
The IUPAC Safety Training Program



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IUPAC Committee on Chemistry and Industry

Role and Strategic Priorities

- **Projects that share best practice globally**
- **Knowledge transfer to developing countries**
- **Capacity building (e.g. safety training workshops)**
- Public appreciation of chemical science and technology
- Reputation and trust

*Provides the IUPAC 'home' for industrial companies
Economic development plus societal and
environmental factors*



The Safety Training Program

Enables experts from developing countries to learn about safety and environmental protective measures by visiting and working in plants of IUPAC Company Associates in the industrialized world.



Administration

IUPAC Committee on Chemistry and Industry (COCI)

- Recruiting, vetting and approving trainees
- Matching trainees and Host Companies
- Financial Support for travel
- Trainee recruiting and placement

Host Companies

- Trainees' local expenses
- Development of course of study; training



Selection of Trainees

Professional scientists and engineers who are currently:

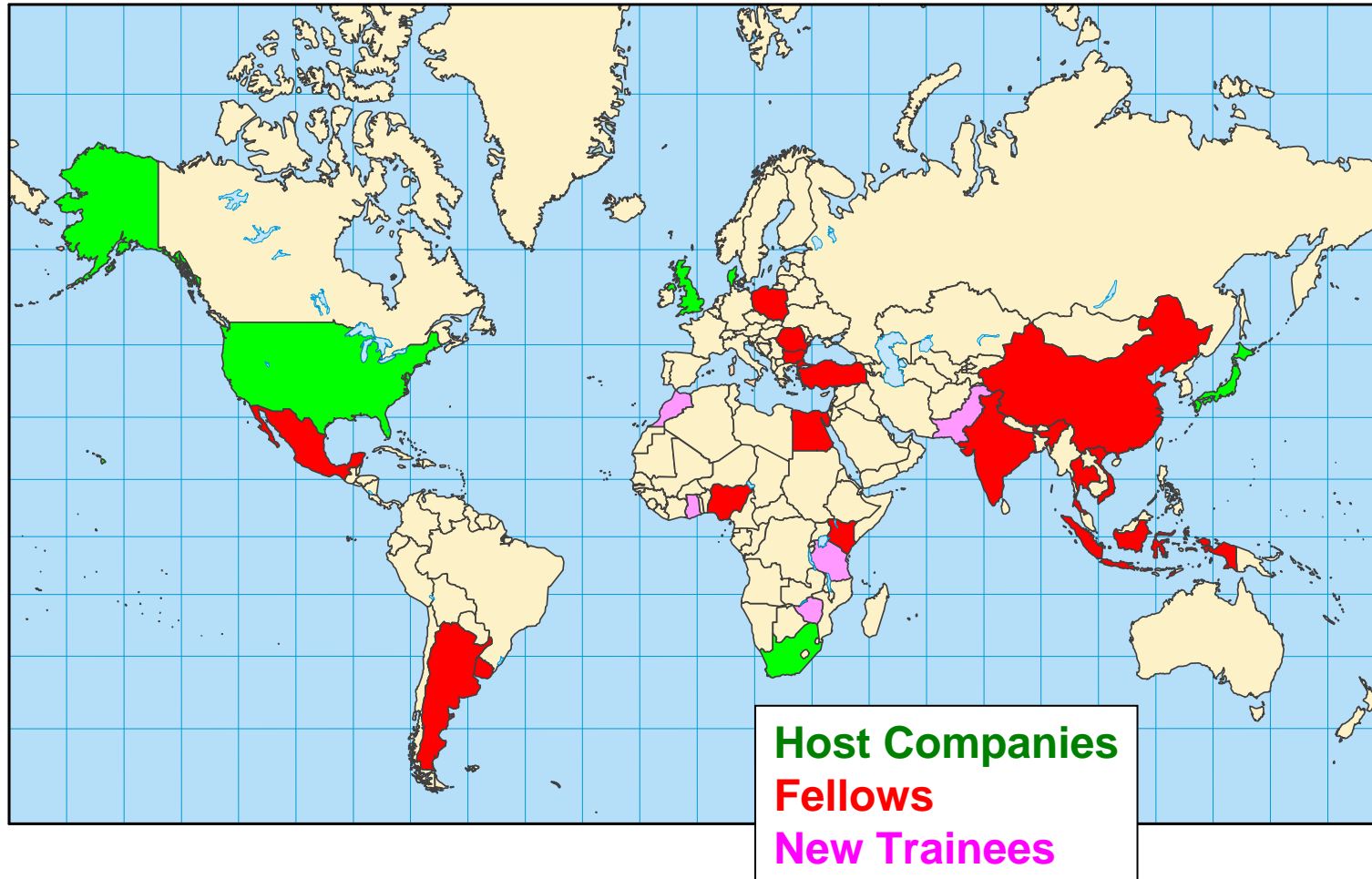
Involved at a **supervisory or managerial level** in chemical companies, governmental or scientific institutions, or universities;

