



CARNEGIE MELLON ENGINEERS WITHOUT BORDERS

Annual Gala 2013!

The 2013 Annual Gala is fast approaching and you can go!



The 2013 Annual Gala is quickly approaching! Carnegie Mellon University's student chapter of Engineers Without Borders' (CMU EWB) annual fundraising event is coming up on November 23 and we would love for you to join. Held in the Singleton Room in Roberts Engineering Hall on Carnegie Mellon University's campus,

Annual Gala is our way to celebrate our generous donors and keep everyone up-to-date on all of the latest projects.

At this event, CMU EWB brings together our Professional and Student supporters and the members of the chapter for a semi-formal dinner party. It is our way of

FALL 2013

informing and thanking all of those who have donated and are an important part of CMU EWB. We cannot stress enough just how big of a part all the attendees of Annual Gala are to our ever-growing chapter, and how much more we are able to accomplish each year because of the support and effort of all those who come to the event!

For first time attendees and those who were not able to attend last year, last year's event was a great meet and greet for CMU EWB members and sponsors. "We had an Indian theme to match our main project at the time in Rampur, India, Project Symbiosis. We had music, performances and Indian food, and all around it was a fun, successful evening," says Michelle Cousté, CMU EWB's co-president. We hope this years event will be just as successful and look forward to getting to know our returning supporters even (Continued on next page)

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better, meeting our new supporters, and making sure everyone has a great time.

This year's Gala will feature presentations by student leaders on each project CMU EWB is currently involved in, which include PET Thatch, Project Symbiosis, Emerald View Park and Water Supply & Purification in Ecuador. These presentations are to inform the attendees of all of the new and exciting ventures CMU EWB is involved in. We will also be auctioning off a number of items members have brought back from their trips to project locations, from India to Ecuador.

For those who have not yet registered for the event, please find registration directions to the right.

1. Visit the Carnegie Mellon University Engineers Without Borders website, located at the address:
<http://www.contrib.andrew.cmu.edu/~ewbcmu/>
2. Once you reach the homepage, scroll down until you see the header "Annual Gala is November 23rd!". Underneath this header, there is information about the event and two buttons. One says "Professional RSVP" and the other says "Student RSVP".
3. Select either "Professional RSVP" or "Student RSVP". This will direct you to the website where you can pay and reserve your spot for the event! Tickets are \$65 for Professionals and \$35 for Students. We hope to see you there!

-Written by: Chandler Caufield

Project Updates

Emerald View Park



With a successful first year that saw over two tons of garbage being taken out of our chapter's section of Emerald View Park, the design team is now working on the next step of the project: designing a boardwalk. Currently, the project team is gathering a variety of data including historical water data, a soil analysis, and the availability and costs of materials. Moreover, the size, materials to be used, and the cost of the boardwalk are being investigated, with construction being planned for the end of the academic year. The team is also very excited to be working with their new professional mentor Cathy Bazán-Arias, who volunteered from the EWB Pittsburgh Professional Chapter to help with the project earlier this year.

Project Updates



Ecuador Water Treatment

The Tingo Pucará, Ecuador project has been very productive this fall! A travel team visited the site in late September to monitor the water pumping system and assess how the community is operating. The water committee in the community is not only making money with the system, but they also have taken full ownership of the project, having installed more trout farms at the sites pumphouse overflow. The travel team also administered quizzes to the water committee about how to operate and maintain the system, which went very well. Installing latrines is next on the agenda for the Tingo development project along with the team considering a new, even larger project in a neighboring village.

Project Symbiosis

This summer, four students and two mentors travelled to Rampur, India to check up on the solar system that was installed last year. The monitoring trip was extremely successful and a potential future trip is being discussed in order to enhance the current system. Additionally, the travel team investigated a prospective project in a nearby village. The travel team also went to each of the classes at the Symbiosis school and taught short seminars about the solar system and renewable energy. Currently, the project team is working on as-built drawings, an economic analysis, and negotiations with the contractors on the particulars of the design enhancements.



-Each Written By: Kiran Pandit

A Fall for the Record Books: Fall recruitment brings in record membership!



This fall was a record start for the Carnegie Mellon Engineers Without Borders Chapter! Not only did we over double our chapters membership population, but our chapters participation on The Bridge, Carnegie Mellon's organizations website, over tripled. With this increase in involvement the chapter has a promising future for new projects that are currently being pursued.

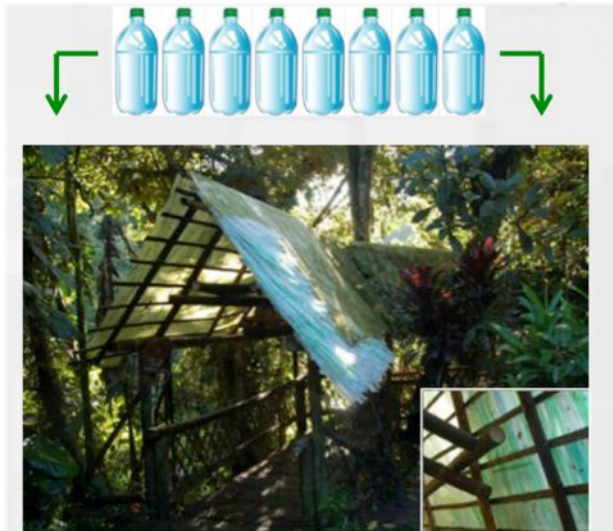
With a possibility of two to three new projects over the next year our chapter is growing at rates that were previously unforeseen. All of this new growth has kept our chapter's grants and fundraising committees working extra hard to get new funding for new and current projects. As one can read in the "Project Spotlight" section, the PET Thatch roof project is our current main funding focus, but

once new projects are introduced, our chapter will be working overtime to fund these new exciting ventures.

