SURF Student Colloquium: Tuesday - August 6, 2013
Plenary Session: Green Auditorium, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
9:00A		National Institute of Standards & Technology	Welcome	NIST
MODERATOR:				
9:15A	Chase Brisbois	State University of New York Albany	Probe-Assisted Doping and the World's Smallest QR Code	PML/Elec Eng
9:45A	Gregory Krummel	University of Maryland College Park	Hand-Arm Coordination: Integration and Control of Dexterous Robots	EL
10:15A	Brian Blankenau	Kansas State University	Evaluation of a Diamagnetic Levitation Apparatus	CNST
10:45A	Lisa Krayer	University of California San Diego	Etch Damage in Magnetic Thin Film Head Materials	MML/NCNR MatSci
11:15A	Sara Stoudt	Smith College	Measuring Optical Apertures for Solar Irradiance Monitoring	ITL
11:45A	Katie Hafner	University of Maryland College Park	Optimizing 3D Structures for the NIST Chemistry WebBook	MML/NCNR ChemBio
	Michael Liou	Duke University		
	Jennifer Skerritt	Duke University		
12:15P				
12:45P	LUNCH – SURF DIRECTORS AND EXTERNAL VISITORS (Dining Rooms A & B, Building 101)			

SURF Student Colloquium: Tuesday - August 6, 2013
Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Tabbetha Dobbins, Rowan University				
2:00P	Robert Buarque de Macedo	Carnegie Mellon University	Creating a Testing Infrastructure for Atomistic Simulations of Materials	MML/NCNR MatSci
2:20P	Danya Murali	University of Maryland Baltimore County	Creating Profiling Tools to Analyze and Optimize FiPy	MML/NCNR MatSci
2:40P	Richard Grist	Central Washington University	Co-W-Al Isothermal Analysis	MML/NCNR MatSci
3:00P	Christopher Kassner	Rowan University	Measurement of Magnetic Anisotropy in Magnetic Nanoparticles	MML/NCNR MatSci
3:20P	Kyle Stritch	Lehigh University	Microanalysis of Various Materials Deposited by Atomic Layer Deposition	MML/NCNR MatSci
3:40P	Eshwari Murty	University of Maryland College Park	Electrochemical Deposition of Pt_3Ni Ultrathin Film Catalysts for PEM Fuel Cells	MML/NCNR MatSci
4:00P	Nathan Smith	University of Maryland Baltimore County	Optimization and Modeling of MIS Devices for Solar Energy Conversion	MML/NCNR MatSci
4:20P	Troy Smith	Rowan University	Improved Data Comparison Schemes for Inter-Laboratory Studies on High-Pressure Gas Sorption Data	MML/NCNR MatSci
4:40P				
5:00P	END OF DAY			

SURF Student Colloquium: Tuesday - August 6, 2013
Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR:				
2:00P	Lance Dockery	Mount St. Mary's University	Determination of Aggregate Size Dependence Effect on Soot Particle Packing in a Macroscale Experiment	MML/NCNR ChemBio
2:20P	Christopher Hernandez	Texas A & M University Corpus Christi	Utilizing Infrared Spectroscopy for the Investigation of Organic Photovoltaic Formation	MML/NCNR ChemBio
2:40P	Stuart Ness	Arizona State University	Correlations Between Fullerene Miscibility and Organic Photovoltaic Device Performance	MML/NCNR ChemBio
3:00P	Graham Spicer	Carnegie Mellon University	Fabrication of Nanoporous Aluminum Oxide Films	MML/NCNR ChemBio
3:20P	Trinh Nguyen	Montgomery College	New and Rapid Methods to Measure Viability of Bacterial Biofilms	MML/NCNR ChemBio
3:40P	*BREAK*			
4:00P				
4:20P				
4:40P				
5:00P	*END OF DAY*			

