SURF 2004 STUDENTS SORTED BY LAST NAME

Student	University	Talk Title	OU
Acevedo-Velez, Claribel	University of Puerto Rico, Mayaguez	Automation of the NIST Hydrometers Calibration Service	CSTL
Adler, Alexander U.	The Pennsylvania State University	Phase Equilibria Studies of Bi_2O_3-MN_2O_3-Nb_2O_5	MSEL
Anttonen, Jennifer	Carnegie Mellon University	Determining Plasma Temperatures with Spectroscopic Data	PL
Armstrong, Matthew A.	Davidson College	The Effect of Temperature on the Fluorescence of Phycoerythrin and Oligonucleotide-Labeled Fluorophores	CSTL
Ashford, Dahlia	Mississippi State University	The Influence of Chemical and Environmental Factors on Measurements of the Degree of Hydration of Cement Pastes	BFRL
Ashley, William	University of San Diego	Verifying Deleted File Recovery Tools	ITL
Austin, Whitney B.	Jackson State University	Tracker Calibration for Immersive Visualization in a Reconfigurable Automatic Virtual Environment	ITL
Ban, Han Yong	Pomona College	Lifetime Measurement of Erbium Transition $4f^{12}6s^2 \rightarrow 4f^{11}(^4I\ ^o_{15/2})\ 5d_{5/2}\ 6s^2$	PL
Baum, Caitlin E.	University of Maryland, Baltimore County	Characterizing Polymer Nanocomposites During Processing	BFRL
Baumgold, Ben	Massachusetts Institute of Technology	Magnetic Refrigeration: Perfecting the Process	MSEL
Blanchard, Daniel S.	Millersville University	Computer-Aided Camera Placement Software for Facial Recognition	ITL
Bonds, Quenton	University of Alabama, Birmingham	The Study of Metal Work Functions by Measurements of Capacitance- voltage, Scanning Kelvin Probe Microscopy	EEEL
Breidenich, Jennifer L.	Smith College	Investigating Interactions Between Colloidal Material and Polycyclic Aromatic Hydrocarbons: Quantifying Sorption Characteristics	CSTL
Brewer, Samuel M.	Appalachian State University	Visible Imaging of Highly Charged Ion Clouds in the NIST EBIT	PL
Brooks, Charles	University of Maryland, College Park	The Observance and Removal of PSS Top Layer in Poly(3,4-ethylenedioxythiophene)-polystyrenesulfonic Acid (PEDOT-PSS) Conducting Thin Films	MSEL
Burley, Shauntia	Coppin State University	Creating 3D Visualizations for the NIST Digital Library of Mathematical Functions	ITL
Butler, Alina	Mississippi State University	Evaluation of Alpha Spectra Deconvolution: A Beam Piercing Through the Vail of Obscurity	PL
Bykowski, Mikolaj	Lehigh University	Evaluating the Fire Resistance of Structural Steel	MSEL
Chang, Daphne	Duke University	In Search of Higher Pu Sensitivity for TIMS	PL
Chereck, Andrew Q.	Illinois Wesleyan University	Controlling a Josephson Junction Array with LabView	EEEL
Clarke, Michelle N.	Johns Hopkins Univeristy	Characterization of the Microstructure and Properties of Fire Protective Materials	BFRL
Cleveland, Thomas E.	Tulane University	Using Neutron Imaging to Analyze the Internal Structure of Biological and Mechanical Objects	PL
Cogut, Daniel A.	College of William and Mary	Fusion of Biometric Algorithms	ITL
Colleton, April	Rochester Institute of Technology	Electropolymerization and Functionalization of Polymeric Material for DNA Sensing in Microfluidic Channels	CSTL
Comer, Jeffrey R.	University of Akron	Fractional Kinetics in Atomic Foreece Microscope Assisted Oxidation of Zirconium Nitride	MEL

Student	University	Talk Title	OU
Conrad, Brad R.	Rochester Institute of Technology	Time Domain Dielectric Spectroscopy Analysis of the Amorphous Phase in Semicrystalline Polycarbonate	MSEL
Cordes, Brian G.	Worcester Polytechnic Institute	Developing a Graphical Tool to Determine the Estimation Capacity of an Experimental Design	ITL
Davidson, Matthew	Catholic University	Quantum Cellular Automata Architecture in an Optical Lattice	PL
Diez, Dustin	Rhodes College	Calibration of a Micro Force Sensor for the Characterization of Compliant Mechanism MEMS	MEL
Farrar-Foley, Brendan	The George Washington University	PDA Forensic Tools: Overview and Analysis	ITL
Fisher, Nathan T.	University of Maryland, College Park	Correlating HMDS (Hexamethyldisilazane) Modified Silica Substrate Surface Characteristics to Thin Film Morphology of Poly(3-hexylthiophene)	MSEL
Frederick, Amanda	Miami University	Use of a Laser Vibrometer for Measuring Spindle Error Motion	MEL
Fried, Alexander	University of Pennsylvania	Digital Image Plate Diagnostics for Use in Ultraviolet Spectroscopy	PL
Fuentes-Figueroa, Angel G.	University of Puerto Rico, Mayaguez	Testing Software Packages for Gamma-Ray Spectrometry Measurements Using Germanium Detectors	PL
Gao, Jingsi	Delaware State University	Wireless Enhancement for Storage Networking	ITL
Garber, Chris S.	Austin Peay State University	Forensic Ballistics: Checking the Performance of Integrated Ballistics Systems with the Standard Bullet and Casing Project	EEEL
Gewuerz, Lloyd W.	Binghamton University, SUNY	The Capabilities of FDS for Prediction of the Steady-State Burning of Small-Scale Materials	BFRL
Goldfarb, Stephanie E.	Cornell University	Factors Influencing the Determination of the Strain Energy Release Rate of an Adhesive Tape	BFRL