With all of this said, our chapters largest fundraising event of the year, Annual Gala (outlined on the front page) is coming up and with the chapter's growth we are working extra hard to make the Annual Gala grow just as fast. We have been attempting to contact as many potential sponsors as possible for this event and any help we can get will be greatly appreciated. In the end, it has been a great start to the year and our chapter's goal is to keep this great start going!

-Craig Boman
Vice President of Public Relations

Project Spotlight: PET Plastic Thatch Roof



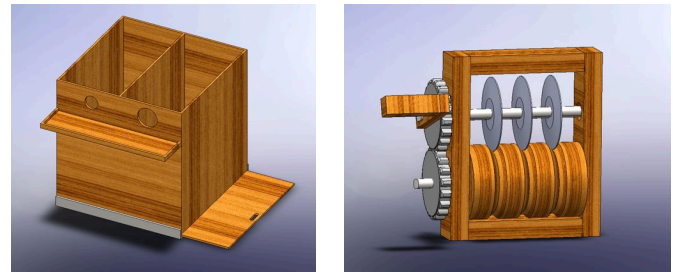
As one of our chapter's newest projects, PET Thatch has been making great strides toward their goal of creating thatch roofing out of recycled plastic bottles.

Decontouring and Fusing Updates

With the exciting addition of a faculty advisor, Professor Robert Heard from CMU's Material Science and Engineering department, the fusing and decontouring teams have found some new tactics that are proving to be very effective. The team has been researching techniques over the last year and most recently has been exploring using rollers along with heat and tension. Progress has also been seen with the fusing team where they have successfully bonded the flattened bottles together by using friction and needle-applied heat methods.

Hopper and Cutter Updates

The hopper and cutter team over the past year has been constructing a full-scale prototype that is planned to be completely functional by the end of the semester. This hopper will be used to organize bottles by size and reorient them in the right position as they move to the next phase of the process. After finishing the prototype, the team's goal is to design a method of cutting the bottles in whatever way decontouring and fusing decide will be best for their process.



Hopper and Cutter prototype CAD designs

Fundraising

Recently our chapter has been taking various approaches to publicize the work that is being done in order to raise money for the project initiative. The team is currently in the process of creating a promotional video that will illustrate the positive impact that the project could have worldwide and will be submitted in several video competitions. We are also working to obtain signatures for a petition we created to gain funding from Coca-Cola, Nestle, and Pepsi in support of our PET Thatch roof project. The link to our electronic petition can be found below. Please help us to make our efforts possible!

www.change.org/petitions/coca-cola-nestle-and-pepsico-help-us-make-low-cost-roofs-and-jobs-from-waste-plastic-bottles?utm_source=guides&utm_medium=email&utm_campaign=petition_created

All in all, the project is only a year old and so much progress has been made, but with the vast potential of this project to solve such a huge worldwide problem, there is so much more that needs to be done!

Project Lead: Maddie Gioffre

-Written by: Karen Li

Thank You!



This being our first newsletter, we would like to make some special Thank You's to our major sponsors and new faculty advisers for this year! First we would like to thank the following groups for their donations to our chapter this year:

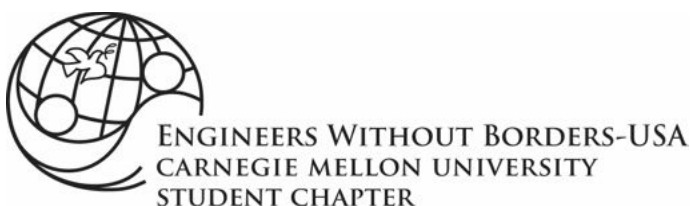
- The Carnegie Institute of Technology
- The CMU Joint Funding Committee
- The CMU Civil and Environmental Engineering Department

We would also like to thank both **Boeing** and **ALCOA** for their continued funding over the years!

Moreover, from our trip to Rampur, India, for Project Symbiosis, this summer, we would like to thank our trip adviser **Sam Shamsi** and our professional mentor **Mark Barlow** for

helping make the trip possible. We would additionally like to thank **Professor Robert Heard** for becoming our adviser for the Fusing and Decontouring section of the PET Thatch Project and **Cathy Bazán-Arias** for becoming our professional mentor for the Emerald View Park project. For asking our chapter to do the PET Thatch project and helping with every step of the way we would like to thank **Andrea and David Saiia**. For helping our chapter through the Student Undergraduate Research Grant process, we would like to thank **Jennifer Keating-Miller** and **Stephanie Wallach**. For supporting our community service initiatives throughout the years, we would like to thank **PACE** and **Kristine Kengor**.

Finally, we would like to thank our chapter's advisers **Kelvin Gregory** and **Mel Siegel** for helping run our club over the last few years!



THANK YOU

EWB 2013-14 Executive Board