SURF Student Colloquium: Tuesday - August 6, 2013
Parallel Session: Lecture Room D, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR:				
Don Snyder, The College of William and Mary				
2:00P	Andrea Bajcsy	University of Maryland College Park	From Web Graphics to 3D Haptics: Depicting Web Images for the Blind and Visually Impaired	ITL
2:20P	Catherine Breen	Princeton University	Automating Image Edge Detection with Accuracy Comparable to Manual Reference and Correlating Oct4 GFP Gene Reporter Expression with Antibody Label for Oct4 in Stem Cell Colonies	ITL
2:40P	Cynthia Gan	University of Maryland College Park	Content-Based Image Comparison	ITL
3:00P	Jacob Siegel	University of Maryland College Park	Virtual Calibration: Using an iPhone to Calibrate Multiple Microscopes	ITL
3:20P	Sarab Al Ammary	Montgomery College	Error Analysis on Open HaRT13 Evaluation	ITL
3:40P	Mark Villarrubia	University of Maryland College Park	Evaluating a Machine Learning Algorithm for Spam Detection Through Standardizing Spam Characterization	ITL
4:00P				
4:20P				
4:40P				
5:00P	*END OF DAY*			

SURF Student Colloquium: Tuesday - August 6, 2013
Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Uwe Arp, Physical Measurement Laboratory SURF Director/NIST				
2:00P	Michael Aiken	Appalachian State University	Development of Calibration Standards for Near Infrared Fluorescence Diagnostic Imaging Systems	PML/Physics
2:20P	Justin Clagg	University of Maryland College Park	Creating an Efficient Program to Simulate Dynamics of One-Dimensional Quantum Many-Body Systems	PML/Physics
2:40P	Aaron Glick	Colorado School of Mines	Modeling Dynamic Elasticity in Dynamic Force Calibration	PML/Physics
3:00P	Gabriel Jaffe	University of Texas Austin	Automating Tunnel Junction Device Fabrication	PML/Physics
3:20P	Troy Seberson	Gustavus Adolphus College	Characterization and Optimization of Neutron Polarization and Magnetic Field for a Neutron Electric Dipole Moment Experiment	PML/Physics
3:40P	Peter Weck	Swarthmore College	Detecting Nanoscale Three-Dimensonal Shape Variations Using an Optical Microscope	PML/Physics
4:00P				
4:20P				
4:40P				
5:00P	*END OF DAY*			

SURF Student Colloquium: Tuesday - August 6, 2013
Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
		MODERATOR: Erica Kuligowski, Fire and Research Division, EL/NIST		
2:00P	Joseph Willi	University of Illinois Urbana-Champaign	Behavior of Fire Fighter Polycarbonate Personal Protective Equipment in Extreme Heat Conditions	EL
2:20P	Rena Elkin	University of Maryland College Park	The Importance of User-Friendly Interfaces for Public Resources	EL
2:40P	Brianna Gillespie	Worcester Polytechnic Institute	Verification of Zone Fire Models	EL
3:00P	Hidemi Omori	University of Maryland College Park	Improving Emergency Evacuation Effectiveness	EL
3:20P	Emily Wiess	University of Maryland College Park	Analysis of Stairwell Evacuation	EL
3:40P	Zineb Bouizy	City College New York	Evaluating Smoldering Ignition Performance of Barrier Fabrics (BF)	EL
4:00P	Nicholas Faenza	University of Maryland College Park	Multi-Substrate Flammability Reduction Using a Layer-by-Layer Assembly with Natural Materials	EL
4:20P	Mary Long	Worcester Polytechnic Institute	Visual Analysis of Fire Spread Rates on Upholstered Furniture Mock-Ups	EL
4:40P				
5:00P	END OF DAY			

SURF Student Colloquium: Wednesday - August 7, 2013
Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: *Julie Borchers, NCNR SURF Director/NIST* *Dan Neumann, NCNR/NIST*				
9:00A	Timothy Dougherty	Georgetown University	Solving Our Carbon Dioxide Problem: CO_2 Binding in Metal-Organic Frameworks	MML/NCNR MatSci
9:20A	Benjamin Jones	University of Maryland College Park	Graphitic Carbon Thin Films for Neutron Reflectometry Investigations of Rechargeable Batteries and Fuel Cells	MML/NCNR MatSci
9:40A	Katherine Borner	University of Texas Dallas	Investigation of Stability of Silica Particles in Lutidine/Water Solvent	MML/NCNR MatSci
10:00A	Jackson Waller	North Carolina State University	Molecular Self-Assembly in Water-Alcohol Solutions	MML/NCNR MatSci
10:20A	Steven Conklin Lopez	University of Puerto Rico	Neutron Diffraction Study of Pressure-Dependent Magnetism in Molecule-Based Magnets	MML/NCNR MatSci
10:40A	*BREAK*			
MODERATOR: *Fred Phelan, Materials Science and Engineering Division, MML/NIST* *Robert Shull, Material Measurement Laboratory SURF Director/NIST*				
11:00A	Daniel Kutzik	Alfred University	All Dressed Up and Somewhere to Go: A SWCNT-Surfactant MD Study	MML/NCNR MatSci
11:20A	Shannon Jones-Butts	Southern University and A&M College	Chemical Structure – Performance Relationships of Molecular Layer-by-Layer Water Desalination Membranes	MML/NCNR MatSci
11:40A	Kari McPartland	University of Maryland College Park	Membranes for Clean Water: Developing a Cure for Chlorine Degradation	MML/NCNR MatSci
12:00N	DoRonne Shyu	University of Maryland College Park	In Situ Characterization of Polymer Adsorption Properties Using Quartz Crystal Microbalance	MML/NCNR MatSci
12:20P	Jote Jinfessa	University of the District of Columbia	High-Throughput Photovoltaic Efficiency Testing Rig	MML/NCNR MatSci
12:40	*LUNCH*			