Goodrum, Jr., William J.	University of Virginia	Microfluidic Interfacial Tension Measurements: Getting the Most From Your Soaps	MSEL
Griggs, Cornelius	University of Maryland, College Park	Investigating Mechanical Properties of Thin Films via Nanoindentation	MSEL
Harris, Theodore Robert	University of North Carolina, Charlotte	Combinatorial Study of Nickel-Gold p-contacts for Blue InGaN Light Emitting Diodes Comparing Electron Beam and Pulsed Laser Deposition Techniques	MSEL
Hoebel, Stacey J.	University of Wisconsin, Madison	Temperature Gradient Focusing	CSTL
Huber, Michael	American University	Streamlining the Production of Viewpoints in VRML	ITL
Hughes, Nicholas R.	Southern Methodist Univeristy	Chaotic Mixing in Microfluidic Devices	MSEL
Hwang, Jesse W.	University of Maryland, College Park	Development of Calcium Phosphate-gelatin Composites	MSEL
Jacques, Teresa L.	Smith College	X-ray Reflectivity Study of the Formation of Alkane Films on OTS-coated Silicon Surfaces	MSEL
Jalilian, Firouzeh	University of Maryland, College Park	Developing a Graphical User Interface for the Mass Calibration Program	ITL
Jenkins, Dyami H.	University of Maryland, College Park	Augmentation of the Statistical Test Suite for Random Number Generators	ITL
Johnson, Soren	Boston University	An Intrusion Detection System in a Wireless Ad Hoc Network	ITL
Kelsic, Eric D.	California Institute of Technology	Efficient Implementation of Error-Handling for Quantum Key Distribution	PL
Kim, Meeri N.	Boston University	Searching for Evidence of Correlated Photons Formed by 4-Wave Mixing	PL
Kitchens, Carolyn A.	Appalachian State University	Preparation and Characterization of Proteins and Hybrid Lipid Bilayers on Gold Surfaces	CSTL

Student	University	Talk Title	OU
Lauterbach, Debra	Iowa State University	Adding Speech to Text Transcription to a Video Annotation Tool	ITL
Le, Michael V.	University of California, Irvine	Investigating Reliability Characteristics of Medium-Sized Service-Oriented Architectures	ITL
Lee, Constance P.	Northwestern University	Grain Growth and Boundary Migration in Strontium Titanate	MSEL
Lee, Jonathan	University of California, Berkeley	Eliminating Rotational Errors in C-AFM's 6-axis Stage	MEL
Lenkner, Jennifer M.	College of Mount St. Joseph	Development, Fabrication, and Characterization of Novel Electrodes for Use as Cell Based Sensors	EEEL
Lewinger, Claire V.	University of Florida	A Study of the Effect of Fire on Steel Framed Buildings	BFRL
Lin, Stephen	University of Pennsylvania	Thermal Characterization of Microhotplate Devices and Gas-Sensor System-on-a-Chip (SoC)	EEEL
Matthews, Paul William	Coppin State University	Reducing NSRL Overhead: Finding Similar Attributes in Multiple Language Versions of Microsoft Windows' Internet Files	ITL
McGruder, Brenna M.	Mississippi State University	Real-Time Measurements for Cancer Detection Using Telomerase	CSTL
McQuighan, Kelly	Rice University	Automation and Testing of a New Plastic Scintillator Dosimeter for Radioactive Sources Used in Prostate Cancer Brachytherapy	PL
Mesick, Nathan J.	Rensselaer Polytechnic Institute	Diffusion in Nickel-Base Superalloys and Bond Coats	MSEL
Milliken, Andrew C.	University of Maryland, College Park	Wireless Telemetry for Fire Research and Fire Service Applications	BFRL
Molino, Van	Princeton University	Markov Chains and MCMC Methods	ITL
Montgomery, Eric J.	University of Maryland, Baltimore County	Exciting Frontiers in Single Photon Counting Detectors	PL
Morales, Miguel A.	University of Puerto Rico, Mayaguez	Phase Diagram of a Gas of Atomic Bosons, Atomic Fermions, and Heteronuclear Molecules	PL
Myers, Katherine E.	Lebanon Valley College	Dynamic Imaging of Lipid Bilayers on Chemically Modified Surfaces	PL
Naff, Jessica L.	Appalachian State University	Re-creation of Accelerant Burn Patterns on Carpet Using the Fire Dynamics Simulator	BFRL
Nishimoto, Bryan I.	University of California, Irvine	Method Development for the Preparation and Analysis of Polymer Samples Using MALDI-TOF Mass Spectrometry	MSEL
Park, G. Barratt	Davidson College	High-Temperature Unimolecular Isomerization Kinetics of 1,4-Pentadiene	CSTL
Pazos, Ileana Marquez	Barry University	Tenary Phase Diagram of the System Bi_2O_3-Fe_2O_3-Nb_2O_5	MSEL
Perez-Andujar, Angelica	University of Puerto Rico, Mayaguez	Test Report of Radiation Detectors Against the ANSI N42.32, N42.33, N42.34, and N42.35 Standards	PL
Pfefferkorn, Candace	Gettysburg College	Nanotube Formation from Biological Membranes Using Optical Tweezers	PL
Pike, Leah	Washington University in St. Louis	Image Analysis of MEMS-Based Nanopositioning Stages	MEL
Radford, Robert J.	University of California, Santa Barbara	An Exploratory Data Analysis for Plutonium Contamination	PL
Rafferty, Ian P.	St. Mary's College of Maryland	Flame Size vs. Heat Release Rates	BFRL
Reedy, Carmen R.	Radford University	Investigations of Explosive Particles in Simulated Fingerprints	CSTL
