



CONCEPT PROPOSAL

International Genetically Engineered Machine





SYNTHETIC BIOLOGY

*“The true and the made
are convertible”*



TEAM: IIT Delhi

Student Members:

Chandel Angad
Shashank Yadav
Nikhil Patidar
Mayank Sahu
Rishabh Mathur
Rishabh Verma
Prem Sai
Robin Chaudhary
Vijayant Pratap
Ekadmika Chauhan
Aniruddh Yadav
Kunal Chaudhary
Karan Varshney
Manisha Lamba
Shuddhodana Mukhta
Varsha Walvekar
Sonakshi Bhatia
Harshita Kejriwal
Paras Agrawal

Mira Kabra
Surbhi Singla
Shreya Pal
Yatish Agrawal
Manish Bhat
Shashank Garg
Ayushi Agarwal
Shubham Goel
Aparna Gupta
Kshitij Rai
Souhardya Roy
Omkar Vinchure
Vinay Kamju

Instructors:

Prof. Z. A. Shaikh
Prof. Virendra S Bisaria
Prof. Prashant Mishra



Follow us on:

https://twitter.com/iGEM_IIT_Delhi 
<https://www.facebook.com/igemiitdelhi> 

CONTACT US

+91-7503995633
iitd.igem@gmail.com
2014.igem.org/Team:IIT_Delhi

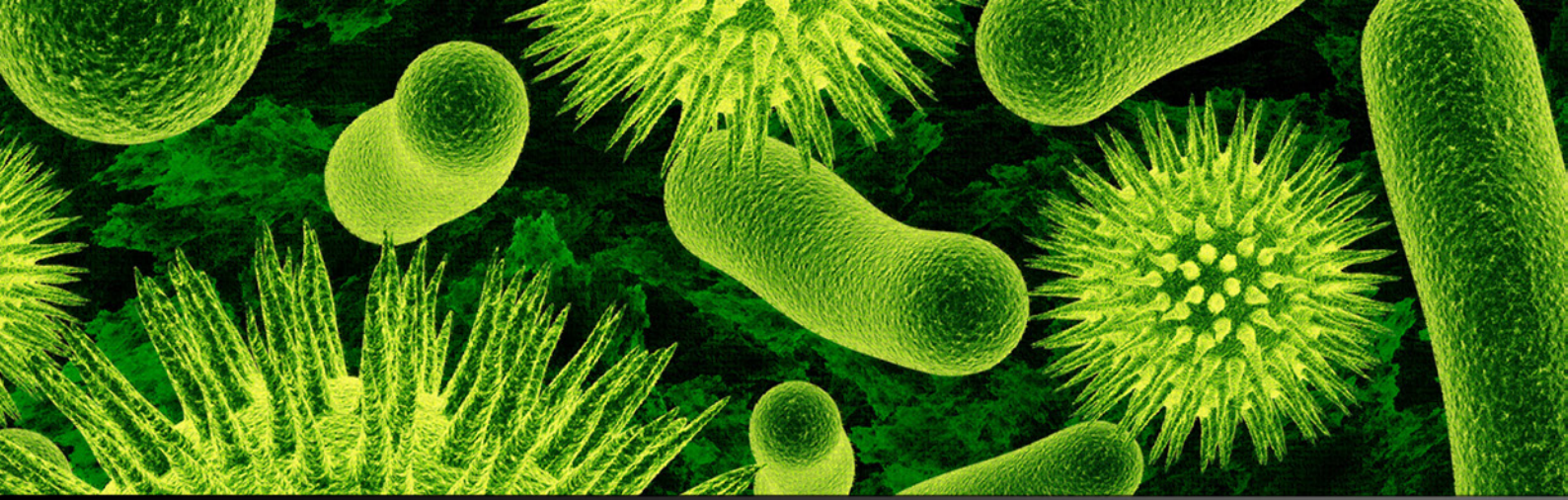
WHAT IS IGEM ?

The International Genetically Engineered Machine (iGEM) contest is an International synthetic biology competition organized annually by the iGEM foundation. It is mainly for undergraduate students, who want to build biological systems for practical applications. In previous editions of the competition teams around the world have worked in areas ranging from solving Arsenic Poisoning in drinking water to detecting Land-mines in war zones.