SURF Student Colloquium: Wednesday - August 7, 2013
Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Terrell Vanderah, Material Measurement Laboratory SURF Director/NIST Robert Shull, Material Measurement Laboratory SURF Director/NIST				
1:30P	Laura Byrnes-Blanco	University of South Florida	SI Traceable Calibration of Thermal Cantilever Vibrations in a Laser Doppler Vibrometer (LDV)	MML/NCNR MatSci
1:50P	Luis Correa	University of Maryland College Park	Indentation Metrology for Nanomechanical Properties	MML/NCNR MatSci
2:10P	Kwami Lamadokou	Indiana University	Friction Effect on Displacement of a Cantilever Beam-Based Instrument During Polymerization Shrinkage	MML/NCNR MatSci
2:30P	Jaime Santillan	University of Puerto Rico	Collection of Standard Reference Data for Gas Adsorption via Molecular Simulation and Literature Meta-Analysis	MML/NCNR MatSci
2:50P	Eric Nelson	Boise State University	Captivating Science: Computational Studies of the Carbon Capture Material HKUST-1	MML/NCNR MatSci
3:10P	*BREAK*			
3:20P	Grace Wang	University of Maryland College Park	Improving Quantitative Immunostaining Measurements by Atomic Force Microscopy	MML/NCNR MatSci
3:40P	Koyuki Fritchman	Boise State University	EBSD Strain Measurements of $Si_{1-x}Ge_x$ Thin Films on Si Chips for Reference Material Development	MML/NCNR MatSci
4:00P	Kevin Talley	Boise State University	Crystal Chemistry and Crystallography of Potential Thermoelectric Perovskites	MML/NCNR MatSci
4:20P	Jared Carter	University of Florida	Synthesis and Crystal Structure of $Na_{(1-y)}Li_yNb_{(1-x)}Ta_xO_3$	MML/NCNR MatSci
4:40P				
5:00P	*END OF DAY*			

SURF Student Colloquium: Wednesday - August 7, 2013
Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB
MODERATOR:				
9:20A	Elianna Bier	Augsburg College	Benchmarking the Detection Threshold, Saturation Limit, Linear Dynamic Range, and the Intensity Calibration for a Widefield Fluorescence Microscope Using Fluorescent Glass Reference Materials	MML/NCNR ChemBio
9:40A	Meryem Ok	Massachusetts Institute of Technology	Investigation of the Potential Genotoxicity of Acid-Modified NanoTitania	MML/NCNR ChemBio
10:00A	Emma D'Ambro	LeMoyne College	Dynamical Structure Measurements of Biotherapeutics with Hydrogen/Deuterium Exchange Mass Spectrometry	MML/NCNR ChemBio
10:20A	Tamika Ragland	Alabama A & M University	Temporal and Spatial Trends of Perfluorinated Compounds in Ringed Seals *(Phoca Hispida)* from Alaska	MML/NCNR ChemBio
10:40A	BREAK			
11:00A	Alexander Yang	University of Virginia	Developing Ontologies Through a Root-Based Vocabulary in a Semantics Database	MML/NCNR ChemBio
11:20A	Ian Movius	Montgomery College	Development of an Apparatus to Measure the Optical Properties of Black Carbon Ice Nuclei	MML/NCNR ChemBio
11:40A	Peter Luu	University of Maryland Baltimore County	Effect of Reduced Beam Divergence on NIST Ozone Standard Reference Photometer Measurements	MML/NCNR ChemBio
12:00N	Jessie Bennett	York College of Pennsylvania	Ion Mobility Spectrometry: Characterizing Instrument Response to Drugs as a Function of Desorber Temperature	MML/NCNR ChemBio
12:20P				
12:40P	LUNCH			

