



Mirror Development  
Technology Days 2017  
In the  
Government

H. Philip Stahl, Ph.D.  
h.philip.stahl@nasa.gov  
(256) 544-0445



# Purpose of Tech Days

Mirror Technology is critical for NASA & DoD missions.

Topics discussed enable missions for next 10 to 20 yrs.

Tech Days has two Goals:

How are we Spending the Taxpayer's money

1. Is the Government Investing the Taxpayer's money wisely  
Are we funding 5 good ideas or 1 good idea 5 times?
2. Are we getting good value for our investment?
3. How can we coordinate our activities to maximize the efficacy of our investments.

Provide a networking opportunity for Vendors and Government.



# Thank You and Acknowledgements

## Organizing Committee

Peter Blake, NASA Goddard Space Flight Center  
David Broadway, Marshall Space Flight Center  
Brendan Crill, Jet Propulsion Laboratory  
Ron Eng, NASA Marshall Space Flight Center  
Carol R. Lewis, Jet Propulsion Laboratory  
Lewis Roberts, Jet Propulsion Laboratory  
Ron Shiri, NASA Goddard Space Flight Center  
Nick Siegler, Jet Propulsion Laboratory  
H. Philip Stahl, NASA Marshall Space Flight Center

## Northrop:

Martin Hagenbuechle  
Chareles Atkinson  
Jon Arenberg  
Albert Conti  
Martin Seilonen  
Scott Texter

## OSSC:

Scott Rowe  
Bo Wang

## SPIE

Marilyn Gorsuch  
Jeff Braswell  
Michelle Kronlund



<https://optics.msfc.nasa.gov/content/tech-days-2016>





# Information & Announcements

## Important Information

Coffee Breaks, Lunch and Receptions

Photograph – Tues before afternoon coffee break

Reception: 'heavy horderves' & drink tickets

1 'free' drink ticket per person

extra drinks ticket cost

## Announcements

SPIE Email List Management & Distribution

ITAR Sessions

Public Release Approvals

Any Agenda Changes

Exhibitors

Sponsors



# Tech Days 2018

Because of the JWST launch delay, we believe that JWST will be at Northrop in November 2018.

Do we want to come back to Redondo Beach?

Do we want to come back to Northrop or go to a Hotel?

A hotel will cost more.



# Tech Day Reserve Fund

Reserve Fund has two functions:

Backstop Meeting Financial Risk – (approximately \$40,000)

Altruistic Activities

2016 Altruism:

\$ 1540      National Capital Section of OSA.

\$ 1000      Best Optics Science Fair Project Student Awards

\$ No      North Alabama Optics Apprenticeship Program

Combining Tech Days 2016 with financial performance (from a rising stock market), the Reserve Fund increased \$16,500

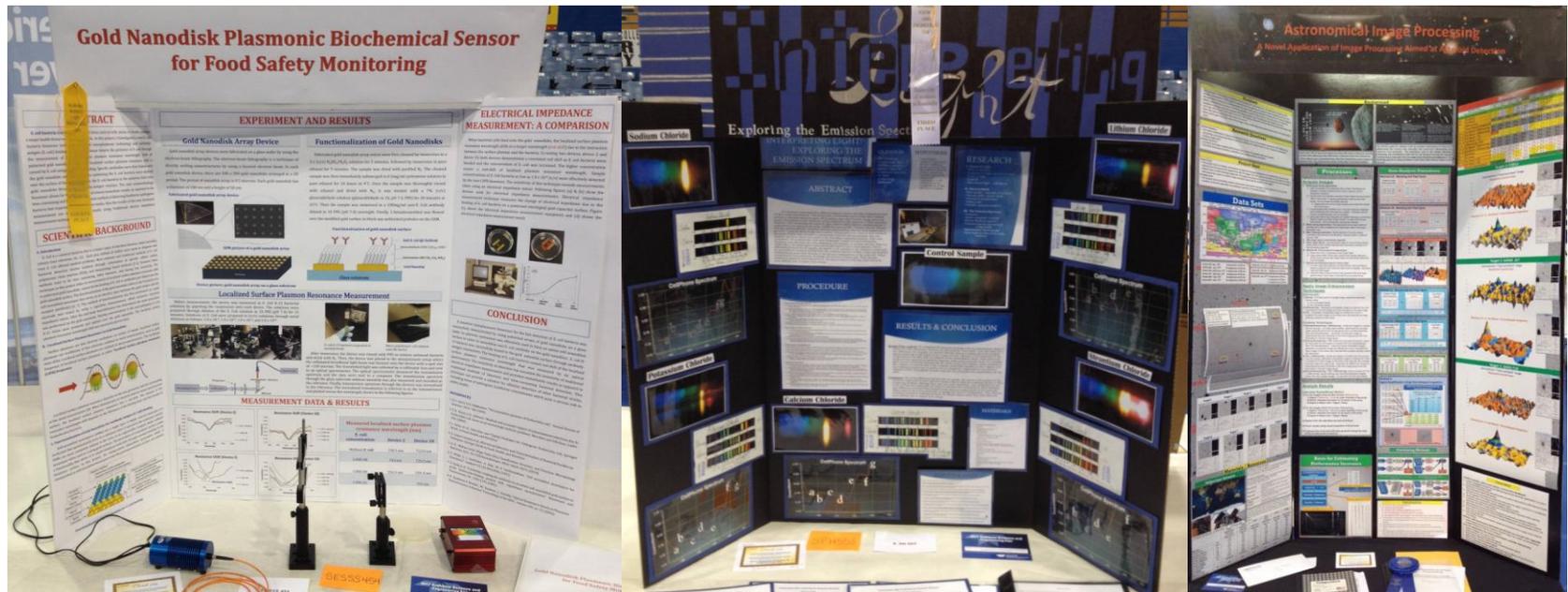
We are talking with SPIE about taking our Apprenticeship Program national. SPIE will match our contribution 1:1.