Robinson, Jenn	Cornell University	Improving Trapping and Detection of BECs in Optical Lattices	PL
Rodriguez-Rivera, Veronica	University of Puerto Rico, Mayaguez	Phase Behavior of Mixed Lipid Bilayered System	MSEL

Student	University	Talk Title	OU
Ruggles, Dorea R.	Gustavus Adolphus College	Database-assisted Design for Structures Subjected to Wind Loads	BFRL
Santiago Soto, Maria De Lourdes	Inter American University of Puerto Rico, San German	Advanced Inkjet Printing Technology for Trace Explosive Standards	CSTL
Sarnowska, Karolina A.	Mississippi State University	A Comparison of Contention Resolution Schemes for Optical Burst Switching Networks	ITL
Schwarzkopf, Andrew	Cornell University	Size-Dependent Optical Properties of Gold Nanotubes	PL
Shamay, Eric	California Polytechnic State University	Accessing Modern Real Fuels: Kinetic and Thermodynamic Property Databases	CSTL
Simonds, Brian J.	Illinois Wesleyan University	Creating a Nanocapacitor to Measure the Energetics of Molecules in Self-Assembled Monolayers	EEEL
Skaggs, Alan M.	Southern Methodist University	Cutting Forces in Aluminum Alloys	MEL
Smith, Kellie M.	Mississippi State University	Determination of Folate Vitames in Spinach via Liquid Chromatography Combined with Ultraviolet and Fluorescence Detection	CSTL
Speicher, Paul	University of Virginia	Ionizing Radiation Dosimetry Using Water Calorimetry: The Exciting World of Water Temperature	PL
Stanford, Christopher J.	University of Southern California	Sub-millimeter Absorption Spectroscopy of Water Vapor	PL
Stelzenmuller, Anna	Southern Methodist University	Surface Treatment and Characterization of Ag/AgCl Micro-Reference Electrode Arrays for BioElectronics	EEEL
Stover, Tracy	Murray State University	Compton Suppression for Neutron Activation Analysis Applications at the National Institute of Standards and Technology	CSTL
Svetlik, Stephanie	Pomona College	Nanomechanical Properties of TiO_2/Epoxy Nanocomposites	BFRL
Tan, Wei M.	University of Colorado	Investigation of Carbon Contamination of CD Reference Materials	EEEL
Thrift, Alan A.	University of North Carolina, Charlotte	Mechanical Design of a Uniaxial Load Frame with High Load Capacity	MSEL
Tsai, Felicia	Rensselaer Polytechnic Institute	Analysis of a Model Drug Delivery System Using Cluster Secondary Ion Mass Spectrometry (SIMS) and Trace Narcotics Detection Using Ion Mobility Spectrometry (IMS)	CSTL
Villalain-Garcia, Angel L.	University of Puerto Rico, Mayaguez	Authentication and Authorization in a Distributed Computer Server	ITL
Walker, David C.	University of Rochester	A Standard Architecture for Naval Training Simulations	MEL
Weatherspoon II, MacArthur	University of Cincinnati	Neutron Spectroscopy	PL
Wells, James E.	Davidson College	The Design and Fabrication of a Thermally Driven Outdoor Sealant Tester	BFRL
Wepasnick, Kevin A.	Franklin and Marshall College	Web-based Databases for Chemical Properties	CSTL
Wiley, Jennifer L.	University of Maryland, College Park	Validation Experiments for the Fire Dynamics Simulator, Version 4.0	BFRL
Zeitoun, Ramsey	University of Maryland, College Park	Development of a Bismuth Filter for the Filter Analyzer Neutron Spectrometer	MSEL

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Huber, Michael	American University	Streamlining the Production of Viewpoints in VRML	ITL
Brewer, Samuel M.	Appalachian State University	Visible Imaging of Highly Charged Ion Clouds in the NIST EBIT	PL
Kitchens, Carolyn A.	Appalachian State University	Preparation and Characterization of Proteins and Hybrid Lipid Bilayers on Gold Surfaces	CSTL
Naff, Jessica L.	Appalachian State University	Re-creation of Accelerant Burn Patterns on Carpet Using the Fire Dynamics Simulator	BFRL
Garber, Chris S.	Austin Peay State University	Forensic Ballistics: Checking the Performance of Integrated Ballistics Systems with the Standard Bullet and Casing Project	EEEL
Pazos, Ileana Marquez	Barry University	Tenary Phase Diagram of the System Bi_2O_3-Fe_2O_3-Nb_2O_5	MSEL
Gewuerz, Lloyd W.	Binghamton University, SUNY	The Capabilities of FDS for Prediction of the Steady-State Burning of Small-Scale Materials	BFRL
Johnson, Soren	Boston University	An Intrusion Detection System in a Wireless Ad Hoc Network	ITL
Kim, Meeri N.	Boston University	Searching for Evidence of Correlated Photons Formed by 4-Wave Mixing	PL
Kelsic, Eric D.	California Institute of Technology	Efficient Implementation of Error-Handling for Quantum Key Distribution	PL
Shamay, Eric	California Polytechnic State University	Accessing Modern Real Fuels: Kinetic and Thermodynamic Property Databases	CSTL
Anttonen, Jennifer	Carnegie Mellon University	Determining Plasma Temperatures with Spectroscopic Data	PL
Davidson, Matthew	Catholic University	Quantum Cellular Automata Architecture in an Optical Lattice	PL
Lenkner, Jennifer M.	College of Mount St. Joseph	Development, Fabrication, and Characterization of Novel Electrodes for Use as Cell Based Sensors	EEEL
