

**IUPAC SAFETY TRAINING PROGRAM LATIN AMERICA STP ASSOCIATED TRAINING (second edition)**  
**Status Report**

**Project Details**

Project N°: 2018-021-1-022

Division Name: Committee on Chemistry and Industry

Division N°: 022

Activity reported: Training course and trainee projects submission, evaluation and approval.

Start Date: 05 November 2018

End Date: 15 December 2018

Financial Support: USD 16.000, divided equally between IUPAC and UNITAR (Switzerland Government).

Funds of IUPAC includes a contribution of USD 3.000 from COCI and USD 5.000 from the Project Committee.

**List of trainees**

Name	Email address	Nationality	Organization
De Oliveira, Natiela	<a href="mailto:natiela.oliveira@saude.gov.br">natiela.oliveira@saude.gov.br</a>	Brazil	Government - National
García, Pablo	<a href="mailto:pgarcia@salud.gob.sv">pgarcia@salud.gob.sv</a>	El Salvador	Government – National
Quintero, Fanny	<a href="mailto:fanny.quintero@up.ac.pa">fanny.quintero@up.ac.pa</a>	Panamá	University
Rada, Ruben	<a href="mailto:walterrada@hotmail.com">walterrada@hotmail.com</a>	Bolivia	Industry
Romero, Gracia	<a href="mailto:gracia.romero90@yahoo.com">gracia.romero90@yahoo.com</a>	Honduras	University

**Activities**

Project activities	Dates	Completed
Evaluation of previous knowledge	13-15/10	Yes
Theoretical exhibitions	5-16/11	Yes
Exercises	5, 6, 12 and 13/11	Yes
Risk assessment in a inorganic research laboratory	7/11	Yes
Tourist visit to Punta del Este	10/11	Yes
Visit to the chemical storage unit	13/11	Yes
Observation of an emergency and evacuation plan	14/11	Yes
Visit to the paint plant in Uruguay (Akzo Nobel N.V.)	16/11	Yes
Evaluation of acquired knowledge	16/11	Yes
Evaluation of the programme by the participants	16/11	Yes
Certifications	16/11	Yes
Proposal of trainees projects	15/12	Yes
Approval of trainees projects	31/12	Yes
Monitoring implementation of trainees projects	01/01-30/10/2019	Not applicable yet
Final reports of trainees projects	15/11/2019	

The project activities for the reporting period has been fully completed according to the work plan, on time and without altered.

## Evaluation of the program

### Academic issues

The main topics of discussion between participants and trainers were: the concept of prevention (based on the probability of events instead on the likelihood of damages), the "Finger pointing and call" method (none of the participants were aware of it), Chemical Leasing (it was also not known), the transport of dangerous goods in general, the GHS in general, and, in particular, labeling according to the type of packaging, the Responsible Care Program, the new ISO 45.001 standard and many other things related to the change of culture regarding safety at work in Latin America.

The main current hurdles for implementation of chemical safety practices, as described by participants, were: lack of training even from university studies, lack of management models or management models based more on protection than on prevention (both people and environment) and little knowledge of the GHS.

The trainee's projects proposed and approved are:

- Strengthening the chemical handling regulations in Bolivia (Ruben Rada).
- Preparation of guidelines for conducting health surveillance of populations exposed to chemicals in Brazil (Natiela de Oliveira).
- Institutional strengthening for the safe management of chemicals in El Salvador (Pablo García).
- Strengthening of chemical safety in the Faculty of Chemistry and Pharmacy of the National Autonomous University of Honduras (Gracia Romero).
- Implementation of the ISO 45001: 2018 standard in the Site of the Specialized Institute of Analysis in Corozal (University of Panama).

The contents, duration, methodology, teaching materials and trainers of the STP-LA2 are considered suitable to achieve the proposed objectives. To endorse this affirmation, the following table shows the gap of the knowledge of trainees before and after the training.

Trainee	Before *	After*
De Oliveira, Natiela	6	8
García, Pablo	5	5
Quintero, Fanny	3	7
Rada, Ruben	5	7
Romero, Gracia	6	6

\* Maximum: 10

### Logistic issues

The hotel, transports, meals (including breaks) and *per diem* expenses as well as the infrastructure of the Faculty of Chemistry was appropriate. Only the Wi-Fi connection in the classroom was erratic sometimes.

### Financial issues

The funds were adequate, considering the number of trainees, all involved expenses and UNITAR support.

### Summary

The STP-LA is considered as an excellent opportunity for candidates to receive an intensive and thorough training, with an emphasis on cultural change focused on prevention and to acquire enough motivation to apply the knowledge gained in their own countries.

The projects proposed by trainees are interesting, relevant and with an expected high impact in their workplaces and/or in their countries.

A fuller assessment of the impact of the STP-LA can be made upon receipt of the final reports of the projects (Due date 30.10.2019).

### List of attached documents

- (a) Records of results of evaluation of knowledge
- (b) Schedule
- (c) Slides
- (d) Recap video
- (e) Evaluation survey summary (in Spanish)
- (f) Certificates forms
- (g) Trainees projects
- (h) Plane ticket receipt
- (i) Boarding passes
- (j) Hotel
- (k) Per diem expenses
- (l) FUNDAQUIM financial report
- (m) Summary financial report

A handwritten signature in blue ink, appearing to read 'Fabián Benzo Moreira', is centered on the page. The signature is fluid and stylized, with a long horizontal stroke extending to the left.

Prof. MSc. Fabián Benzo Moreira  
12/20/2018