SURF Student Colloquium: Wednesday - August 7, 2013
Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Bettijoyce Lide, Information Technology Laboratory SURF Director/NIST				
1:30P	Dana Udwin	Smith College	Face Recognition Performance in Point-and-Shoot Video	ITL
1:50P	Emily Jay	Towson University	Security of WS-Biometric Devices (WS-BD)	ITL
2:10P	Amy Zemanick	Elon University	Compositional Data Analysis of a Cement Clinker	ITL
2:30P	Kyle Leber	Lock Haven University	The Tale of Two Models	ITL
2:50P	Kevin Keller	University of Maryland College Park	Stampeding Over Cement: Simulating Chemical Kinetics in Parallel with HydratiCA	ITL
3:10P		*BREAK*		
MODERATOR: Alan Mink, Applied and Computational Mathematics Division, ITL/NIST				
3:20P	Andrea Rommal	Muhlenberg College	Investigation of Trevisan Extraction Theory and Framework	ITL
3:40P	Janelle Williams	Virginia State University	Digital Repository of Mathematical Formulae	ITL
4:00P	Michael Baeder	Harvey Mudd College	Generalizations of Generating Functions for Hypergeometric Orthogonal Polynomials	ITL
4:20P	Rebekah Wheatley	Johns Hopkins University	Fourier and Gegenbauer Expansions of a Fundamental Solution of Laplace's Equation on a Hypersphere	ITL
4:40P	Rehab AlAmmary	Montgomery College	Identifying Critical Links in a Network	ITL
5:00P		*END OF DAY*		

SURF Student Colloquium: Wednesday - August 7, 2013
Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR:				
9:00A	Emily Hitz	University of Maryland College Park	COMSOL Simulation of Multi-Level Interconnects for Advanced Integrated Circuit Design	PML/Elec Eng
9:20A	Franklin L. Nouketcha	University of Maryland College Park	Measuring and Modeling Parasitic Resistances in CMOS Transistors	PML/Elec Eng
9:40A	Farad Golshany	University of Maryland College Park	Electrical Modeling of the Change in Resistance in Through-Silicon Via Daisy Chain Subjected to Thermal Cycling	PML/Elec Eng
10:00A	Jing Chen	City College of New York	Hole and Electron Internal Photoemission of MOS Devices	PML/Elec Eng
10:20A	Marilyn Gauthier	City College of New York	Electrical Transport Measurements of Molecular Layers Using Eutectic Gallium Indium	PML/Elec Eng
10:40A	*BREAK*			
11:00A	Michael J. Morales-Otero	Inter-American University of Puerto Rico	Density of States Characterization in Single Crystals of Rubrene	PML/Elec Eng
11:20A	Mian Khalid	University of Maryland College Park	Flexible Conducting Polymer Actuators for Cell Stimulus Applications	PML/Elec Eng
11:40A	Danielle Soberman	George Washington University	A Study of Polymer Interactions at the Membrane-Solution Interface for Single Molecule DNA Sequencing Applications	PML/Elec Eng
12:00N	Benjamin Hackett	University of Kentucky	Improving the 3-D Capabilities of the Scanning Electron Microscope (SEM)	PML/Elec Eng
12:20P	Taher Kakal	Virginia State University	3D Topography Analysis of 10 Consecutively Manufactured Drift Punches	PML/Elec Eng
12:40P	*LUNCH*			