Cogut, Daniel A.	College of William and Mary	Fusion of Biometric Algorithms	ITL
Burley, Shauntia	Coppin State University	Creating 3D Visualizations for the NIST Digital Library of Mathematical Functions	ITL
Matthews, Paul William	Coppin State University	Reducing NSRL Overhead: Finding Similar Attributes in Multiple Language Versions of Microsoft Windows' Internet Files	ITL
Goldfarb, Stephanie E.	Cornell University	Factors Influencing the Determination of the Strain Energy Release Rate of an Adhesive Tape	BFRL
Robinson, Jenn	Cornell University	Improving Trapping and Detection of BECs in Optical Lattices	PL
Schwarzkopf, Andrew	Cornell University	Size-Dependent Optical Properties of Gold Nanotubes	PL
Armstrong, Matthew A.	Davidson College	The Effect of Temperature on the Fluorescence of Phycoerythrin and Oligonucleotide-Labeled Fluorophores	CSTL
Park, G. Barratt	Davidson College	High-Temperature Unimolecular Isomerization Kinetics of 1,4-Pentadiene	CSTL
Wells, James E.	Davidson College	The Design and Fabrication of a Thermally Driven Outdoor Sealant Tester	BFRL
Gao, Jingsi	Delaware State University	Wireless Enhancement for Storage Networking	ITL
Chang, Daphne	Duke University	In Search of Higher Pu Sensitivity for TIMS	PL
Wepasnick, Kevin A.	Franklin and Marshall College	Web-based Databases for Chemical Properties	CSTL
Farrar-Foley, Brendan	George Washington University	PDA Forensic Tools: Overview and Analysis	ITL
Pfefferkorn, Candace	Gettysburg College	Nanotube Formation from Biological Membranes	PL

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		Using Optical Tweezers	
Ruggles, Dorea R.	Gustavus Adolphus College	Database-assisted Design for Structures Subjected to Wind Loads	BFRL
Chereck, Andrew Q.	Illinois Wesleyan University	Controlling a Josephson Junction Array with LabView	EEEL
Simonds, Brian J.	Illinois Wesleyan University	Creating a Nanocapacitor to Measure the Energetics of Molecules in Self-Assembled Monolayers	EEEL
Santiago Soto, Maria De Lourdes	Inter American University of Puerto Rico, San German	Advanced Inkjet Printing Technology for Trace Explosive Standards	CSTL
Lauterbach, Debra	Iowa State University	Adding Speech to Text Transcription to a Video Annotation Tool	ITL
Austin, Whitney B.	Jackson State University	Tracker Calibration for Immersive Visualization in a Reconfigurable Automatic Virtual Environment	ITL
Clarke, Michelle N.	Johns Hopkins Univeristy	Characterization of the Microstructure and Properties of Fire Protective Materials	BFRL
Myers, Katherine E.	Lebanon Valley College	Dynamic Imaging of Lipid Bilayers on Chemically Modified Surfaces	PL
Bykowski, Mikolaj	Lehigh University	Evaluating the Fire Resistance of Structural Steel	MSEL
Baumgold, Ben	Massachusetts Institute of Technology	Magnetic Refrigeration: Perfecting the Process	MSEL
Frederick, Amanda	Miami University	Use of a Laser Vibrometer for Measuring Spindle Error Motion	MEL
Blanchard, Daniel S.	Millersville University	Computer-Aided Camera Placement Software for Facial Recognition	ITL
Ashford, Dahlia	Mississippi State University	The Influence of Chemical and Environmental Factors on Measurements of the Degree of Hydration of Cement Pastes	BFRL
Butler, Alina	Mississippi State University	Evaluation of Alpha Spectra Deconvolution: A Beam Piercing Through the Vail of Obscurity	PL
McGruder, Brenna M.	Mississippi State University	Real-Time Measurements for Cancer Detection Using Telomerase	CSTL
Sarnowska, Karolina A.	Mississippi State University	A Comparison of Contention Resolution Schemes for Optical Burst Switching Networks	ITL
Smith, Kellie M.	Mississippi State University	Determination of Folate Vitames in Spinach via Liquid Chromatography Combined with Ultraviolet and Fluorescence Detection	CSTL
Stover, Tracy	Murray State University	Compton Suppression for Neutron Activation Analysis Applications at the National Institute of Standards and Technology	CSTL
Lee, Constance P.	Northwestern University	Grain Growth and Boundary Migration in Strontium Titanate	MSEL
Adler, Alexander U.	Pennsylvania State University	Phase Equilibria Studies of Bi_2O_3-Mn_2O_3-Nb_2O_5	MSEL
Ban, Han Yong	Pomona College	Lifetime Measurement of Erbium Transition $4f^{12}6s^2 \rightarrow 4f^{11}(^4I\ ^o_{15/2})\ 5d_{5/2}\ 6s^2$	PL
Svetlik, Stephanie	Pomona College	Nanomechanical Properties of TiO_2/Epoxy Nanocomposites	BFRL
Molino, Van	Princeton University	Markov Chains and MCMC Methods	ITL
Reedy, Carmen R.	Radford University	Investigations of Explosive Particles in Simulated Fingerprints	CSTL
Mesick, Nathan J.	Rensselaer Polytechnic Institute	Diffusion in Nickel-Base Superalloys and Bond Coats	MSEL
Tsai, Felicia	Rensselaer Polytechnic Institute	Analysis of a Model Drug Delivery System Using Cluster Secondary Ion Mass Spectrometry (SIMS) and Trace Narcotics Detection Using Ion Mobility Spectrometry (IMS)	CSTL
Diez, Dustin	Rhodes College	Calibration of a Micro Force Sensor for the	MEL

