



## IUPAC Safety Training Workshop

Paris, France

2019/07/08

# STP-LA

## History, Learning and Perspectives

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# History

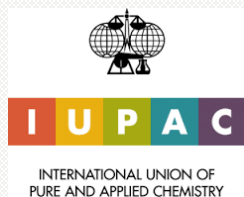
2007



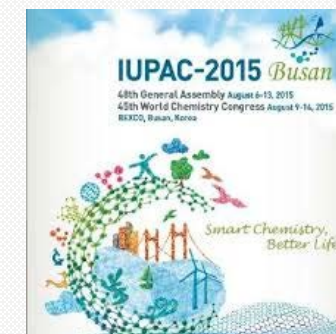
STP Trainee  
Mitsui Chemicals Inc.



2015



STP-LA Proposal → Project  
IUPAC 48<sup>th</sup> General Assembly



2016 / 2018



STP-LA 1  
STP-LA 2



# Objectives

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- To train professionals with chemistry knowledge, in SHE&S, promoting a culture that prioritizes prevention to protection.
- To improve the management of chemicals products in Latin American, diminishing the probabilities of injuries, illness and contamination caused by working with chemical products.
- To strengthen the STP and the presence of IUPAC in Latin American.

# Criteria for Selection of Trainees

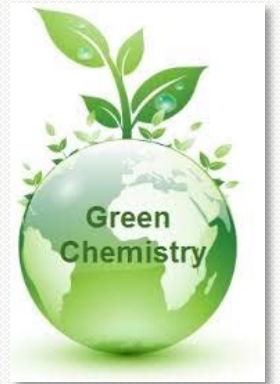
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- Professional chemists.
- Engaged in aspects of SHE.
- Involved in chemical organizations, universities or governmental institutions.
- Commitment and capacity to disseminate knowledge gained and influence in their places of employment and elsewhere within their country.



# Topic covered

- Basic concepts
- Occupational safety
- Chemical products
- GHS
- Emergencies
- SHE&S Management
- Security
- SH&E culture



# Methodology

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- 80 - 90 hours training over 2 weeks
- Master classes
- Exercises in the classroom
- Practical experiences
- Videos
- Visit to chemical companies
- Activities on the field
- Evaluation of knowledge before and after training
- Application project



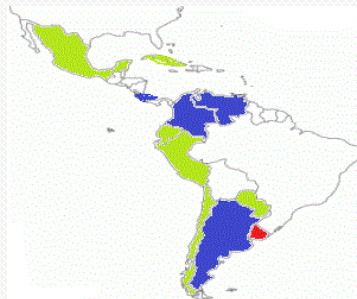


# STP-LA 1 (2016)

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- 44 candidates

- 10 countries



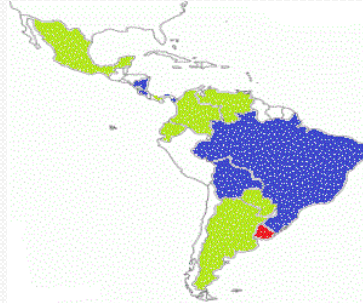
- Comprehensive management system in the upper and basic organic chemistry laboratories of the National University of La Plata (Argentina).
- Importance of chemical safety application during teaching and research activities at the Zulia University (Venezuela).
- Training process on chemical safety aspects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

# STP-LA 2 (2018)

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- 39 candidates

- 12 countries



- Strengthening the chemical handling regulations in Bolivia (Occupational Safety and Health Bolivian Society).
- Preparation of guidelines for conducting health surveillance of populations exposed to chemicals in Brazil (Ministry of Health, Brazil).
- Institutional strengthening for the safe management of chemicals in El Salvador (Ministry of Health, El Salvador).
- Strengthening of chemical safety in the Faculty of Chemistry and Pharmacy (National Autonomous University of Honduras).
- Implementation of the ISO 45001: 2018 standard in the Site of the Specialized Institute of Analysis in Corozal (University of Panama).



# STP-LA 2 (2018)

Gap of knowledge level of trainees

| 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



# STP-LA

- 83 candidates
- 15 countries
- 2 projects cancelled.
- 4 projects in incipient state of implementation.
- 3 projects in advanced state of implementation.



INTERNATIONAL UNION OF  
PURE AND APPLIED CHEMISTRY



unitar  
United Nations Institute for Training and Research



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

**PROGRAMA DE ENTRENAMIENTO EN SEGURIDAD QUÍMICA  
PARA AMÉRICA LATINA (STP-LA)**

<http://stp-la.fq.edu.uy>

# Lessons Learned

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- The contents, duration, methodology, teaching materials, trainers, logistic and funds are considered suitable to achieve the proposed objectives.
- It is important evaluate the trainee's gap of knowledge before and after STP-LA.
- In general, the progress of the projects proposed is less than expected.

# Conclusions

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- The strengthening of STP-LA program requires increasing the effectiveness of implementation of projects through the improvement of the trainee's selection process.
- The STP-LA regional program is a valuable extension to the original IUPAC-STP and strengthens that program in developing countries.
- The STP-LA program is a necessary presence and important contribution of IUPAC to disseminate the chemical safety and security in industrial, academic and governmental sectors in Latin America.
- There are still Latin American countries with interest in participating in the STP-LA program that could not be accommodated.

# Perspectives

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**STP-LA 3**  
**2020?**