Engaged in **aspects of safety and environmental protection** or in the teaching of these fields;

Influential in their workplaces and within their home country.



Trainees and Host Companies



Trainees since 2000



Ms. Esma Toprak - Director of Chemical Engineering Laboratories, Bogazici University, Istanbul, Turkey
Trained at BP Amoco Chemicals Research Laboratory and Chemical Plant, Chicago, IL and Green Lake, TX



Prof. Ali A. El-Emam - Dean of Faculty of Pharmacy, University of Mansoura, Egypt
Trained at Bristol-Myers Squibb Corp. Laboratories and Production Facilities in New Jersey, USA



Trainees since 2000



Mr. Tersoo Charles Gwaza - Shell Petrochemical Development Company, Port Harcourt, Nigeria
Trained at Sasol, South Africa

Mr. Kelvin Khisa - UNIDO National Cleaner Production Nairobi, Kenya
Trained at Sankyo, Japan



Mr. Isiaka O. Bakare Dare, Rubber Research Institute of Nigeria, Benin City, Nigeria
Trained at Mitsui Chemical Co., Japan



Trainees since 2000



Mr. Zhang GuoHong, Unilever, China
Trained at BP Chemicals, USA

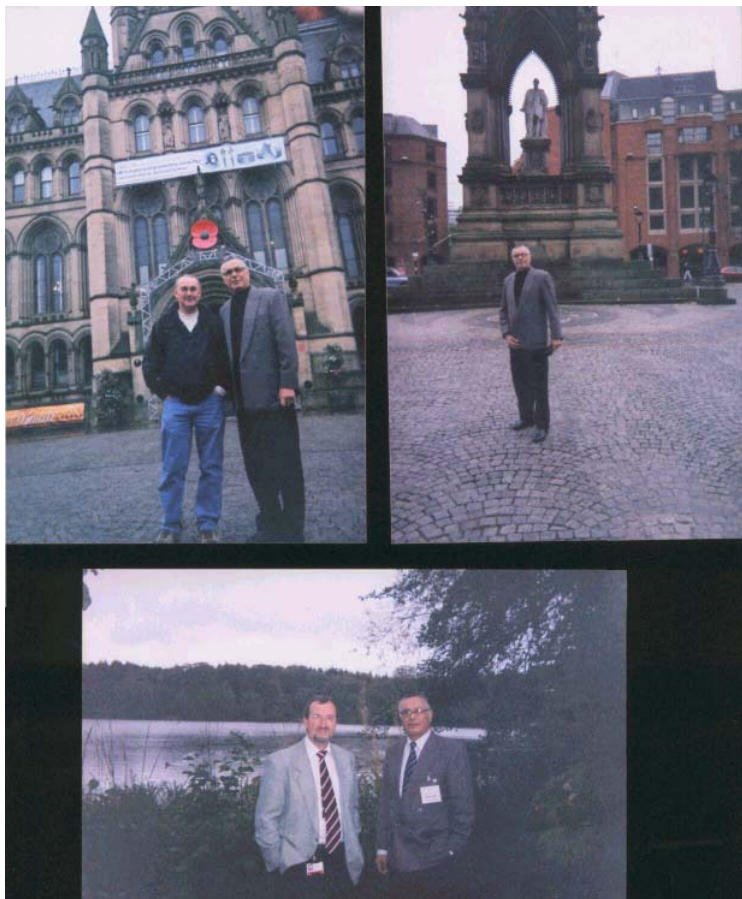
Ms. Jane Nyakang'o, UNIDO National
Cleaner Production Centre, Nairobi, Kenya

