

# STEM Education and Public Engagement

## Shikha Sharma

Biomedical Diagnostics Institute, Dublin City University, Dublin 9, Ireland



# Winner of "I'm a Scientist, Get me out of here" Beryllium Zone





Berylling Be Zone Be

Winner of "I'm a Scientist, Get me out of here" - Beryllium Zone. It is a free online event where school students meet and interact with scientists. It's an X Factor-style competition between scientists, where the students are the judges. Students challenge the scientists over fast-paced online live CHAT They ASK the scientists anything they want, and VOTE for their favorite scientist to win communicate their work with the public.

I participated in the Beryllium Zone was the busiest zone in I'm a Scientist Ireland 2014. Over 560 students took part, 24 chats were booked and more than 1,200 questions were asked. After removing duplicates and spam, 350 of them were approved and sent to the scientists.

# Ideas to Impact: Recycling Liquid Petroleum Gas Cylinders Across Sub-Saharan Africa Access to safe energy impacts



#### Proposed a solution to "killer in the kitchen" - Winner

The current cooking practice in many of the rural areas is dubbed "killer in the kitchen" in many developing countries as women and children are directly exposed to harmful particulates and tasses leading to pulmonary diseases. With little economic access to fossil fuels such as LPG and korosone, third, world, populations, are relepted to use biomass, for cooking, and other

kerosene, third world populations are relented to use biomass for cooking and other nousehold energy. This practice is most often linked to deforestation and other climatic changes eventually resulting in global warming. I proposed a solution of converting the

LPG cylinders into cooking stoves named as **Skoon Stove** which will help in reduction in air pollutants, saving number of lives in developing countries at the same time addressing the worldwide burning issue of **global warming**.

# **Volunteering Activities- Promoting STEM**







#### **Smart Futures**

Work as a Volunteer to motivate school students. Smart Futures is a collaborative government-industry-education programme promoting science, technology, engineering and maths (STEM) careers to second-level students. As a Volunteer we visit students in their classroom and talk to them about the diverse and exciting career opportunities science, technology or engineering offers.

#### "Ballymun Child and Family Resource Centre Homework Clubs"

Working as a volunteer at Homework Club which provide support for Secondary School and help students who need a little extra help with certain school subjects.

#### **Physics Busking**

Volunteered with Physics Busking team - It is a national initiative to promote the awareness and engagement of the Irish public with science, technology, engineering and mathematics (STEM).



## Remote Rural Education- eVidyaloka



Volunteering as a teacher for eVidyaloka . Helping students in rural India to learn new things and motivate them. The program focuses on remote, rural education and enabling access to quality teaching to children in Indian villages through a partner eco system, delivering live, interactive classes in local media. Digital classroom infrastructure: Teaching classes through Skype / Google Hangout real-time connect with live interactions; more than 50,000 online classes delivered to date; presently connected across 17 centers in three states of Jharkhand, Tamil Nadu and Andhra Pradesh, delivering classes to more than 831 children.





### Acknowledgement

Project funded through the Marie Curie Initial Training Network PROSENSE (2012-2016, European Commission FP7), www.prosense-itn.eu

