

On March 9, H. Philip Stahl and William Decker represented SPIE at the 59th North Alabama Regional Science and Engineering Fair. We judged 4 elementary, 19 junior and 10 senior division projects. On behalf of SPIE we recognized 4 senior division projects and 1 junior division project.



SPIE Senior Division 1st Recognition of \$125 went to Joseph Patrick Lee, 10th grader at St. Peter's Academy for his project "Development of a Long Life Solid State Dye Laser". Joseph built a solid dye laser by mixing dye with epoxy to make a solid cylindrical dye cell. Then he mounted the dye cell in a rotary DC motor to avoid depletion zone effects. He has filed for a patent on this ideal. He used the flowing gas nitrogen TEA laser which he built last year from a sheet of aluminum and PVC pipe to drive his dye laser. This is the 4th year that SPIE has given its top recognition to a project by Joseph. This year's project was selected to go to the INTEL International Science and Engineering Fair in Phoenix AZ.

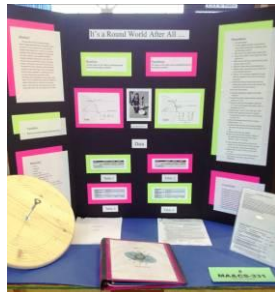
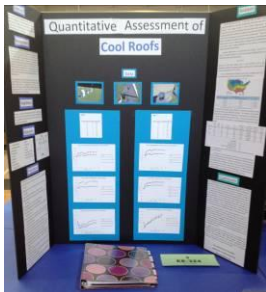
SPIE presented 3 Senior Division 2nd Recognitions of \$75 each to:

Abigail Smith, 10th grader of Pope John Paul II for her project "Quantitative Assessment of Cool Roofs" Last year SPIE awarded Abigail a 3rd recognition. Abigail used a thermal couple to measure temperature as a function of roof color and insulation.

Lauren Colvert, 9th grader of Westminster Christian Academy for her project "It's a Round World After All". Lauren used the Eratosthenes method to calculate the Earth's diameter by measure the length of a shadow at different geographic locations. She hung the pin to insure its orientation relative to gravity.

Peter Kim, 10th grader of Covenant Christian Academy for his project "Development of an Integrating Sphere for Characterizing Light Bulbs". Peter make an integrating sphere via covering a balloon with paper mache and covering the inside with white paint.

SPIE presented 1 Junior Division 1st Recognition of \$75 to Katelin Baird, 8th grader at Liberty Middle School for her project "Compliant Bio-Robotic Prostheses with Microprocessor Control"



The Huntsville Electro-Optical Society (HEOS) recognized 5 Junior Division projects.



HEOS Junior Division 1st Recognition of \$100 went to Mia Vanterpool, 8th grader of Oakwood Adventist Academy for her project “Does UV Light Kill Bacteria”.

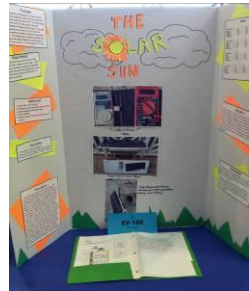
HEOS presented 4 Junior Division 2nd Recognitions of \$50 each to:

Daylan Jhin, 8th grader of St. Peter’s Academy for his project “Solar Heating”

Leslie Chu, 6th grader of Horizon Elementary School for her project “The Solar Sun”

Elizabeth Lauderdale, 6th grader of Mill Creek Elementary for her project “Mobile MIPS and FLOPS”

Timothy Brown, 8th grader of Life Christian School for his project “Focusing on the Efficiency of Paraboloids”



NASA Optics Tech Day fund recognized 2 Elementary Division projects



NASA Optics Elementary Division 1st Recognition of \$50 went to Yunona Shkolnikov, 5th grader of Horizon Elementary School for her project “Study of sky colors under changing temperature and humidity”.

NASA Optics Elementary Division 1st Recognition of \$50 went to Jordan Reynolds-Gleason, 5th grader of Grace Lutheran School for his project “Cooler Roof: will painting your shingles with a white coating make your house cooler?”

