

# CWSF 2015 - Fredericton, New Brunswick



## Qasim Ali, Brendan Samek

### Photon Filtration: A Novel Printer for Ink-Free Reusable Paper

**Challenge:** Innovation

**Category:** Senior

**Region:** Edmonton

**City:** Edmonton, AB

**School:** Old Scona School

**Abstract:** Due to an overwhelming amount of paper wastage in office environments; we developed a printer that uses custom photocatalytic paper using UV light and an LCD as a photon filter. Our printer is competitive in price to ones currently on the market while being both: more environmentally friendly by reducing paper's ecological footprint, and cost effective in the long term by reducing paper costs.

#### Biographies

Qasim - Hey! My name is Qasim Ali, a grade 12 student living in Alberta. This will be my third time going to CWSF, and my last time ever. Engineering is a field that has always been interesting to me. Though I never believed myself to be someone who can innovate in this field, I challenged my thoughts, ideas, and intellect to being able to create our innovation, with my partner. I had always thought of creating quality scientific procedures and labs as a daunting task, with the fear of possibly failing. But this project highlighted to me that knowing what doesn't work is just as valuable as what does in science. Though engineering interests me, I hav...

Brendan - I've always been strong academically, but it has never been my passion. My passion is engineering: building... stuff. Whether its a batch of cinnamon rolls in the kitchen or a batch of materials in the lab; it doesn't matter all of it is equally fascinating. Recently, I have been interested in software development which partly led to the creation of our printer. But really our project encompasses many aspects of engineering; from materials, to electrical to software. Engineering isn't my only passion though, I also love politics and following the decisions that our leaders make. As such, I am a page in the Alberta provincial legislature working...

#### Awards

#### Value

|   |                |
|---|----------------|
| Excellence Award - Senior - Bronze Medal<br>Sponsor: Youth Science Canada   |                |
| University of Ottawa Entrance Scholarship<br>Senior Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: University of Ottawa | \$1 000        |
| Western University Scholarship<br>Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: Western University                     | \$1 000        |
| <b>Total</b>  | <b>\$2 000</b> |