

2016 Chevron/USC Frontiers of Energy Resources Summer Camp *by: Yash Bharganwar*

'Now close your eyes and imagine the Earth from above. Isn't it beautiful? Isn't it worth preserving? It's time we took a holistic approach to reducing our carbon footprint...' rang the call-to-action as the magnificence of this planet was portrayed on the screen. It was the final day of the USC/Chevron Frontiers of Energy Summer Camp; the brightest high-school students from across the country were presenting their solutions to reducing the carbon dioxide in the atmosphere.

The USC/Chevron Frontiers of Energy Resources Summer Camp was held from July 10-15th, 2016 at the University of Southern California. The camp, held annually, aims at nurturing promising talent through introducing them to the world of engineering at the Viterbi School of Engineering and giving them a platform to grow. This year, 20 talented high school students and 3 high school science teachers from across the country were selected from over 100 applicants to attend the camp. The preparatory, interactive training program hosts lectures, field trips, hands-on activities and projects.

The main project for the campers was to research a solution to reduce the carbon dioxide in the atmosphere. The solutions were to be presented as videos with a complementing webpage describing the process. Over the week the campers heard from professors and professionals about various aspects of energy resources. The lecture topics included various energy resources like fossil fuels, wind, solar and nuclear energy alongside complementing topics like the role of cyber security in the energy industry. The campers used this knowledge as a basis for their research. The end products were wrapped in mesmerizing videos created using the film-making techniques they learned at the camp.

Building a Rube Goldberg machine is a feat, in and of itself. Building four in 30 minutes with limited resources is even more impressive. That is precisely what the campers did while working in their teams. The camp focuses on all round development. The campers therefore, had the chance to test their engineering knowledge in action through various activities like the aforementioned Rube Goldberg activity. They also got a chance to race solar cars, take a lecture on basic web development and visit research labs at USC which introduced them to the innovation culture at USC.

When the presentations ended on the final day, it was clear that the diverse group of campers had achieved a lot. They had learned through the camp, made friends and had a great time. They went home with optimism in their step; their futures clearer than ever. The testimonials of the campers speak about their experience:

"I had a blast at the camp. I learned so much from the amazing speakers and my understanding of energy has completely changed. I totally can see myself in an industry as focused on improving the world as the energy industry. Furthermore, I can see myself here at USC" – Jake Sheridan, Charlotte Catholic High School, North Carolina

"I really, really enjoyed this camp. The small number of participants created a fun, tight knit environment. Each session was informative and educational. The program was challenging and the project was fantastic. I enjoyed the sessions and the activities we did" – Anne Curtis Giovanelli, Mountain Brook High School, Alabama

Now close your eyes, take a moment, and imagine a cleaner, sustainable progressive world. Isn't it beautiful? Isn't it the dream? It's time for us to change the world, a change that will be led by the contributions of many; like these campers.