SURF Student Colloquium: Wednesday - August 7, 2013
Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Cameron Miller, Physical Measurement Laboratory SURF Director/NIST				
1:30P	Chase Brignac	Louisiana State University	Optimal Photo Down-Conversion Through Thermal Control of Nonlinear Crystals	PML/Physics
1:50P	Rachel Kearns	University of Washington	An Optical Force-to-Frequency Transducer	PML/Physics
1:50P	Devin O'Kelly	University of Texas Austin	Neutron Vision	PML/Physics
2:10P	Wilbur Shirley	University of Illinois Urbana Champaign	Half-Quantized Vortex Molecules in Quasi-Two-Dimensional Rotating Binary Superferrofluids	PML/Physics
2:50P	Dillon Frame	North Carolina State University	Shielding Designs for a Short-Baseline Neutrino Detector: A Monte Carlo Approach	PML/Physics
3:10P			*BREAK*	
3:20P	Mira Fein	Oberlin College	Redefining Acceptable White Light for General Lighting	PML/Physics
3:40P	Jacob Ward	Arizona State University	Atomic Spectra of Iron Group Elements: Looking at the Universe Through Atoms	PML/Physics
4:00P	Brandon Wilson	Hamilton College	Towards Microgram Mass Standards for Small Force Metrology	PML/Physics
4:20P	Zachary Pruett	Appalachian State University	Stellar Photometry: Calibration of Stars	PML/Physics
4:40P				
5:00P			*END OF DAY*	

SURF Student Colloquium: Wednesday - August 7, 2013
Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB
MODERATOR: *Lisa Fronczek, Engineering Laboratory SURF Director/NIST*				
9:00A	Ian Bashor	University of Evansville	Performance Testing for Android Devices for Tactical Military Use	EL
9:20A	Justin Cosentino	Swarthmore College	Extrinsic Lidar Calibration for Use with Mobile Robotics	EL
9:40A	Byung Kim	University of Maryland College Park	Metrology of Force-Based Control for Robotic Assembly	EL
10:00A	David Nahmias	Swarthmore College	Design, Construct and Test a Computer Controlled Mannequin Mover for Automated Guided Vehicle (AGV) Obstacle Avoidance	EL
10:20A	Thomas Oeste	University of Maryland College Park	The Impact of Robot-Human Collaboration	EL
10:40A	*BREAK*			
Moderator: *Siva Paramasivam, Savannah State University*				
11:00A	Syed Elahi	University of Maryland College Park	Database Automation by Solving Puzzles!!!	EL
11:20A	Kevin Molina Serrano	University of Puerto Rico Mayaguez	Manufacturing Sensor Knowledge Representation	EL
11:40A	Leticia Simpore	Savannah State University	Automation of Performance Plan Generation	EL
12:00N	Lindsey Bass	Virginia Polytechnic Institute and State University	Measurement Deviations of Additively-Manufactured Parts from Their Theoretical Models	EL
12:20P	Jessica Gladstone	State University of New York Binghamton	Optical Measurements of Porosity in Additive Manufactured Metallic Parts	EL
12:40P	*LUNCH*			

SURF Student Colloquium: Wednesday - August 7, 2013
Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE OF TALK	LAB
			MODERATOR: *Siva Paramasivam, Savannah State University* *Chris White, Engineering Laboratory SURF Director/NIST*	
1:30P	Aidan Clawson	Georgia Institute of Technology	Performance Characterization of Precision Positioning Systems	EL
1:50P	Taqiyyah Safi	Montgomery College	Integration of Adaptive Control in Cyber Physical Systems for Enhanced System Performance	EL
2:10P	Kathryn Skobrak	Ohio Northern University	Machine Tool Performance Under Loaded Conditions	EL
2:30P	Jenna Lynch	Arizona State University	A Really Hot Way to Measure Airflow	EL
2:50P	Wasson An	University of Maryland College Park	Computer Assisted Translator for Sustainable Process Description Analytics Formalism (SPAF)	EL
3:10P			**BREAK**	
3:20P	Adrian Hamins-Puertolas	University of Maryland College Park	Estimating the Cost of Inadequate Interoperability for Manufacturing Processes	EL
3:40P	Samuel Sharpe	Oberlin College	Environmental and Economic Sustainability of Residential Buildings	EL
4:00P	Jason Regina	University of Missouri Kansas City	How to Blow a House Down: Confessions of the Big Bad Wolf	EL
4:20P	Kelly Webster	Virginia Polytechnic Institute and State University	CFD Simulation of Flow Around Bluff Body Objects	EL
4:40P	Isaiah Sampson	Johns Hopkins University	Structural Robustness of Reinforced Concrete Frames	EL
5:00P			**END OF DAY**	

