

GRAND PRIZE NOMINEES
Fairfax County Regional Science
and Engineering Fair

March 30, 2008

Animal Sciences

Alexander M. Kim

Thomas Jefferson H S
for Science and
Technology

Decapod Biocontrol of an Aquatic Trematode Vector

Animal Sciences

Juyeon Park, Koeun (Janet) Shin

Thomas Jefferson H S
for Science and
Technology

The Effect of Sound Intensity on Planaria Learning

Behavioral and Social
Sciences

Alexander L. Peterkin

Oakton High School

The Relationship Between Nail Biting and OCD

Biochemistry

Russell P. Glorioso

Thomas Jefferson H S
for Science and
Technology

Measuring Cholinesterase Activity

Chemistry

Francesca E. Lee

Fairfax High School

Oh, The Ties That Bind!

Chemistry

Anne B. Rohlving

Thomas Jefferson H S
for Science and
Technology

Radon Capture via Capillarity of Carbon Nanotubes

Chemistry

Rohit Dasgupta, Christine N. Hiemstra

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On the Optimization and Refinement of Zeolite Na-A

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Chemistry	Dana Hayes, Mojan Nourbakhsh	Marshall High School
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Got UV? Get Sunscreen!

Computer Science	Jeff Z. Chen	Thomas Jefferson H S for Science and Technology
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Dynamic Speech Recognition Via News Monitoring

Computer Science	Madhav M. Nandipati	Thomas Jefferson H S for Science and Technology
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Analysis of Receptive Fields in a Neural Network

Engineering: Electrical and Mechanical	David Harsh	Chantilly High School
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Peanut Brittle: Battle of Sugar and Baking Soda

Engineering: Electrical and Mechanical	Nabeem I. Hashem	Thomas Jefferson H S for Science and Technology
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Enhancement of CNT Gas Sensors Using Polymers

Engineering: Electrical and Mechanical	Lauren Z. Abram, Eleanor L. Jordan	Fairfax High School
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Flirting with Invisibility

Engineering: Materials and Bioengineering	Dennis Li	Langley High School
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An Automobile Collision Avoidance System

Engineering: Materials and Bioengineering	William B. McGrath	Thomas Jefferson H S for Science and Technology
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Motion Capture for Mixed Reality Applications

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Engineering: Materials
and Bioengineering

Ryan Brewster

Thomas Jefferson H S
for Science and
Technology

Analysis of Compressed Gas for Energy Storage

Engineering: Materials
and Bioengineering

James D. Carter, Janet L. Josten

Lake Braddock
Secondary School

Seeing the Light: Combating Scintillation

Engineering: Materials
and Bioengineering

Atif M. Javed, Alex S. Kuck

Fairfax High School

Testing a Trebuchet's Fulcrum and Counterbalance

Energy and
Transportation

Abhinav R. Mohan

Chantilly High School

Enzymatic Conversion of Cellulose Biomass to Sugar

Energy and
Transportation

Arfa N. Aijazi

South Lakes High
School

Electr-Yeast-ity

Energy and
Transportation

Mike S. Finneran

Chantilly High School

Effect of Tidal Generator Design On Power Output

Energy and
Transportation

Dawei Qi

Thomas Jefferson H S
for Science and
Technology

ALF Validation of Asphalt Binder Fatigue Parameter

Energy and
Transportation

Sara W. Almousa, Noha A. Sherif

Islamic Saudi Academy

Energy Production...Now Available In Color!

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Environmental
Management

Varun Bansal

Thomas Jefferson H S
for Science and
Technology

Arsenic in Microstegium Vimineum From Two Rivers

Environmental
Management

Phil T. Grisdela, Joy E. Lee, Sumit Malik

Thomas Jefferson H S
for Science and
Technology

Optimization: Marine Sediment Microbial Solar Cell

Environmental Sciences

Samantha Dodbele

Hayfield Secondary

Microbial Bioconversion of Varying Concentrations

Mathematical Sciences

Evan B. Warner

Thomas Jefferson H S
for Science and
Technology

Implementation of the Schwarz-Christoffel Mapping

Mathematical Sciences

Jacob N. Steinhardt

Thomas Jefferson H S
for Science and
Technology

Cayley Graphs Formed by Conjugate Generating Sets

Mathematical Sciences

Dhruv Kedar, Shawn Mittal

Chantilly High School

Chaos: An Analysis of Market Nonlinearity

Medicine and Health
Sciences

Francis Deng

Thomas Jefferson H S
for Science and
Technology

AMD3100: A Potential Therapeutic for WHIM Syndrome

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Medicine and Health
Sciences

Sappho Z. Gilbert

Thomas Jefferson H S
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Technology

Survivn: Anti-Apoptotic Prognostic Tool in ESFT

Physics and Astronomy

Andre Gerner

Marshall High School

Radon Pump Efficacy

Physics and Astronomy

Bo Fan

Thomas Jefferson H S
for Science and
Technology

Raman Study of Carbon Nanotube Interactions

Physics and Astronomy

Arielle B. Kahn

Thomas Jefferson H S
for Science and
Technology

Determining Age of Enceladus

Physics and Astronomy

Christopher Braun, Marta Hansen

Woodson High School

Effect of Servomechanisms and Autogyros on Flight

Physics and Astronomy

Connie Chee, Nikita Dodbele

Hayfield Secondary

Aspects of Motor Vehicles on Rippled Roads
