

STP

Activities summary and proposal



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at

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STP Mandate

- To undertake safety awareness programmes and to improve safety, health and environment in India.



Progress update

- 2008: STP at Novozymes, Denmark
- 2009 : GA in Glasgow
- 2011: Puerto Rico (x)
- 2013: GA in Istanbul
- 2015: GA in Busan, Korea
- 2017: Sao Paulo, Brazil (x)



Activities (last 2 years)

- Lab safety orientation seminars for
 - UG & PG students in colleges & Univ.
 - Researchers in Institutions
 - College teachers
 - Symposia and conference
- Lab safety audits for unsafe conditions & practices
- Discuss unsafe practices in informal gatherings and help improvements.
 - Long lasting solutions Vs quick fix approach
- Accident investigation
- Popular articles



Application of the training at Novozymes in 2008

- Risk assessment
 - Underlining this concept in all modules.
- Accident investigation
 - Ask.. (Why?).. 'n' no of times to reach to the bottom of the cause.

Applications of STP



1. National Institute of Virology, Pune

The National Institute of Virology, Pune (a part of Indian Council of Medical Research (ICMR). Founded in collaboration with the Rockefeller Foundation. Designated as a WHO H5 reference Laboratory for SE Asia region.

- (11/2015) Safety training program for medical, paramedical and administrative officials all NIV units from across the country in **HINDI** language
- (04/2016) at NIV Microbial Containment facility : Seminar to scientists on Workplace hazards- understanding and controls in a Bio lab.



2. IISER Pune

- Safety orientation courses to UG, PG students
- Concepts beyond the use of PPE
- Impressed upon the conduct of qualitative risk assessment before taking up any experiment.
 - Includes referring to MSDS
 - Identify the basic hazards and the risks
 - Reaction conditions and procedures
- Audits of PhD research labs and
- Counseling of researchers during informal meetings: influencing the mindset

- Encouraging results



3. Out of Pune

- Nagarjuna Agrichemi Limited, R & D Centre, Hyderabad (10/2015)
 - Comprehensive safety training including fire safety
- Academic staff college, BAMU, Aurangabad, (12/2015)
 - About 50 university and college teachers from all over Maharashtra state.
- BITS Pilani Goa Campus, (11/2016)
 - RSC supported symposium for PG, PhD scholars and Univ & college teachers.
 - Interesting feedback.....



Feedback after BITS Pilani Goa symposium

- by Prof A K Singh, IIT Mumbai

- Everyone enjoyed your talk, which was very informative, nicely organized, and authoritatively presented in an interactive manner.
- What was also interesting is that you did not just enumerate and list the caution/ precautions, but also gave chemical rationales for these, which definitely enriched all of us.
- **I believe every symposium should have at least one talk on this subject, and I am glad that you joined us.**



Cue from the feedback.....

IUPAC led Promotion of safety culture

- IUPAC financially supports several conferences and workshops all over the world.
- Conferences run for 2-3 days with an average of 25 talks including key note.
- Can we at IUPAC, insist on to have at least one talk per day, on safety in every symposium sponsored by IUPAC !
 - It could be case study of a risk assessment, process safety, incident investigation, new techniques / procedures to mitigate hazards,



Upshot

- Touched > 500 students and researchers.
- Introduced the concepts of Risk assessments, MSDS to UG students.
- MSDS on fingertips...use of an app.
- Contributed an article in the IISER students magazine KALPA 2017.

DO WE PERCIEVE WHAT WE SEE?

-Dr G S Grover



Sheila got up in the morning and as usual, went straight to the kitchen to make tea for herself and her husband. She poured water in a pan, lit the gas burner and kept the water for boiling. Within a minute, she spotted a few cockroaches escaping

propane that can catch fire, even from a distance. Similar is the case with several of the deodorant canisters that we use so regularly. These also contain a propellant to pump the perfume or fragrance out and freshen us up.

We are surrounded by chemicals.



From now on...

- Project proposal to IUPAC for fulfilling the mandate of STP
- Propose safety awareness camps in various parts of India.
- In this approach the teaching will be taken to the institutions as opposed to have people come to a central site i.e in a workshop.
- Involves travel to different parts of India and stay in semi urban and rural areas too. 4-6 visits per year.
- May also include to conduct a safety training workshop. Details being worked out.



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THANKS FOR YOUR ATTENTION
TAKE CARE !