SURF Student Colloquium: Thursday - August 8, 2013
Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Lloyd Whitman, Deputy Director, Center for Nanoscale Science and Technology/NIST				
9:40A	Ekaterina Tolstaya	University of Maryland College Park	Measurements of a Copper Polypeptide Solar Fuels Catalyst	CNST
10:00A	Osama Khalil	Arizona State University	Characterization of High Density Plasma Chemical Vapor Deposition Process	CNST
10:20A	Tim Straley	Colorado School of Mines	Development of a Deep-Level Transient Spectroscopy Data Acquisition Method for Characterization of Photovoltaics	CNST
10:40A	Adam Bern	Cornell University	Design and Fabrication of a Nano-Scale Cantilever for the Atomic Microscope	CNST
11:00A	*BREAK*			
11:10A	Katherine Sytwu	Rutgers University	Optical Ferromagnetic Resonance Measurement Using the Kerr Effect	CNST
11:30A	Jonathan Mehlman	Yeshiva University	The Reliability of Magnetic Switching in Spintronic Devices	CNST
11:50A	Philip Trettenero	University of Illinois Urbana-Champaign	Measuring the Defect Density of Carbon Nanotubes	CNST
12:10P	Michael Briggs	State University of New York Albany	Photoresist Surface Modification for Photolithography	CNST
12:30P				
12:50P	*LUNCH*			

SURF Student Colloquium: Thursday - August 8, 2013
Parallel Session: Lecture Room A, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: Joonil Seog, University of Maryland College Park				
1:30P	Natalie Austin	University of Maryland Baltimore County	Understanding Intracellular Biomineralization: Exploring the Role of pH and Supersaturation on the Compositioin of Amorphous Calcium Phosphate	MML/NCNR MatSci
1:50P	Neha Kumar	University of Maryland Baltimore County	Growth Factor Deliverable Smart Nanofiber Scaffolds for Tissue Engineering Applications	MML/NCNR MatSci
2:10P	Charles Onyenemezu	University of Maryland College Park	Engineering Polymer Fiber 3D Composite Scaffolds for Enhanced Periodontal Tissue Regeneration	MML/NCNR MatSci
2:30P	Marianna Fleischman	University of Delaware	An Investigation of the Stabilizing Effects of Surfactants on Bio-Therapeutics	MML/NCNR MatSci
2:50P	Perri Weinstein	Rochester Institute of Technology	Evaluation of Thiolacetates and Disulfides as Lipidic Anchors in Tethered Bilayer Membranes (tBLMS)	MML/NCNR MatSci
3:10P	BREAK			
3:20P	Anita Kundu	University of Maryland College Park	The Effect of the Hydration Layer on the Small Angle Scattering Data of Proteins	MML/NCNR MatSci
3:40P	Dylan Quintana	Carnegie Mellon University	A Bayesian Approach to Crystal Structure Refinement	MML/NCNR MatSci
4:00P	Max Carlson	Georgia Institute of Technology	Conceptual Design of a High-Power, Low-Enriched Uranium (LEU) Research Reactor	MML/NCNR MatSci
4:20P	Isaac Khader	Reed College	Reactor Data at Your Desk	MML/NCNR MatSci
4:40P	Grant Fong	University of Florida	Remote Controlled Vacuum Instrumentation of the Cold Neutron Source	MML/NCNR MatSci
5:00P	END OF DAY			

SURF Student Colloquium: Thursday, August 8, 2013
Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
			MODERATOR:	
9:00A	George Burton	Georgetown University	Synthesis and Microscopic Characterization of Anisotropic Colloids and Induced Depletion Interactions	MML/NCNR ChemBio
9:20A	Julian Goding	College of the Holy Cross	Analysis of Biodiesel Using Comprehensive Two-Dimensional Gas Chromatography (GCxGC)	MML/NCNR ChemBio
9:40A	Dimitri Tselenchuk	University of Maryland College Park	Development of Silver Nanocomposite Model Systems to Test for Environmentally Induced Nanoparticle Release	MML/NCNR ChemBio
10:00A	Avery Fordham	Juniata College	Optimization of Field Flow Fractionation Parameters for Use with Water Soluble Gold Nanoclusters	MML/NCNR ChemBio
10:20A	Imani T. Wood	Virginia State University	Functionalized Gold Nanoparticles That Resist Protein Adsorption	MML/NCNR ChemBio
10:40A	Rebecca Zubajlo	University of Maryland College Park	Utilizing Microfluidic Platforms to Develop Microbial Pathogen Separation Techniques	MML/NCNR ChemBio
11:00A			*BREAK*	
			MODERATOR: *Bettijoyce Lide, Information Technology Laboratory SURF Director/NIST*	
11:10A	Celia Drew	University of Maryland Baltimore County	Mobility Management for Heterogeneous Networks	ITL
11:30A	Anson Rosenthal	Brown University	A Novel Memory-Efficient Method for Visualizing Large Stitched Images	ITL
11:50A	Manuel Ortiz	University of Puerto Rico	WiFi Indoor Localization	ITL
12:10P	Paul Watrobski	State University of New York Binghamton	High-Speed RF Spectrum Analysis on a Software-Defined Radio	ITL
12:30P	Guru Ram Ambalavanar	University of Maryland College Park	Resource Public Key Infrastructure (RPKI) Deployment Strategies and Its Impact on Today's Backbone Routing	ITL
12:50P			*LUNCH*	

