

Final Status Report

Project Details

IUPAC-UNITAR SAFETY TRAINING PROGRAM FOCAL POINT FOR LATIN AMERICA

Project N°: 2016-021-1-022

Start Date: 01 September 2016

End Date: 30 September 2017

Division Name: Committee on Chemistry and Industry

Division N°: 022

Financial Support: U\$S 8.000, divided equally between IUPAC (combination of COCI, PC and Strategic) and UNITAR (Switzerland Government)

Activities developed

The IUPAC-UNITAR Safety Training Program Focal Point for LATIN AMERICA (STP-LA) included the following activities:

- Creation of Web Page.
- Preparation of candidates profile.
- Open call for candidates.
- Selection of candidates.
- Preparation of training materials.
- Logistics (travel and lodging arrangements, materials copy, coffee breaks, internal transport).
- Training course.
- Evaluation of training course.
- Trainee projects submission.
- Evaluation and monitoring of trainee projects submitted.

Results

The Web Page was created (<http://stp-la.fq.edu.uy/>), being very useful for diffusion of STP-LA and for candidate's inscription.

Candidates had to fulfil the following profile:

- Live in Latin America, except Uruguay, and speak fluent Spanish.
- To be a graduate or advanced student of a chemistry related major.
- To have previous knowledge of Occupational Health and Safety (it was not excluding but was valued).
- To work at an organization related to chemical products, academic, industrial or government.
- To have the support and commitment of the organization they work at.
- To take on the commitment of applying the acquired knowledge at least at the organization they work at.

Forty-four candidates from ten different countries submitted applications: seven from South America (Argentina, Colombia, Chile, Ecuador, Paraguay, Peru and Venezuela), two from Central America (Costa Rica and Mexico) and one from Caribbean (Cuba).

Five candidates were selected: Omar Guaymas (chemist from the National University of La Plata, Argentina), Daniela Hernández (chemist and chemistry master's student from the University of Zulia, Venezuela), Mercedes Fernández (chemistry graduate with a masters in inorganic chemistry from the University of Havana, Cuba), Marilyn Escorcía, (chemical engineer specialized on environmental engineering from Integral Responsibility, the industrial association responsible for the Responsible Care Program in Colombia) and Víctor Mata (chemical engineer with a masters in industrial toxicology from the Ministry of Health, Costa Rica).

Of the five candidates four attended the program, since Mercedes Fernandez reported the day before traveling that she could not travel due to health issues.

The total duration of the program was eighty hours, distributed in two weeks and was executed according to plan. The training program (selection and depth of the topics covered, duration, methodology, materials and didactic resources), the trainers and the logistics were evaluated as excellent by the four participants. The STP-LA is considered as an excellent opportunity for candidates to receive a full and intensive training, with an emphasis on cultural change, focused on prevention and to acquire enough motivation to apply the knowledge gained in their own countries.

UNITAR also made its own evaluation of the STP-LA. The conclusion was: "We are happy to have shared the STP-LA experience. It certainly was a good course. "

The projects presented by the trainees were:

1. Comprehensive management system in the upper and basic organic chemistry laboratories of the National University of La Plata (Argentina).
2. Importance of chemical safety application during teaching and research activities at the Zulia University (Venezuela).
3. Training process on chemical safety aspects (Ministry of Health, Costa Rica).
4. Strengthening chemical safety program for Integral Responsibility Colombia member companies (Integral Responsibility, Colombia).

The first three projects have less than one year since presented and are currently being executed. The four project (Colombia) could no longer advance due to the recent resignation of the participant to her position at Integral Responsibility.

Some of the main results achieved so far are:

- A project of construction of a chemical warehouse, the acquisition of new equipment to improve the chemical storage and the installation of new fume hoods at the National University of La Plata.
- Addition of basics safety topics to the chemistry bachelor curricular program (new units for health and safety), and the courses hanged from optional to obligatory at the Zulia University. Also added compliance topics such as GHS and created education program on prevention of risks in handling of chemical products, offering it to home university, universities in area, and industrial chemists in the area.
- A chemical safety training program for health ministry officials across Costa Rica.
- Realization of process safety workshops to Responsible Care Program companies staff in different regions of Colombia.

Impact

The impact of the project includes: improving the curriculum and work conditions of chemistry students at university, as well as the expansion and enhancement of chemical safety training at universities, chemicals companies and government officials. The impact it also reaches the IUPAC itself, since the STP-LA appears as a possible model to apply in other regions, i.e. STP-ASEAN and STP-Africa.

Diffusion

All the information about STP-LA are available at STP-LA website. The results of STP-LA has been presented and discussed at IUPAC Safety Training Workshop (Monday July 10th 2017, Sao Paulo, Brazil).

Conclusions

- There is need and demand for chemical safety training in Latin America.
- The STP-LA has been well evaluated and appears to be an appropriate tool to fulfil that need as well as to promote and disseminate a new SH&E culture at educational, industrial and governmental levels.
- The STP-LA has strengthened the original IUPAC-STP, allowing to train a higher number of trainees simultaneously at lower costs and generating a new model that may be applicable to other regions.
- The funding was appropriate and the project management by the COCI, as well as the support from the Secretariat was very helpful.

Future perspectives

Offer the STP-LA every two years (on even years), considering the well evaluation of the program and that there are many great candidates at least in the other six countries that submitted candidates not selected. The maximum number of trainees will be five due to educational and financial reasons. Continuing with the STP-LA obviously requires funds, but since this is a IUPAC program, it's a IUPAC initiative, and other funding sources, such as those already achieved, are likely to follow given initial support from IUPAC.



Prof. MSc. Fabián Benzo Moreira
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