Mirror Development
Technology Days 2015
In the
Government

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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

Balasubramanian, Jet Propulsion Laboratory

Peter Blake, NASA Goddard Space Flight Center

Hans-Peter Dumm, US Air Force Research Lab, Space Vehicles Directorate

Ron Eng, NASA Marshall Space Flight Center

Mikhail Gubarev, NASA Marshall Space Flight Center

Carol R. Lewis, Jet Propulsion Laboratory

Lewis Roberts, Jet Propulsion Laboratory

Ron Shiri, NASA Goddard Space Flight Center

H. Philip Stahl, NASA Marshall Space Flight Center

OSA Capital Section:

Joseph Howard, GSFC

James Heaney, GSFC

SPIE

Marilyn Gorsuch

Jeff Braswell

Linda Warren

https://optics.nasa.gov/tech

Home

Tech Days

Technology Days 2014

"Technology Days 2014" symposium will be held later this year. This annual me
to see what is being funded by other agencies and to track the progress in these

2014 Presentations

Technology Days 2013 - Presentations

Technology Days 2012 - Presentations

Technology Days 2011 - Presentations

Technology Days 2010 - Presentations

Technology Days 2009 - Presentations

Technology Days 2008 - Presentations

Technology Days 2007 - Presentations

Technology Days 2006 - Presentations

Technology Days 2005 - Presentations

Technology Days 2004 - Presentations

Technology Days 2003 - Presentations

Technology Days 2002 - Presentations

Technology Days 2001 - Presentations

Tech Days 2014

(Click for larger image)
November 18th | November 19th | November 20th

Technology Days 2014

Tuesday November 18, 2014

#	Presenter	Title	Company
		SBIR Workshop and Government Technology Needs (OPEN)	
00	Stahl	Welcome	NASA
01	Perez	Mirror Technologies for NASA Astrophysics	NASA
02	Shaklan	SBIR Topic S2 Need overview	JPL
03	Stahl	SBIR Subtopic S2.03 overview	NASA
04	Blake	SBIR Subtopic S2.04 overview	NASA
05	Lewis	New NASA SBIR Program Initiatives for Post Phase 2	JPL
		Future Large Aperture UVOIR Telescope (OPEN)	
06	Clampin	Science with a Future Large Aperture UVOIR Telescope	
07	TBD	Discovery and Characterization of Candidate Planet vs Aperture, etc.	
08	Feinberg	ATLAST 10-m class architecture studies	NASA
09	Stahle	ATLAST Technology Roadmap	NASA
10	Shaklan	Segmented Telescope Stability Error Budget for Exo-Earth Direct Imaging	JPL
11	Breckinridge	Image quality and polarization in large aperture telescope systems	Caltech & UoAZ
		AMTD-II (OPEN)	
12	Stahl	Overview & Status	NASA
13	Stahl	Engineering Specifications	NASA
14	Matthews	Exelis 1.5m Pathfinder Mirror status	Exelis

Information & Announcements

Important Information

- Coffee Breaks, Lunch and Receptions
- Photograph – Wed before lunch
- Reception: ‘light fare’ & drink tickets

Announcements

- SPIE Email List Management & Distribution
- ITAR Sessions
- Public Release Approvals
- Any Agenda Changes
- Exhibitors
- Sponsors

Tech Days 2015

We have not yet signed a contract, but the plan is:

Houston Texas

Nov 2016

JWST Optical Telescope Test Setup will be available for viewing at Johnson Space Flight Center.

JWST will either still be at GSFC or in transit to JSC.

Technology Days 2014

Tech Days 2001

Tech Day Reserve Fund

Tech Days 2014 added $ 3,700 surplus to Reserve Fund

Reserve Fund has two functions:

- Backstop Meeting Financial Risk – (approximately $40,000)
- Altruistic Activities

2015 Altruism:

$ 1000	New Mexico Optical Industry Association
$ 1000	Best Optics Science Fair Project Student Awards
$ 2700	North Alabama Optics Apprenticeship Program

North Alabama Optics Apprenticeship Program

NAOAP Goals:

- Provide real-world experience for talented students.
- Develop laboratory practices and methods.
- Help academia prepare a well educated work force.
- Introduce optical science and engineering as a possible career path.
- Establish early employment opportunities.