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		Characterization of Compliant Mechanism MEMS	
McQuighan, Kelly	Rice University	Automation and Testing of a New Plastic Scintillator Dosimeter for Radioactive Sources Used in Prostate Cancer Brachytherapy	PL
Colleton, April	Rochester Institute of Technology	Electropolymerization and Functionalization of Polymeric Material for DNA Sensing in Microfluidic Channels	CSTL
Conrad, Brad R.	Rochester Institute of Technology	Time Domain Dielectric Spectroscopy Analysis of the Amorphous Phase in Semicrystalline Polycarbonate	MSEL
Rafferty, Ian P.	Saint Mary's College of Maryland	Flame Size vs. Heat Release Rates	BFRL
Breidenich, Jennifer L.	Smith College	Investigating Interactions Between Colloidal Material and Polycyclic Aromatic Hydrocarbons: Quantifying Sorption Characteristics	CSTL
Jacques, Teresa L.	Smith College	X-ray Reflectivity Study of the Formation of Alkane Films on OTS-coated Silicon Surfaces	MSEL
Hughes, Nicholas R.	Southern Methodist Univeristy	Chaotic Mixing in Microfluidic Devices	MSEL
Skaggs, Alan M.	Southern Methodist University	Cutting Forces in Aluminum Alloys	MEL
Stelzenmuller, Anna	Southern Methodist University	Surface Treatment and Characterization of Ag/AgCl Micro-Reference Electrode Arrays for BioElectronics	EEEL
Cleveland, Thomas E.	Tulane University	Using Neutron Imaging to Analyze the Internal Structure of Biological and Mechanical Objects	PL
Comer, Jeffrey R.	University of Akron	Fractional Kinetics in Atomic Force Microscope Assisted Oxidation of Zirconium Nitride	MEL
Bonds, Quenton	University of Alabama, Birmingham	The Study of Metal Work Functions by Measurements of Capacitance-voltage, Scanning Kelvin Probe Microscopy	EEEL
Lee, Jonathan	University of California, Berkeley	Eliminating Rotational Errors in C-AFM's 6-axis Stage	MEL
Le, Michael V.	University of California, Irvine	Investigating Reliability Characteristics of Medium-Sized Service-Oriented Architectures	ITL
Nishimoto, Bryan I.	University of California, Irvine	Method Development for the Preparation and Analysis of Polymer Samples Using MALDI-TOF Mass Spectrometry	MSEL
Radford, Robert J.	University of California, Santa Barbara	An Exploratory Data Analysis for Plutonium Contamination	PL
Weatherspoon II, MacArthur	University of Cincinnati	Neutron Spectroscopy	PL
Tan, Wei M.	University of Colorado	Investigation of Carbon Contamination of CD Reference Materials	EEEL
Lewinger, Claire V.	University of Florida	A Study of the Effect of Fire on Steel Framed Buildings	BFRL
Baum, Caitlin E.	University of Maryland, Baltimore County	Characterizing Polymer Nanocomposites During Processing	BFRL
Montgomery, Eric J.	University of Maryland, Baltimore County	Exciting Frontiers in Single Photon Counting Detectors	PL
Brooks, Charles	University of Maryland, College Park	The Observance and Removal of PSS Top Layer in Poly(3,4-ethylenedioxythiophene)-polystyrenesulfonic Acid (PEDOT-PSS) Conducting Thin Films	MSEL
Fisher, Nathan T.	University of Maryland, College Park	Correlating HMDS (Hexamethyldisilazane) Modified Silica Substrate Surface Characteristics to Thin Film Morphology of Poly(3-hexylthiophene)	MSEL
Griggs, Cornelius	University of Maryland, College Park	Investigating Mechanical Properties of Thin Films via Nanoindentation	MSEL
Hwang, Jesse W.	University of Maryland, College Park	Development of Calcium Phosphate-gelatin Composites	MSEL

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Jalilian, Firouzeh	University of Maryland, College Park	Developing a Graphical User Interface for the Mass Calibration Program	ITL
Jenkins, Dyami H.	University of Maryland, College Park	Augmentation of the Statistical Test Suite for Random Number Generators	ITL
Milliken, Andrew C.	University of Maryland, College Park	Wireless Telemetry for Fire Research and Fire Service Applications	BFRL
Wiley, Jennifer L.	University of Maryland, College Park	Validation Experiments for the Fire Dynamics Simulator, Version 4.0	BFRL
Zeitoun, Ramsey	University of Maryland, College Park	Development of a Bismuth Filter for the Filter Analyzer Neutron Spectrometer	MSEL
Harris, Theodore Robert	University of North Carolina, Charlotte	Combinatorial Study of Nickel-Gold p-contacts for Blue InGaN Light Emitting Diodes Comparing Electron Beam and Pulsed Laser Deposition Techniques	MSEL
Thrift, Alan A.	University of North Carolina, Charlotte	Mechanical Design of a Uniaxial Load Frame with High Load Capacity	MSEL
Fried, Alexander	University of Pennsylvania	Digital Image Plate Diagnostics for Use in Ultraviolet Spectroscopy	PL
Lin, Stephen	University of Pennsylvania	Thermal Characterization of Microhotplate Devices and Gas-Sensor System-on-a-Chip (SoC)	EEEL
Villalain-Garcia, Angel L.	University of Puerto Rico, Mayaguez	Authentication and Authorization in a Distributed Computer Server	ITL
Acevedo-Velez, Claribel	University of Puerto Rico, Mayaguez	Automation of the NIST Hydrometers Calibration Service	CSTL
