

Title: The Major Challenges Facing the Proper Application of Chemical Safety Regulations in the Third World Countries

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Main Topics of the Talk:

1. The current situation in the research centres and universities in the third world countries:

There is a huge gap between the third world countries and the developed countries due to the absence of a definite and integrated health safety programs that protect the people and environment. In general, the design of the chemistry laboratories in most cases is defective, the hoods and ventilation cabinets are not efficient. The lack of PPE such as safety showers, eyewash and insufficient fire extinguishers. The handling, transport and storage of chemicals are very primitive. The chemical and biological wastes are disposed through sanitary drain, and solid wastes are treated as normal garbage. There is no periodic medical monitoring system for the employee.

2. Applications of the training and achievements:

The trainee faces several challenges which necessitate better co-operation between the trainee and the governmental authorities. Most of the achievements of the trainee in their home countries resulted from their personal contacts and to some extent through their professional authorities which is limited outside their institutions. The achievements includes the use of some PPE as eye protection glasses and gloves was considered obligatory in all laboratories in the faculty of pharmacy. Improving the laboratory ventilation via installation of more efficient exhaust fans. The laboratories were supplied with safety showers, eye washers, and fire extinguishers. A new training program was introduced for laboratory technicians, and postgraduate students, the program covers the major topics of chemical safety. Organization of several symposia and seminars about the major topics of EHS. The audients were from all the Egyptian universities and chemical and pharmaceutical industries.

3. The major challenges and retarding factors:

The major retarding factors are mainly financial, technical and political. The financial factors are an important issue to set an integrated chemical safety program. The financial support is necessary to improve the laboratory safety, to construct incinerators, chemical wastes recyclers and occupational health centres. Although the financial donations of the developed countries and the international organizations are sufficient to improve the health safety in many recipient countries, the misuse of these donations and the administrative corruption in many countries retards this international efforts. The donating countries and organizations should be urged to give their donations in the form of construction of incinerators, waste recycling plants and occupational health centers, instead of the monetary donations. The political factors are the most important challenge facing the improvement of the chemical safety in the third world countries, the political will is almost absent and the environmental health and safety problems are not considered of high priority in many countries. The international community should play a greater role to enforce the governments to adhere to the international standards and guidelines.

4. New initiatives for expansion of the program:

As the original IUPAC-UNIDO-INESCO program aims to enable professional scientists from developing countries to receive experiences and knowledge on health, safety and environmental protection in chemical research and production, and to act as regional experts in this field in their home countries. The trainee should play a role to expand the program to their geographical regions. The situation in many Arab countries is similar to the situation in the third world countries. A new regional program may be started in the Arab countries. The new program may be initiated by the IUPAC or UNESCO via contacting the authorities in the countries to explain the benefits and

importance of the program. The trainee may act as mediators between the IUPAC or UNESCO and the authorities in the countries in their regions. Suggested Counterparts for such program may include the Arab Nations Organization, Arab Regional Funds as the Arab Fund for Social & Economic Development (Kuwait) and the Islamic Development Bank (Saudi Arabia), in addition to some regional Non-Governmental Organizations.