

Second Place Winners Fairfax County Regional Science and Engineering Fair

March 29, 2009

Animal Sciences

The Effect of Worm Type on Waste Consumption Rate	Danny J. Krulick	Oakton High School
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Behavioral and Social Sciences

What Distance Can Physical Features Be Identified?	Daniel Bond	Centreville High School
Which Gender Has Superior Spatial Visualization?	Nick Bilyeu, Bobby Kelly, Brittanie Peterson	Centreville High School

Biochemistry

Enthralling Enzymes	Kelsey M. Carpenter	Lake Braddock Secondary School
Performance Drugs on Heart Rate of Daphnia	Angela Virostek	Chantilly High School
Effects of Temperature on Catalase Reaction Rates	Christopher A. Hollingsworth	West Potomac High School
Methane Produced by Digested & Predigested Matter	Michael McCluskey	Woodson High School
Are You 'Lovin' It?'	Lauren E. Jones	Fairfax High School

Cellular and Molecular Biology

Molecular Genetics of Dendritic Morphogenesis	Dennis Wang	Thomas Jefferson H S for Science and Technology
Discovery of Anthrax Phosphoprotein Biomarkers	Nikitha Reghu	Chantilly High School

Chemistry

The Removal of Impurities in Water	Chaitu V. Peddi	Westfield High School
The Effect of MethylSalicylate on Triboluminescence	George C. Wilkes	McLean High School
The Effect of Film Type on Dynamic Range	Emily C. Rogers	Madison High School
Determining the Heat Capacity of Autumn Leaves	Samy A. Kebaish	Madison High School
Effect of Chlorine Removal on Chlorine Content	LeeAnn C. Ramsay	Herndon High School
Hydrogen Peroxide and Calcium Phosphate on Teeth	Chadwick E. Eason	Mount Vernon High School
The Effect of Bleach on Different Types of Hair	Kelsey A. Mutchler, Katherine L. Wrona	South County Secondary School
Making Soap with Olive and Coconut Fat	Marium Fayyaz, Anais F. Pizarro	Annandale High School
The Effect of pH Levels on the Growth of Crystals	Mahesh Yalamanchili, Miri Yoon	South County Secondary School
The Corrosion of Metals	Helen (Hey Ryun) Kim, Nicole L. Wilson	Madison High School
The Effect of Substances on Ice Melting Rate	Ella G. Fertitta, Jennifer B. Zaylah	South Lakes High School
The Effect of pH on Tooth Decay	Danny Garcha, Hamid Hassanzadeh, Zaid Nawaz	Herndon High School
The Effect of the Brand on Absorbency of Diapers	Polette Jazmin Centellas, Valeria Eileen Zepeda	Annandale High School
Which Clog Removing Product Works the Best?	Jehad A. Alazzaz, Yasin Guergaf	Islamic Saudi Academy

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Computer Science

Programming Geometry Proofs with HTML and JAVA	Victoria R. Parces	West Potomac High School
Hitting the Right Keys	Jasdev Singh, Nikhil Tuteja	South County Secondary School

Earth and Planetary Science

Investigation of Aerosol Optical Scattering	Ellen Chapin, Theresa Marie Hackett, Juliana Yahn	Marshall High School
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Engineering: Materials and Bioengineering

Under Pressure	Dylan J. Hale	South Lakes High School
Vertical and Horizontal Earthquake-proof Project	Adrian Y. Salmon	McLean High School
Structural Strength of Bridges	Samuel C. Tubb	Annandale High School
Effectiveness of Thermal Insulation	Stephen L. Koelbl	Robinson Secondary

Engineering: Electrical and Mechanical

Characterization of Fluorescent Lamps	Hayden H. Chun	Lake Braddock Secondary School
How An Adaptive Lens Affects Refraction	Katharine E. Walker-Bawa	McLean High School
Effect of Non-uniformity Corrections on IR Imaging	Andrew J. Smith	Thomas Jefferson H S for Science and Technology
Green Insulation: Is It Really Eco-Friendly?	Rebecca Groisser, Brigitte Lee Tondreau	Marshall High School
Effect of Temperature on Output of Solar Panel	Dong Ook Eun, Min Gyu Kim	Langley High School
Effect of Bridge Type on Strength	Charles (C.J.) McCracken, Shieun Park	Woodson High School
The Effect of Angled Blades on Wind Turbines	Carmen M. Mann, Anita Palmer	Marshall High School
Walking Motion on the Production of Electricity	Jonathan G. Pilcher, Meredith E. Pilcher	Hayfield Secondary
Aeronautical Excellence	Dylan B. Kelly, Ilya M. Komarov	Fairfax High School