Fuentes-Figueroa, Angel G.	University of Puerto Rico, Mayaguez	Testing Software Packages for Gamma-Ray Spectrometry Measurements Using Germanium Detectors	PL
Morales, Miguel A.	University of Puerto Rico, Mayaguez	Phase Diagram of a Gas of Atomic Bosons, Atomic Fermions, and Heteronuclear Molecules	PL
Perez-Andujar, Angelica	University of Puerto Rico, Mayaguez	Test Report of Radiation Detectors Against the ANSI N42.32, N42.33, N42.34, and N42.35 Standards	PL
Rodriguez-Rivera, Veronica	University of Puerto Rico, Mayaguez	Phase Behavior of Mixed Lipid Bilayered System	MSEL
Walker, David C.	University of Rochester	A Standard Architecture for Naval Training Simulations	MEL
Ashley, William	University of San Diego	Verifying Deleted File Recovery Tools	ITL
Stanford, Christopher J.	University of Southern California	Sub-millimeter Absorption Spectroscopy of Water Vapor	PL
Goodrum, Jr., William J.	University of Virginia	Microfluidic Interfacial Tension Measurements: Getting the Most From Your Soaps	MSEL
Speicher, Paul	University of Virginia	Ionizing Radiation Dosimetry Using Water Calorimetry: The Exciting World of Water Temperature	PL
Hoebel, Stacey J.	University of Wisconsin, Madison	Temperature Gradient Focusing	CSTL
Pike, Leah	Washington University in St. Louis	Image Analysis of MEMS-Based Nanopositioning Stages	MEL
Cordes, Brian G.	Worcester Polytechnic Institute	Developing a Graphical Tool to Determine the Estimation Capacity of an Experimental Design	ITL

SURF 2004 STUDENTS SORTED BY RESEARCH LABORATORY

Student	University	Talk Title	OU
Ashford, Dahlia	Mississippi State University	The Influence of Chemical and Environmental Factors on Measurements of the Degree of Hydration of Cement Pastes	BFRL
Baum, Caitlin E.	University of Maryland, Baltimore County	Characterizing Polymer Nanocomposites During Processing	BFRL
Clarke, Michelle N.	Johns Hopkins Univeristy	Characterization of the Microstructure and Properties of Fire Protective Materials	BFRL
Gewuerz, Lloyd W.	Binghamton University, SUNY	The Capabilities of FDS for Prediction of the Steady-State Burning of Small-Scale Materials	BFRL
Goldfarb, Stephanie E.	Cornell University	Factors Influencing the Determination of the Strain Energy Release Rate of an Adhesive Tape	BFRL
Lewinger, Claire V.	University of Florida	A Study of the Effect of Fire on Steel Framed Buildings	BFRL
Milliken, Andrew C.	University of Maryland, College Park	Wireless Telemetry for Fire Research and Fire Service Applications	BFRL
Naff, Jessica L.	Appalachian State University	Re-creation of Accelerant Burn Patterns on Carpet Using the Fire Dynamics Simulator	BFRL
Rafferty, Ian P.	St. Mary's College of Maryland	Flame Size vs. Heat Release Rates	BFRL
Ruggles, Dorea R.	Gustavus Adolphus College	Database-assisted Design for Structures Subjected to Wind Loads	BFRL
Svetlik, Stephanie	Pomona College	Nanomechanical Properties of TiO_2/Epoxy Nanocomposites	BFRL
Wells, James E.	Davidson College	The Design and Fabrication of a Thermally Driven Outdoor Sealant Tester	BFRL
Wiley, Jennifer L.	University of Maryland, College Park	Validation Experiments for the Fire Dynamics Simulator, Version 4.0	BFRL
Acevedo-Velez, Claribel	University of Puerto Rico, Mayaguez	Automation of the NIST Hydrometers Calibration Service	CSTL
Armstrong, Matthew A.	Davidson College	The Effect of Temperature on the Fluorescence of Phycoerythrin and Oligonucleotide-Labeled Fluorophores	CSTL
Breidenich, Jennifer L.	Smith College	Investigating Interactions Between Colloidal Material and Polycyclic Aromatic Hydrocarbons: Quantifying Sorption Characteristics	CSTL
Colleton, April	Rochester Institute of Technology	Electropolymerization and Functionalization of Polymeric Material for DNA Sensing in Microfluidic Channels	CSTL
Hoebel, Stacey J.	University of Wisconsin, Madison	Temperature Gradient Focusing	CSTL
Kitchens, Carolyn A.	Appalachian State University	Preparation and Characterization of Proteins and Hybrid Lipid Bilayers on Gold Surfaces	CSTL
McGruder, Brenna M.	Mississippi State University	Real-Time Measurements for Cancer Detection Using Telomerase	CSTL
Park, G. Barratt	Davidson College	High-Temperature Unimolecular Isomerization Kinetics of 1,4-Pentadiene	CSTL
Reedy, Carmen R.	Radford University	Investigations of Explosive Particles in Simulated Fingerprints	CSTL
Santiago Soto, Maria De Lourdes	Inter American University of Puerto Rico, San German	Advanced Inkjet Printing Technology for Trace Explosive Standards	CSTL
Shamay, Eric	California Polytechnic State University	Accessing Modern Real Fuels: Kinetic and Thermodynamic Property Databases	CSTL
Smith, Kellie M.	Mississippi State University	Determination of Folate Vitames in Spinach via Liquid Chromatography Combined with Ultraviolet	CSTL

Student	University	Talk Title	OU
		and Fluorescence Detection	
Stover, Tracy	Murray State University	Compton Suppression for Neutron Activation Analysis Applications at the National Institute of Standards and Technology	CSTL