SURF Student Colloquium: Thursday, August 8, 2013
Parallel Session: Lecture Room B, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: *David Flater, Software and Systems Division, ITL/NIST*				
1:30P	Bruce Batson	Virginia State University	Inheritance in Attribute Control Policy	ITL
1:50P	Robert Staples III	Hood College	Software Entropy Sources for Cryptographic Applications	ITL
2:10P	Ramon L. De Jesús	University of Puerto Rico	Measuring Software Performance on Mobile Devices	ITL
2:30P	Andrew Badger	University of Maryland College Park	Cryptography in Constrained Environments	ITL
2:50P				
3:10P				
3:20P				
3:40P				
4:00P				
4:20P				
4:40P				
5:00P	*END OF DAY*			

SURF Student Colloquium: Thursday, August 8, 2013
Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR:				
9:00A	Edward O'Brien	State University of New York Binghamton	Designing a 100TΩ Standard Resistor	PML/Elec Eng
9:20A	Thomas Zirkle	Andrews University	Improved Signal Generation and Acquisition Methods	PML/Elec Eng
9:40A	Benjamin Walsh	University of Maryland College Park	Design and Construction of a Differential Current Amplifier for Capacitance measurement with an Atomic Force Microscope Probe	PML/Elec Eng
10:00A	George Sineriz	University of Maryland College Park	Controlled Optical Levitation of Small Particles	PML/Elec Eng
10:20A	Nadav Kravitz	University of Maryland College Park	Raman Analysis of Carbon Nanostructures	PML/Elec Eng
10:40A				
11:00A	*BREAK*			
MODERATOR: *Uwe Arp, Physical Measurement Laboratory SURF Director/NIST*				
11:10A	Erin Marshall	LeMoyne College	Bose-Einstein Condensation of Photons	PML/Physics
11:30A	William McGrew	Juniata College	Rydberg Rubudium Atoms for Charge Exchange in a Penning Trap	PML/Physics
11:50A	Elizabeth Skerritt	Johns Hopkins University	Fabry-Perot Displacement Interferometry in Air	PML/Physics
12:10P	Nikolai Hesterberg	Appalachian State University	Measuring Absorbed Radiation Dose in Water Using Optical Interferometry	PML/Physics
12:30P	Arec Jamgochian	University of Maryland College Park	Exploring the Sapphire Whispering Gallery Thermometer	PML/Physics
12:50P	*LUNCH*			

SURF Student Colloquium: Thursday, August 8, 2013
Parallel Session: Portrait Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR:				
1:30P	Markus Moser	Miami Dade College	How to Calibrate a Digital DC-MM-Calibrator Effectively	PML/Elec Eng
1:50P	Ronisha Kelley	Florida A & M University	Digital Multimeter Calibrations	PML/Elec Eng
2:10P	Vignesh Dhanasekaran	University of Maryland Baltimore County	Monitoring Magnetic Levitation Through Interferometry	PML/Elec Eng
2:30P	Eric Leaman	James Madison University	Characterization of N IST-4 Components and Materials	PML/Elec Eng
2:50P	Eric Huang	University of Maryland College Park	Microelectromechanical Triaxial Accelerometer Testing	PML/Elec Eng
3:10P	*BREAK*			
3:20P	Travis Hinton	Alabama A & M University	Laboratory Instrument Driver for Residential Scale Grid Emulator	PML/Elec Eng
3:40P	Daniel J. Wong	State University of New York Binghamton	Laboratory Instrument Driver for Home Area Energy Network	PML/Elec Eng
4:00P	Emily Ruppel	University of Maryland College Park	Measuring the Power Supply of the Future	PML/Elec Eng
4:20P	Andrew Wong	State University of New York Binghamton	Massively Parallel Long Term Reliability System	PML/Elec Eng
4:40P				
5:00P	*END OF DAY*			