Ms. Ana Luisa Arocena, Waste Management
Expert, Montevideo, Uruguay

Trained at BP Chemicals facilities in
Naperville, IL USA and Lima, OH USA



Trainees since 2000



Prof. Said Mohammed Mahmoud Bayomi

Pharmaceutical Chemistry,
University of Mansoura, Egypt

Trained at Astra Zeneca, UK



Trainees since 2000

Mr. Godfred Nyarko

Health, Safety and Environment
Coordinator
Tema Lube Oil Company, Ghana

Mr. Fabian Benzo Moreira

Occupational Health and Safety
University of Uruguay, Montevideo



Trained at Mitsui Chemical Co., Japan, 2007



Trainees since 2000

Dr. Gursharn Singh Grover

Host Company:
Novozymes A/S - Denmark

Training: June 2008



Responsibilities of Trainees

Utilize learnings within their place of employment

Disseminate knowledge gained in the program throughout home country

Establish new programs to improve safety practices within home country.

File report with IUPAC

Evaluation of training - host company, content of program,
usefulness

Activities to be undertaken to apply training after return home



Typical Training Schedule

Employees directly involved
Shadowing by trainees
Hands-on experiences
Tours of facilities
Participation in decision-making



Schedule for IUPAC-UNESCO-UNIDO safety training program
International Union of Pure and Applied Chemistry (IUPAC), United Nations Educational, Scientific, and Cultural Organization (UNESCO), United Nations Industrial Development Organization (UNIDO)
Week of October 13, 2003
BP Chemicals Inc.
Lima, OH

Day	Time	Place	Activity	Responsible Person
Monday, 10/13	7:00		Travel from Chicago to Lima	Jeff Gilman
"	12:30	Kevin's Office	Welcome to Lima	Kevin Sprague
"	12:45	East Chicago Pizza Company	Buffet Lunch	Kevin Sprague & Participants
"	2:00	Kevin's Office	Week's Logistics and HSE Resources Table	Kevin Sprague
"	2:30	Lobby	Safety Video Orientation	Jayne Kisor
"	2:45	Office/Restroom	Break	On Own
"	3:00	Chuck's Office	Welcome by Plant Manager and his vision on HSSE	Chuck Treloar
"	3:30	Nick's Office	Review HSE Co-Op Program	Nick Steimle and Todd Flippin
"	4:00	Driving Tour of Plant	Driving Tour of Lima Chemical Plant	Jeff Gilman and Kevin Sprague
"	5:30	Wingate	Hotel Check In and Break	Jeff Gilman
"	6:00	TBD	Dinner	Jeff Gilman & Kevin Sprague
Tuesday, 10/14	7:30	Hotel	Pick Up	Jeff Gilman
"	8:00	Visitor Center	Front Office Pause for PAWS	Jeff Gilman
"	8:15	Jan Kentner Office/field	Explain PAWS process and conduct a PAWS observation	Jim Cook and Jan Kentner
"	9:30	Joe Martz Office	Lima Safety Programs, Traction and areas of responsibilities	Joe Martz
"	10:30	Dave Breitigam office	Lima IH Programs and areas of responsibilities	Dave Breitigam
"	11:30	Medical Clinic	Lima Medical Programs and areas of responsibilities	Linda Schumacher Kellie Johnston Dr Oyer
"	12:30	Someplace healthy	Lunch	"
"	1:30	BDO Lab	Review Lab safety and safe sample collection issues	Bob Schantz
"	2:30	Dave Linderud Office	PSM and the Lima Process Safety Committee	Dave Linderud
"	3:15	Tom Say's Office	NPDES sampling and visit outfall and ponds.	Tom Say
"	4:30	Kevin's office	GHSER	Kevin Sprague
"	5:30	Hotel drop off/break	Drop off and Break	Kevin Sprague
"	6:30	Dinner at the Sprague House		Kevin Sprague