NAOAP Program:

- $1350 Scholarship
- Personal Mentor
- End of Summer Oral Research Report

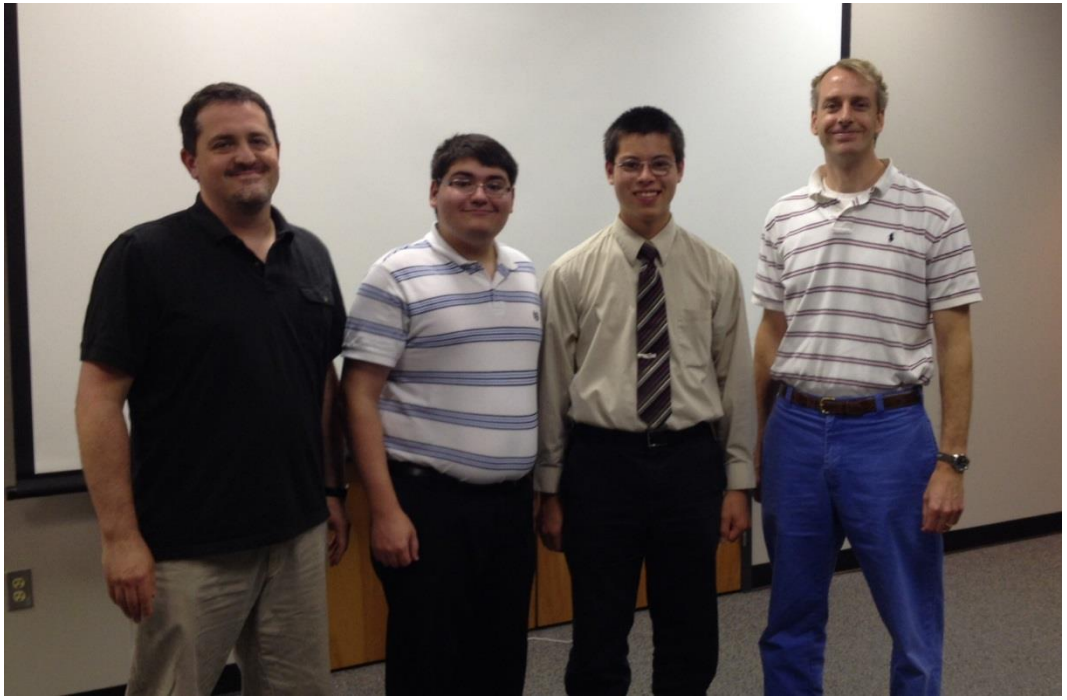
Applicants must be between the ages of 16-21.

NAOAP 2015 – Innovation Internship Program

Students: Joseph Lee and Matthew Robertson

Challenged students to pursue their own research project.

Developed a prototype diffractive optical technique to detect and identify mold spores



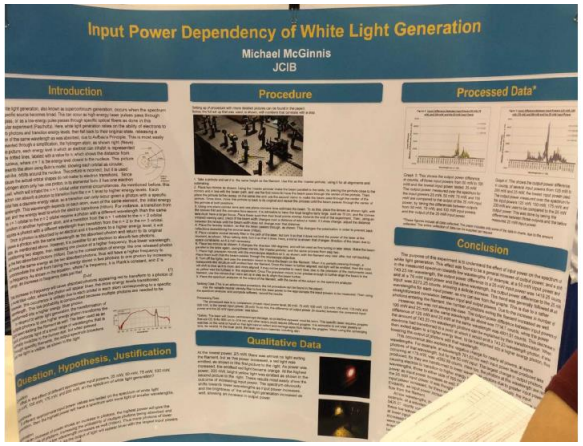
2014 Alabama State Science & Engineering Fair

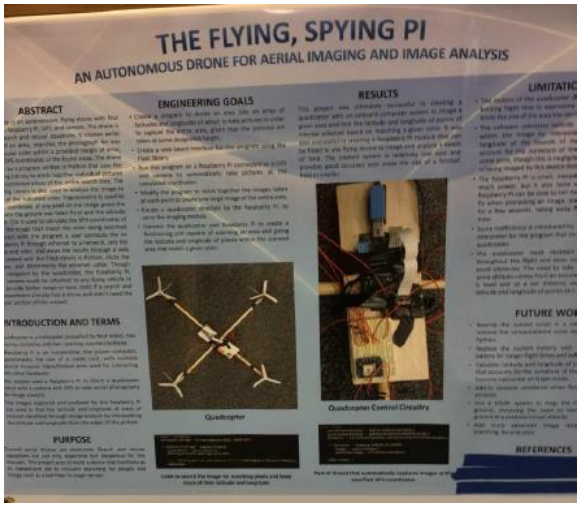
Senior Division

1st Award ($250): Michael McGinnis, 11th grade; "Input Power Dependency of White Light Generator"