SURF Student Colloquium: Thursday - August 8, 2013
Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
MODERATOR: _Clarissa Ferraris, Engineering Laboratory SURF Director/NIST_				
9:00A	Sterling Brooks	Savannah State University	Measurement Science for Concrete Surface Electrical Resistivity Test Methods	EL
9:20A	John Epling	Purdue University	Standard Reference Mortar Development	EL
9:40A	Joanna Moody	Bates College	Zeta Potential and Particle Size Analysis of Hydrating Cement Solutions	EL
10:00A	John Seader	Oklahoma State University	Solution Chemistry and Kinetics of High Volume Fly Ash Binders	EL
10:20A	Kathryn Connolly	University of Maryland College Park	Durability of Polyethylene Terephthalate (PET) in Photovoltaic Applications	EL
10:40A	Emily Fusco	George Washington University	From the Redwood Forest to the Gulf Stream Waters: Creating a Database of Spectral Solar Data Via Locations Spanning the U.S.	EL
11:00A		_BREAK_		
MODERATOR: _Chris White, Engineering Laboratory SURF Director/NIST_				
11:10A	James Ging	State University of New York Stony Brook	Fuzzy Fiber Fillers: Understanding the Metrology an Aquatic Durability of the Next Generation of Polymeric Nanocomposites	EL
11:30A	Whitney Novotny	Rensselaer Polytechnic Institute	Thermal Processing Impacts on Slow Growth Resistance of High Density Polyethylene	EL
11:50A	Melissa Novy	American University	Accelerated Aging of Nuclear Power Plant Cables	EL
12:10P	Kevin Chuang	University of Maryland College Park	Thinking Green: Sustainable Energy Modeling for Arc Welding Processes	EL
12:30P	Ryan Etkins	University of Maryland College Park	Improving Sustainability Analysis of Unit Manufacturing Processes	EL
12:50P		_LUNCH_		

SURF Student Colloquium: Thursday - August 8, 2013
Parallel Session: Heritage Room, Administration Building (101)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
			MODERATOR: *Paul Witherell, Systems Integration Division, MML/NIST* *Lisa Fronczek, Engineering Laboratory SURF Director/NIST*	
1:30P	Sarah Wolff	Northwestern University	Sustainable Manufacturing Standards Ontology	EL
1:50P	Haley Hill	University of South Alabama	Sustainable Thinking in the Design Environment	EL
2:10P	Arvind Harinder	University of Virginia	Requirement Analyses to Support a Material Information Model for Sustainability	EL
2:30P	Joseph McIlree	University of Wisconsin Platteville	A Case Study of a Turning Machine to Validate Sustainable Process Analytic Formalism	EL
2:50P	Theodore Russell	Vanderbilt University	Energy Optimization for Welding Operations	EL
3:10P			**BREAK**	
3:20P	Kenneth Hwang	University of California Berkeley	A Review on Additive Manufacturing Processes	EL
3:40P	Michael Bishoff	University of Maryland Baltimore County	Heterogeneous Mapping Platform for Model-Based System Engineering	EL
4:00P	Alex Paxton	Hood College	A Preliminary Testbed Architecture Design for the Sustainable Manufacturing Testbed	EL
4:20P				
4:40P				
5:00P			**END OF DAY**	

SURF Student Colloquium: Monday - July 29, 2013
Special Session: Room 202, Advanced Chemical Sciences Laboratory Building (227)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
2:00P	Matthew Boyce	Virginia Wesleyan College	Development of PVC Reference Materials Containing Hazardous Metals	MML/NCNR ChemBio

SURF Student Colloquium: Tuesday - July 30, 2013
Special Session: Room A366, Physics Building (221)

TIME	SPEAKER	UNIVERSITY	TITLE	LAB
2:00P	Shir Boger	University of Maryland College Park	Characterization of Microfabricated Particles and Protein Aggregrates Using a Custom Microfluidic Coulter Device	MML/NCNR ChemBio