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Energy and Transportation

Effect of Shapes on Energy Output of Wind Turbines	Gregory S. Shallcross	Oakton High School
The Effect of Suspension Generator Type on Energy	Daniel M. Bombaugh	Lake Braddock Secondary School
Effect of Different Wing Camber on Lift Capability	Sara D. Link	West Potomac High School
Width of Channel on Wind Speed Produced by OWC	Jordan B. Rennert	Marshall High School
Wind Turbine Efficiency	Caylah S. Green, Seth M. McChesney	Westfield High School
Wind Energy: Are More Scoops Better?	Brandon G. Henton, David K. Jeon, Christopher H. Peterkin	Oakton High School
The Effect of Chord Length on Propeller Efficiency	Ishaan P. Dharia, Jason H. Luu, Rahul Monga	Fairfax High School
Micro Hydroelectricity	Charles S. Kang, Chang M. Lee, Michael E. Promisel	Woodson High School
nHew enHergy	Lauren Z. Abram, Eleanor L. Jordan	Fairfax High School
Analysis of Biodiesel from Algal Oil & WVO	Ellen C. Huang, Jason A. Kaushik	Thomas Jefferson H S for Science and Technology

Environmental Analysis

The Effect of Water Quality on Creek Environment	Cassandra M. Porter	Lake Braddock Secondary School
The Effect of Temperature on Algae Growth	Patrick R. Clark	Chantilly High School
Effect of Plant Ash on Radish Seed Growth	Kathryn D. Lucas	Mount Vernon High School
UVB Radiation on Daphnia magna	Emily B. Eastlake	Hayfield Secondary
Which Aquatic Plant Can Reduce Water Pollution?	Shiv Sinha	Centreville High School
Effect of Chemical Runoff on the Filtering Efficie	Matthew Egeland	South County Secondary School
After the Storm: The Effect of Storm Water Runoff	Zachary M. Diener, Michael R. Land	Madison High School
The Effect of Compost Materials on Heat Generation	Nicholas A. Ritter, Sean P. Ryan	Marshall High School

Environmental Management

Testing Solutions to the Drinking Water Crisis	Christine M. Heubusch	Paul VI High School
Different Amounts of Filtered Roundup on Duckweed	Shannon M. Frodge, Daniel J. Halse	Hayfield Secondary
The Effect of Oil Dispersants on Daphnia Survival	Ayesha Darab, Yussre T. EIBardicy	Madison High School

Mathematical Sciences

Candy Equals Decaying Atoms	Evelina Voronina	Falls Church High School
Mathematical Modeling of the Chance of a Car Crash	Amanda J. Crowley, Emily R. Hrin	West Potomac High School

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Medicine and Health

Effect of Spray v Cream Sunscreen on UV Protection	Elizabeth T. Knippler	Chantilly High School
Water Extraction of BPA in Baby Bottles	Eun Kyeong Jeong	Chantilly High School
The Effect of Delivery Method on Iron Absorption	Christina M. Knippler	Chantilly High School
The Effect of Light Cigarettes on Toxins Released	Justine J. Ferrari, Erin E. Horil	Chantilly High School

Microbiology

The Effect of Sporan(R) on Bacterial Growth	Daniel R. Monaco	Oakton High School
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Physics and Astronomy

Effect of Location on Local Ionizing Radiation	Nick Dvorak	Chantilly High School
Effect of Sugar Concentration on Angle Refraction	Samuel J. Cipriani	Chantilly High School
The Effect of Medium Density on Speed of a Laser	David S. Harris	Lake Braddock Secondary School
Universe's Orientation From Hubble UDF Galaxies	Hannah D. Goldberg	Woodson High School
Tracking Material Flow Using SECCHI Images	Kevin P. Casto	Thomas Jefferson H S for Science and Technology
Aerodynamics of Model Rockets	Albrey De Clerck, Taehyung Kim	McLean High School
Temperature on the Rebound Height of a Tennis Ball	Coline C. Hay, Zachary T. Kiszka	Hayfield Secondary
Effect of NIB Magnet Mass on Superconductor Motion	Suraj Malladi, Bhargavi L. Munukutla	Chantilly High School

Plant Sciences

How Vitamin C Affects a Plant's Oxygen Production	Sivasankari Rajamarthandan	Robinson Secondary
The Effect of Tumeric on Plant Growth	Mary Stoney	Oakton High School
Effect of Insecticide on Germination Rate	Charlene M. Belanger	Mount Vernon High School
Killer Chlorine	Michael R. Cosgrove, Yasmin M. Hussain	Fairfax High School
Effect of Soil pH on Rhizobium Activity in Alfalfa	Alexandra E. Clayton, Claire Degitz	Stuart High School
The Effects of Additives on Cut Flower Lifespan	Katherine M. Broadway, Christina D. Cooper	South County Secondary School
Colorful Growth	Margaret Ann Ifarraguerri, Christine Y. Song	Fairfax High School