SYNTHETIC BIOLOGY

Synthetic biology is the engineering of biology: the synthesis of complex biological systems, which display functions that do not exist naturally. Synthetic Biology looks at biology in a new way by abstraction and breaking down things. Geneticists have found a number of gene sequences which correspond to differing traits in organisms. These individual gene sequences have been developed and incorporated into DNA similar to genetic "lego" blocks. What separates Synthetic biology from Genetic engineering is that rather than altering an already existent DNA strand, synthetic biology puts these "blocks" together from scratch to build an entirely new strand of DNA which is then placed into an empty living cell.





The story so far...

Working on the "*Eco.coli*", we have managed to successfully synthesize the bacterial clone capable of reducing NO_x and SO_x into NH₃ and sulfur respectively. However, due to lack of time and funding, we could not develop the table top model last year.

We have decided to continue working on this project and develop the final model this time. The model will consist of a reaction chamber that has the modified bacteria immobilized inside. The exhaust gas will pass through the chamber and the SO_x and NO_x in the gas stream will be reduced by the bacteria.

Apart from this, we are also planning to work on another project this year to present at the iGEM Giant Jamboree. Our brainstorming sessions are currently underway and we expect to have a final project ready in a short while.





Why Sponsor Us ?

iGEM Jamboree is the largest global annual gathering of synthetic biologists and the future revolutionists of the biotechnology industries-Students from well renowned colleges across the world. This is a significant opportunity for your organization to build visibility and collaborate with the leaders in the new field of Synthetic Biology from all over the world.

And last but not the least, your company by sponsoring us would not only gain visibility but also encourage the future budding and interested minds of the country to pursue to make the impossible possible.

As a sponsor you can:

- o Revolutionize with iGEM: Have the brightest minds working on an problem important to you by having the next iGEM project be on your area of interest
- o Be an essential part of synthetic biology: Have your product play a vital role in advancing synthetic biology through iGEM projects with access to the global iGEM community.

Sponsorship Details:

This competition would require sponsors for various needs ranging from funding the lab team (lab equipment, kits, chemicals etc.) to expenses for registration to the World Finals(held at MIT, Boston, USA) and travel expenses.



TITLE SPONSOR CORPORATE PARTNER

Sponsorship greater than
5,00,000 INR or \$8500*



Deliverables

Acknowledgement in press
interviews and media publications

Acknowledgement on team wiki
(official igem webpage of the team)

Acknowledgement on official team
video

Sponsor logo on banner and poster at
Jamboree(s)

One page dedicated to title sponsor
on website of igem IIT Delhi team

Acknowledgement during oral
presentation at Jamboree (s)

Company name and logo displayed
with future igem teams from IIT Delhi
(for 2 years)

Acknowledgement on facebook
page and also on twitter

Sponsor name and logo on the front
of team T-shirt with team's name

Gold Sponsor

Sponsorship
5,00,000 INR (\$8000*)



Deliverables

Acknowledgement in press interviews and media publications

Acknowledgement as gold sponsor on team wiki (official iGEM webpage of the team)

One page dedicated to gold sponsors on team website

Sponsor name and logo on the front of team T-shirt.

Acknowledgement on official team video

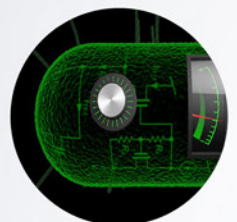
Acknowledgement during oral presentation at Jamboree (s)

Sponsor logo on banner and poster at jamboree(s)

Acknowledgement on facebook page and also on twitter

Silver Sponsor

Sponsorship
3,50,000 INR (\$6,000*)



Travel and Accommodation Sponsor

Bronze Sponsor

Sponsorship less than 2,50,000 INR (\$4000*)