Tsai, Felicia	Rensselaer Polytechnic Institute	Analysis of a Model Drug Delivery System Using Cluster Secondary Ion Mass Spectrometry (SIMS) and Trace Narcotics Detection Using Ion Mobility Spectrometry (IMS)	CSTL
Wepasnick, Kevin A.	Franklin and Marshall College	Web-based Databases for Chemical Properties	CSTL
Bonds, Quenton	University of Alabama, Birmingham	The Study of Metal Work Functions by Measurements of Capacitance- voltage, Scanning Kelvin Probe Microscopy	EEEL
Chereck, Andrew Q.	Illinois Wesleyan University	Controlling a Josephson Junction Array with LabView	EEEL
Garber, Chris S.	Austin Peay State University	Forensic Ballistics: Checking the Performance of Integrated Ballistics Systems with the Standard Bullet and Casing Project	EEEL
Lenkner, Jennifer M.	College of Mount St. Joseph	Development, Fabrication, and Characterization of Novel Electrodes for Use as Cell Based Sensors	EEEL
Lin, Stephen	University of Pennsylvania	Thermal Characterization of Microhotplate Devices and Gas-Sensor System-on-a-Chip (SoC)	EEEL
Simonds, Brian J.	Illinois Wesleyan University	Creating a Nanocapacitor to Measure the Energetics of Molecules in Self-Assembled Monolayers	EEEL
Stelzenmuller, Anna	Southern Methodist University	Surface Treatment and Characterization of Ag/AgCl Micro-Reference Electrode Arrays for BioElectronics	EEEL
Tan, Wei M.	University of Colorado	Investigation of Carbon Contamination of CD Reference Materials	EEEL
Ashley, William	University of San Diego	Verifying Deleted File Recovery Tools	ITL
Austin, Whitney B.	Jackson State University	Tracker Calibration for Immersive Visualization in a Reconfigurable Automatic Virtual Environment	ITL
Blanchard, Daniel S.	Millersville University	Computer-Aided Camera Placement Software for Facial Recognition	ITL
Burley, Shauntia	Coppin State University	Creating 3D Visualizations for the NIST Digital Library of Mathematical Functions	ITL
Cogut, Daniel A.	College of William and Mary	Fusion of Biometric Algorithms	ITL
Cordes, Brian G.	Worcester Polytechnic Institute	Developing a Graphical Tool to Determine the Estimation Capacity of an Experimental Design	ITL
Farrar-Foley, Brendan	The George Washington University	PDA Forensic Tools: Overview and Analysis	ITL
Gao, Jingsi	Delaware State University	Wireless Enhancement for Storage Networking	ITL
Huber, Michael	American University	Streamlining the Production of Viewpoints in VRML	ITL
Jalilian, Firouzeh	University of Maryland, College Park	Developing a Graphical User Interface for the Mass Calibration Program	ITL
Jenkins, Dyami H.	University of Maryland, College Park	Augmentation of the Statistical Test Suite for Random Number Generators	ITL
Johnson, Soren	Boston University	An Intrusion Detection System in a Wireless Ad Hoc Network	ITL
Lauterbach, Debra	Iowa State University	Adding Speech to Text Transcription to a Video Annotation Tool	ITL
Le, Michael V.	University of California, Irvine	Investigating Reliability Characteristics of Medium-Sized Service-Oriented Architectures	ITL
Matthews, Paul William	Coppin State University	Reducing NSRL Overhead: Finding Similar Attributes in Multiple Language Versions of Microsoft Windows' Internet Files	ITL
Molino, Van	Princeton University	Markov Chains and MCMC Methods	ITL

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Sarnowska, Karolina A.	Mississippi State University	A Comparison of Contention Resolution Schemes for Optical Burst Switching Networks	ITL
Villalain-Garcia, Angel L.	University of Puerto Rico	Authentication and Authorization in a Distributed Computer Server	ITL
Comer, Jeffrey R.	University of Akron	Fractional Kinetics in Atomic Force Microscope Assisted Oxidation of Zirconium Nitride	MEL
Diez, Dustin	Rhodes College	Calibration of a Micro Force Sensor for the Characterization of Compliant Mechanism MEMS	MEL
Frederick, Amanda	Miami University	Use of a Laser Vibrometer for Measuring Spindle Error Motion	MEL
Lee, Jonathan	University of California, Berkeley	Eliminating Rotational Errors in C-AFM's 6-axis Stage	MEL
Pike, Leah	Washington University in St. Louis	Image Analysis of MEMS-Based Nanopositioning Stages	MEL
Skaggs, Alan M.	Southern Methodist University	Cutting Forces in Aluminum Alloys	MEL
Walker, David C.	University of Rochester	A Standard Architecture for Naval Training Simulations	MEL
Adler, Alexander U.	The Pennsylvania State University	Phase Equilibria Studies of Bi2O3-MN203-Nb205	MSEL
Baumgold, Ben	Massachusetts Institute of Technology	Magnetic Refrigeration: Perfecting the Process	MSEL
Brooks, Charles	University of Maryland, College Park	The Observance and Removal of PSS Top Layer in Poly(3,4-ethylenedioxythiophene)-polystyrenesulfonic Acid (PEDOT-PSS) Conducting Thin Films	MSEL
Bykowski, Mikolaj	Lehigh University	Evaluating the Fire Resistance of Structural Steel	MSEL
Conrad, Brad R.	Rochester Institute of Technology	Time Domain Dielectric Spectroscopy Analysis of the Amorphous Phase in Semicrystalline Polycarbonate	MSEL