2nd Award ($150): Rohan Palanki, 12th grade; "Gold and Silver Nanoparticles for Skin Cancer Chemoprevention and Therapy"

3rd Award ($100): Nath Tumlin, 12th grade; "The Flying, Spying Pi"



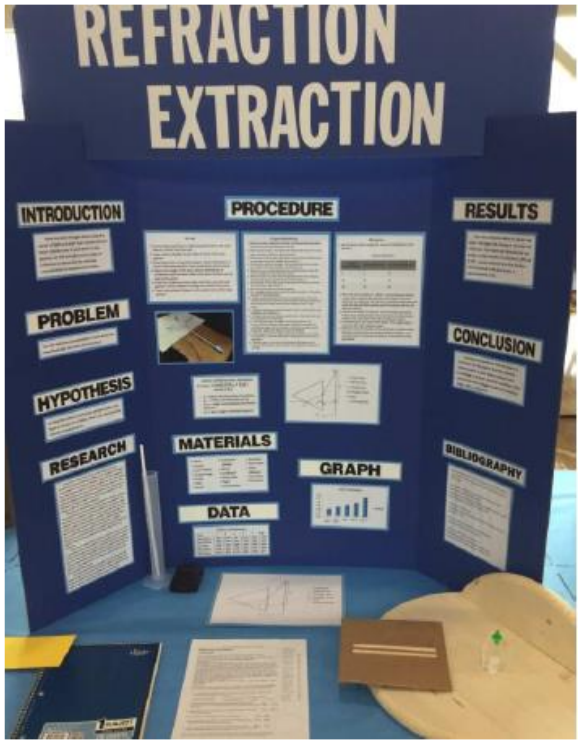


2014 Alabama State Science & Engineering Fair

Junior Division

1st Award ($150): Miles Thompson, 6th grade;
"Which Disc is Groovier?"

2nd Award ($100): Caleb Kirk, 8th grade;
"Refraction Extraction"



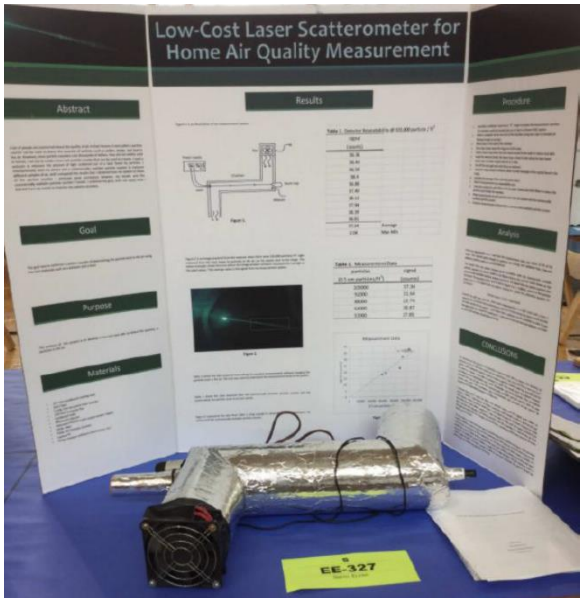
2014 North Alabama Science & Engineering Fair