13 September 2011
STP Overview 2011.ppt

Safety Training Program Workshops

Mechanism for follow-up and monitoring of progress

Held at IUPAC Congresses

Ottawa – 2003

Beijing – 2005

Turin – 2007

Glasgow – 2009

San Juan - 2011



Trainees present and discuss activities they have pursued since their training

Plenary speakers address topics of concern in the country or region where the Congress is held



Acknowledgments

Host Companies



BP Chemicals – USA
Bristol-Myers Squibb – USA
Sasol – South Africa
Sankyo Co. – Japan
Mitsui Chemical Co. – Japan
AstraZeneca – UK
Novozymes - Denmark

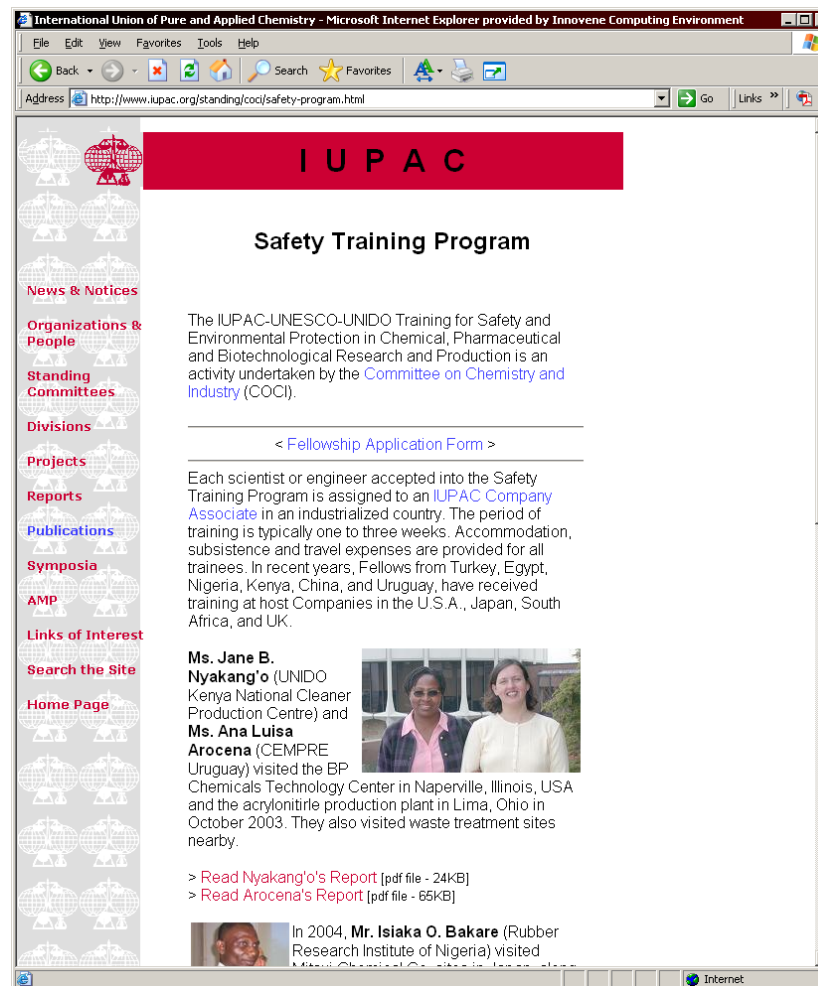
Financial and Administrative Support

IUPAC
UNESCO
UNIDO



Further Information

Application Forms
Brochures
Reports from Trainees
Articles and Publicity
Workshop Summaries



<http://www.iupac.org/standing/coci/safety-program.html>

