

2021 Metro Richmond STEM Fair

Special Awards

American Chemical Society (Virginia Section)

Senior Division

1st Place Daniel Philip

*The Effect of Type of Catalyst on Efficiency of Water-Splitting
with an Application Towards Solar Energy*

2nd Place Thanvi Parupati

*The Effect of the Form of Heat Resistant Product on the Heat
Damage of the Hair*

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Special Awards

American Meteorological Society

Junior Division

Akanksha Gomatam

The Effect of Different Plants on Their Growth in Martian Soil

2021 Metro Richmond STEM Fair

Special Awards

The American Society for Nondestructive Testing

Senior Division

1st Place

Shrinidhi Nadgouda

Analyzing Viscosity Uniformity in Non-Newtonian Fluids

2nd Place

Erum Vohra

The Effect of Various Wavelengths on the Detection of Point Sources in the Galactic Center

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Special Awards

American Water Works Association

Junior Division

1st Place Maxim Avrutin

The Effect of Design of Solar Desalinators on the Amount of Desalinated Water

2nd Place Annabelle Van Saun

The Effect of Silver Nanoparticles on the Death Rate of Adult Daphnia Magna

Honorable Mention Shriya Bandla

The Effect of Material of Container on pH of Water

Honorable Mention Renn Clark

The Effect of Oxybenzone and Zinc-oxide Based Sunscreen on Juncus Inflexus in a Simulated Marsh Environment

Honorable Mention Vihaan Iyer

The Effect of Different Water Purifying Tablets on Freshwater Quality

Senior Division

1st Place Aryan Mhaskar

The Effect of Bio-compatible Coagulants on Reduction of Microplastics in Water

2nd Place Shrinidhi Nadgouda

Analyzing Viscosity Uniformity in Non-Newtonian Fluids

Honorable Mention Cameron Sharma

The Effect of Surface Dynamics on Atmospheric Water Harvesting

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Special Awards

The Lemelson Early Inventor Prize

Senior Division

Camellia Sharma

*The Effect of Machine Learning Algorithms on Counting the
Fish Population*

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Special Awards

North American Young Generation in Nuclear

Senior Division

Anvita Korrapati

*The Effect of Coronal Mass Ejection Acceleration (km/s^2) In
Relevance of Earth's Orbital Position on Gamma Ray Dose
Equivalent Rate (nSv/H) in Virginia*

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Special Awards

Naval Science Awards Program

Junior Division

Abhinab Gitta

*The Effect of Resistance of Different Types of Metals on
Electrical Conductivity*

Senior Division

Phillip Naveen

*Hydrocortisone-Induced Decay Predicted via an Automated
Computing Nexus*

Vaibhavreddy Maru

*Examining ALS Prognostic Biomarker Potential by Predicting
ALSFRS-R Scores using Neural Networks*

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Special Awards

Richmond Astronomical Society

Senior Division

Hemansh Adunoor

*Comparing Exoplanet Detection Techniques Using Various
Exoplanet Distances*

Mahin Atturu

*Using Transit Light Curves for Ground-Truthing the Orbital
Radius and Planet Radius of Exoplanets Examined by the
Kepler Space Telescope*

Anvita Korrapati

*The Effect of Coronal Mass Ejection Acceleration (km/s^2) In
Relevance of Earth's Orbital Position on Gamma Ray Dose
Equivalent Rate (nSv/H) in Virginia*

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Special Awards

Randolph-Macon College

Senior Division

1st Place **Emily Lionberger**

The Effect of Oxygenator Design on the Survival Rate of Culex tarsalis Larvae

2nd Place **Gwyneth Liu**

Non-Invasive Enhancement of Bionic Vision for Patients of Photoreceptor Degeneration through Computer Vision Techniques

3rd Place **Bhavana Adhikari**

The Effect of Various Allelopathic Plants on the Suppression of Taraxacum officinale

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Special Awards

Virginia Water Environment Association

Senior Division

1st Place **Emily Lionberger**

The Effect of Oxygenator Design on the Survival Rate of Culex tarsalis Larvae

2nd Place **Estelle He**

The Effect of Mangroves and Limestone Powder on the pH of Water

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Special Awards

Yale Science & Engineering Association Science Fair Award

Senior Division

Camellia Sharma

*The Effect of Machine Learning Algorithms on Counting the
Fish Population*