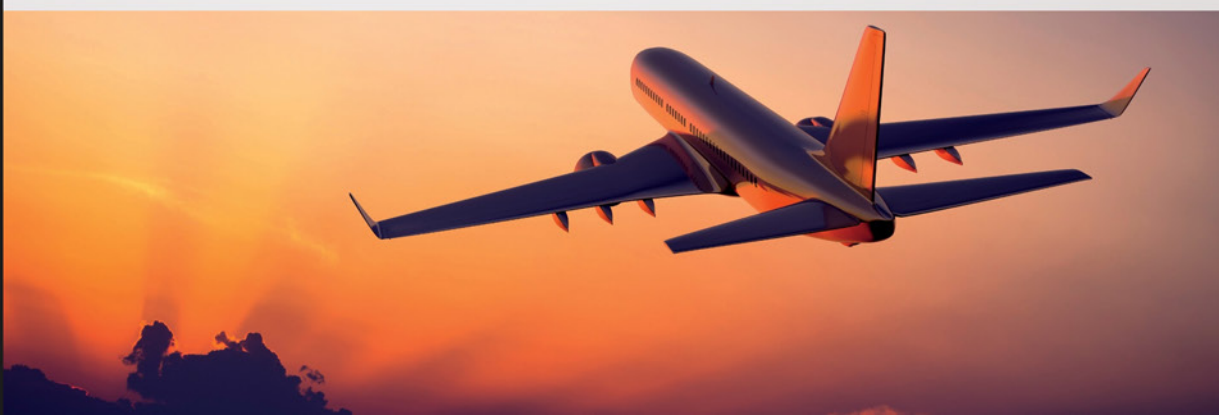


Deliverables:

- Sponsor name on back of T-shirt.
- Acknowledgement on Facebook page and also on twitter.
- Sponsor logo and name on banners and posters at Jamboree(s).
- Acknowledgement on team wiki (official iGEM webpage of the team) and also on the team website.

Deliverables:

- Acknowledgement in press interviews and media publications.
- Sponsor name and logo on front of team T-shirt.
- One page dedicated to travel sponsor on website of igem IIT Delhi team.
- Sponsor logo on banner and poster at jamboree(s).
- Acknowledgement on Facebook page and also on twitter.
- Acknowledgement on team wiki as travel sponsor (official iGEM webpage of the team).
- Acknowledgement on official team video
- Acknowledgement during oral presentation at Jamboree (s)



iGEM-IIT Delhi, 2014

at a glance...

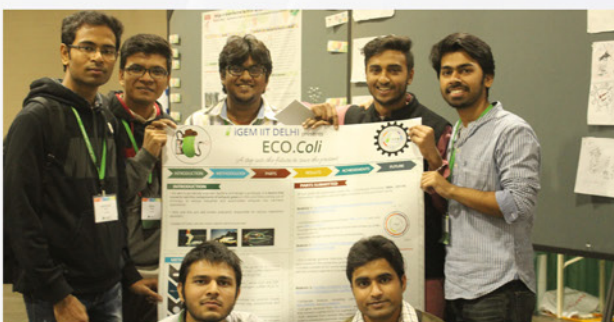
Concept presentation & Team Meetups



At iGEM 2014, 245 teams participated from all over the world.



IIT Delhi won **BRONZE** at World Jamboree 2014 (MIT, Boston)



महिला
महिला
महिला
महिला

एला ई-कोलाई बैक्टीरिया एंज प्रदूषण से बचाएगा। जो आमतौर पर प्रदूषित पानी के अंत में पहुंचकर कारण बनता है। शहर साह ने इस ई-कोलाई बदलाव कर उसमें ऐसी में कामयाबी हासिल की जिनमें और वाहनों से मौजूद हानिकारक गैसों (ऑन) को सहेगा। यह को अवशोषित कर इन्हें यह खेतों की मिट्टी को एक होगी। इस मांडिफाइड को चिमिनियों में एक लगाया जाएगा। पिछले साल...

महिला
महिला
महिला
महिला

महिला
महिला
महिला
महिला

महिला
महिला
महिला
महिला

महिला
महिला
महिला
महिला

एस काम करगा इवाइस

महिला के अनुसार ई-कोलाई बैक्टीरिया के जीन को इस तरह विकसित किया है, जिससे यह सल्फर-डाय-ऑक्साइड और वाइट्रोसल-डाय-ऑक्साइड को अवशोषित कर सके। डिवाइस में मौजूद बैक्टीरिया, सल्फर-डाय-ऑक्साइड को सल्फर और वाइट्रोसल-डाय-ऑक्साइड को अवशोषित करने में बदल देते हैं। तब समय सीमा में अपना काम करने के बाद यह बैक्टीरिया मर जाते हैं। इन मरे हुए बैक्टीरिया को डिवाइस से बाहर निकालकर इनसे सल्फर और वाइट्रोसल को अलग कर लिया जाता है। डिवाइस से निकली सल्फर और वाइट्रोसल दोनों को मिश्रित कर उर्वरता को बढ़ाने में सहायक होती है।

महिला ने की फंडिंग

महिला ने बताया कि इस प्रोजेक्ट को डेवलप

Our Previous Sponsors



Mahindra
Rise.

IDT
INTEGRATED DNA TECHNOLOGIES



POSTERGUY



CONTACT US

+91-7503995633
iitd.igem@gmail.com
2014.igem.org/Team:IIT_Delhi