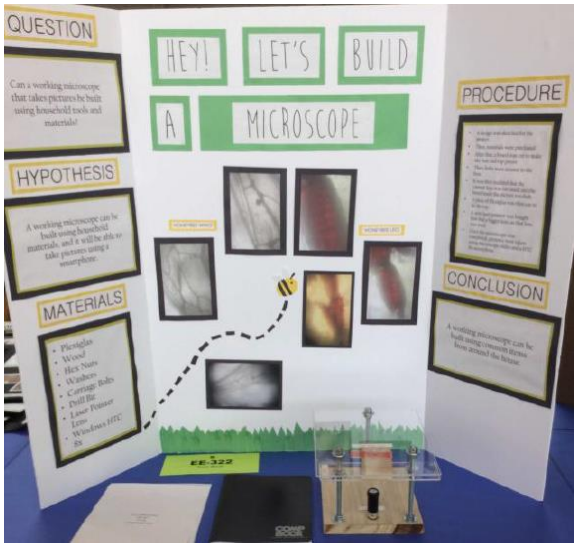
Senior Division

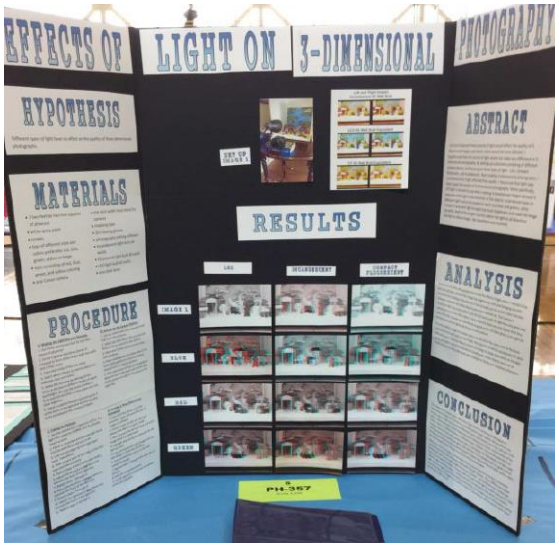
1st Award ($200): Elena Smith, 9th grade; "Low-Cost Laser Scatterometer for Home Air Quality Measurement"

2nd Award ($150): Elizabeth Susan Allen, 11th grade; "Effects of Light on 3D Photography"

3rd Award ($50): Bailee Michele Gann, 11th grade; "Hey! Let's Build a Microscope"



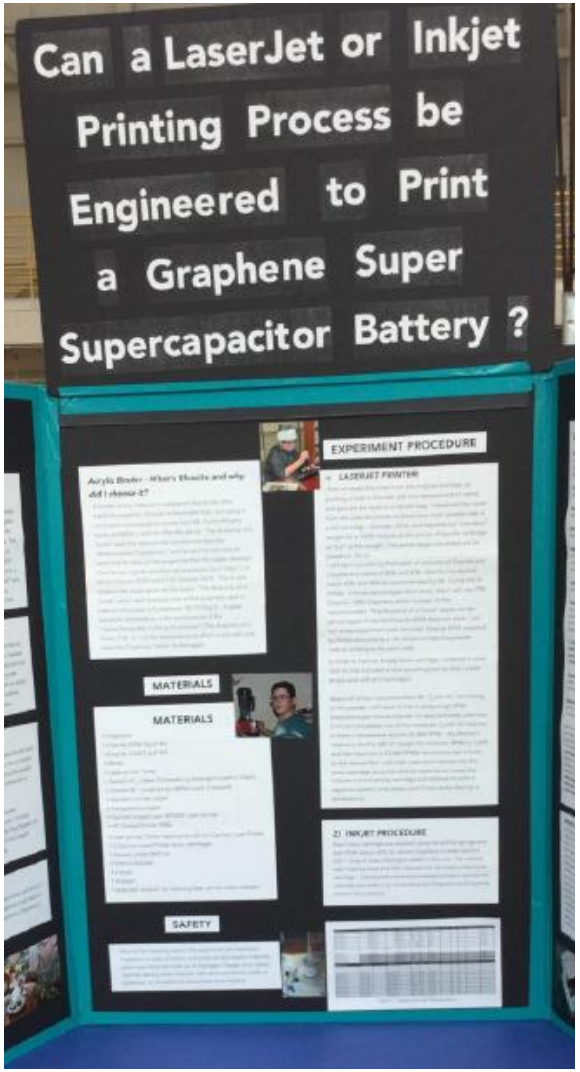


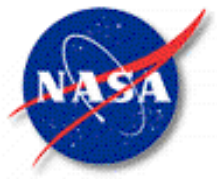


2014 North Alabama Science & Engineering Fair

Junior Division

- 1st Award ($150): Jordan Reynolds-Gleason, 7th grade; "Can a LaserJet or Inkjet Printing Process be Engineered to Print a Graphene Super Capacitor"
- 2nd Award ($100): Caleb Kirk, 8th grade; "Refraction Extraction"
- 3rd Award ($75): Sydney Michelle Guy, 6th grade; "Boxing the Power of Light"
- 3rd Award ($75): John Rottenborn, 6th grade; "To Detect or Not to Detect"





Thank You