Magnetic Composites (RIMaC) for magnetic gears	I. Nas (G) B. Losey (G) M. Moore (U)	M. Dapino
#57B NEW	Flexible piezoelectric sensors for vehicle applications: Air speed and direction measurement	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
#59 NEW	Multi-functional structural panels with electroluminescence	M. Demissie (G)	V. Sundaresan
#60 NEW	Distributed programmable actuation platforms	S. Mukhopadhyay (G)	V. Sundaresan
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	TBD (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

<b>Title</b>	<b>Presenter</b>	<b>Project Leader(s)</b>
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

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