# 2017 Alabama State Science & Engineering Fair

## Senior Division

- 1<sup>st</sup> Award (\$250): Sofie Guo, 11<sup>th</sup> Grade; “Gold Nanodisk Plasmonic Biochemical Sensors for Food Safety Monitoring” (2016 NAOA Intern)
- 2<sup>nd</sup> Award (\$150): Tucker Edison Honeycutt, 9<sup>th</sup> Grade; “Astronomical Image Processing”
- 3<sup>rd</sup> Award (\$100): Catherine Blevins, 9<sup>th</sup> Grade; “Interpreting Light: Exploring the Emission Spectrum”

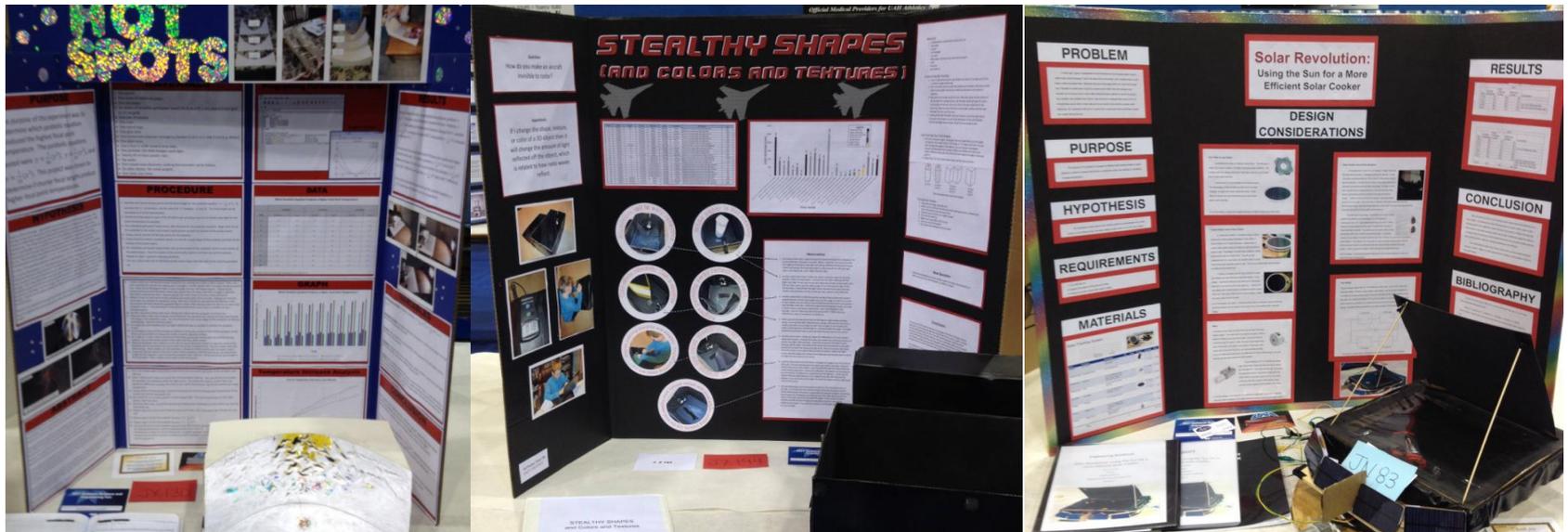




# 2017 Alabama State Science & Engineering Fair

## Junior Division

- 1<sup>st</sup> Award (\$150): Hannah Patterson, 8<sup>th</sup> Grade, “Algebraic Hot Spots”
- 2<sup>nd</sup> Award (\$100): Zachary Nameniuk, 8<sup>th</sup> Grade, “Dye’n for Blue”
- 2<sup>nd</sup> Award (\$100): Andrew Crocker, 5<sup>th</sup> Grade, “Stealthy Shapes”
- 3<sup>rd</sup> Award (\$50): Javon Zion Jennings, 6<sup>th</sup> Grade, “Solar Revolution: using the Sun for a more efficient solar cooker”





# 2016 North Alabama Science & Engineering Fair

## Senior Division

- 1<sup>st</sup> Award (\$250): Sophie Guo, 11<sup>th</sup> Grade; “Fiber Optics Nanoplasmonic Biochemical Sensor for Food Safety Monitoring”
- 2<sup>nd</sup> Award (\$150): Therese Breithaupt, 10<sup>th</sup> Grade; “Helping Hands”
- 3<sup>rd</sup> Award (\$50): Tucker Honeycutt, 10<sup>th</sup> Grade; “Astronomical Image Processing”

## Junior Division

- 1<sup>st</sup> Award (\$150): Miles Thompson, 8<sup>th</sup> Grade, “Making Rainbows”
- 2<sup>nd</sup> Award (\$100): Javon Jennings, 6<sup>th</sup> Grade, “Solar Revolution”
- 3<sup>rd</sup> Award (\$50): Elena Tetrault, 8<sup>th</sup> Grade, “Building a better Robot”
- 3<sup>rd</sup> Award (\$500): Wyatt Smith, 7<sup>th</sup> Grade, “Fluorescent Quantum Dot Solar Cells”
- 3<sup>rd</sup> Award (\$50): Avani Singireddy, 7<sup>th</sup> Grade, “Photochemistry”





Thank You