Fisher, Nathan T.	University of Maryland, College Park	Correlating HMDS (Hexamethyldisilazane) Modified Silica Substrate Surface Characteristics to Thin Film Morphology of Poly(3-hexylthiophene)	MSEL
Goodrum, Jr., William J.	University of Virginia	Microfluidic Interfacial Tension Measurements: Getting the Most From Your Soaps	MSEL
Griggs, Cornelius	University of Maryland, College Park	Investigating Mechanical Properties of Thin Films via Nanoindentation	MSEL
Harris, Theodore Robert	University of North Carolina, Charlotte	Combinatorial Study of Nickel-Gold p-contacts for Blue InGaN Light Emitting Diodes Comparing Electron Beam and Pulsed Laser Deposition Techniques	MSEL
Hughes, Nicholas R.	Southern Methodist Univeristy	Chaotic Mixing in Microfluidic Devices	MSEL
Hwang, Jesse W.	University of Maryland, College Park	Development of Calcium Phosphate-gelatin Composites	MSEL
Jacques, Teresa L.	Smith College	X-ray Reflectivity Study of the Formation of Alkane Films on OTS-coated Silicon Surfaces	MSEL
Lee, Constance P.	Northwestern University	Grain Growth and Boundary Migration in Strontium Titanate	MSEL
Mesick, Nathan J.	Rensselaer Polytechnic Institute	Diffusion in Nickel-Base Superalloys and Bond Coats	MSEL
Nishimoto, Bryan I.	University of California, Irvine	Method Development for the Preparation and Analysis of Polymer Samples Using MALDI-TOF Mass Spectrometry	MSEL
Pazos, Ileana Marquez	Barry University	Tenary Phase Diagram of the System Bi_2O_3-Fe_2O_3-Nb_2O_5	MSEL
Rodriguez-Rivera, Veronica	University of Puerto Rico, Mayaguez	Phase Behavior of Mixed Lipid Bilayered System	MSEL
Thrift, Alan A.	University of North Carolina, Charlotte	Mechanical Design of a Uniaxial Load Frame with High Load Capacity	MSEL
Zeitoun, Ramsey	University of Maryland, College Park	Development of a Bismuth Filter for the Filter Analyzer Neutron Spectrometer	MSEL

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Anttonen, Jennifer	Carnegie Mellon University	Determining Plasma Temperatures with Spectroscopic Data	PL
Ban, Han Yong	Pomona College	Lifetime Measurement of Erbium Transition $4f^{12}6s^2 \rightarrow 4f^{11}(^4I\ ^o_{15/2})\ 5d_{5/2}\ 6s^2$	PL
Brewer, Samuel M.	Appalachian State University	Visible Imaging of Highly Charged Ion Clouds in the NIST EBIT	PL
Butler, Alina	Mississippi State University	Evaluation of Alpha Spectra Deconvolution: A Beam Piercing Through the Vail of Obscurity	PL
Chang, Daphne	Duke University	In Search of Higher Pu Sensitivity for TIMS	PL
Cleveland, Thomas E.	Tulane University	Using Neutron Imaging to Analyze the Internal Structure of Biological and Mechanical Objects	PL
Davidson, Matthew	Catholic University	Quantum Cellular Automata Architecture in an Optical Lattice	PL
Fried, Alexander	University of Pennsylvania	Digital Image Plate Diagnostics for Use in Ultraviolet Spectroscopy	PL
Fuentes-Figueroa, Angel G.	University of Puerto Rico, Mayaguez	Testing Software Packages for Gamma-Ray Spectrometry Measurements Using Germanium Detectors	PL
Kelsic, Eric D.	California Institute of Technology	Efficient Implementation of Error-Handling for Quantum Key Distribution	PL
Kim, Meeri N.	Boston University	Searching for Evidence of Correlated Photons Formed by 4-Wave Mixing	PL
McQuighan, Kelly	Rice University	Automation and Testing of a New Plastic Scintillator Dosimeter for Radioactive Sources Used in Prostate Cancer Brachytherapy	PL
Montgomery, Eric J.	University of Maryland, Baltimore County	Exciting Frontiers in Single Photon Counting Detectors	PL
Morales, Miguel A.	University of Puerto Rico, Mayaguez	Phase Diagram of a Gas of Atomic Bosons, Atomic Fermions, and Heteronuclear Molecules	PL
Myers, Katherine E.	Lebanon Valley College	Dynamic Imaging of Lipid Bilayers on Chemically Modified Surfaces	PL
Perez-Andujar, Angelica	University of Puerto Rico, Mayaguez	Test Report of Radiation Detectors Against the ANSI N42.32, N42.33, N42.34, and N42.35 Standards	PL
Pfefferkorn, Candace	Gettysburg College	Nanotube Formation from Biological Membranes Using Optical Tweezers	PL
Radford, Robert J.	University of California, Santa Barbara	An Exploratory Data Analysis for Plutonium Contamination	PL
Robinson, Jenn	Cornell University	Improving Trapping and Detection of BECs in Optical Lattices	PL
Schwarzkopf, Andrew	Cornell University	Size-Dependent Optical Properties of Gold Nanotubes	PL
Speicher, Paul	University of Virginia	Ionizing Radiation Dosimetry Using Water Calorimetry: The Exciting World of Water Temperature	PL
Stanford, Christopher J.	University of Southern California	Sub-millimeter Absorption Spectroscopy of Water Vapor	PL
Weatherspoon II, MacArthur	University of Cincinnati	Neutron Spectroscopy	PL

BFRL – Building and Fire Research Laboratory
CSTL – Chemical Science and Technology Laboratory
EEEL – Electronics and Electrical Engineering Laboratory
ITL – Information Technology Laboratory
MEL – Manufacturing Engineering Laboratory
MSEL – Materials Science and Engineering Laboratory
PL – Physics Laboratory