

**PREVENTION IN EXPOSURE TO OCCUPATIONAL AND
ENVIRONMENTAL CONTAMINANTS**
Symposium of Occupational Hygiene
IASI 16-17 May 2001

Motto Although the profession of industrial hygiene isn't changing, the practice of the profession of industrial hygiene is.

James R. Thornton- former president of American Industrial Hygiene Association

Motivation and theme

The evolution of Occupational Hygiene profession strongly depends upon the economical and technological change. As technology advances or alters, more and more hazards appear and more exposure circumstances occur or embrace new shapes. The more sophisticated is the technology, the more insidious is the risk imposed by its usage; consequently, the investigation of the working conditions requires larger amount of knowledge. Although the measurement methods include now a wide range of techniques, such as those based on lasers or the usage of monoclonal antibodies, finally it is the man and not the instrumentation who assesses the risk.

The theme of the symposium, "*Prevention in exposure to occupational and environmental contaminants*", underlines the importance of preventing occupational illness and environmental problems before they occur. But in order to achieve this purpose, the Occupational Hygienists must respond with more professionalism and dedication, be prepared to understand every detail and choose the particular strategies and tools for the particular situation.

Organization and goals

The Symposium was initiated by the newly formed **Romanian Occupational**

Hygiene Association (ARIO) and supported by the American Industrial Hygiene Association (AIHA), **The Institute of Public Health Iasi** and **The Technical University Iasi**. The meeting was recognized by the Romanian Ministry of Health and Family and the World Health Organization - Occupational and Environmental Health Unit.

The mission of the Symposium was to bring together professionals working in a variety of activity domains, who are dealing with problems pertaining to the contaminants generated by a human activity. There attendees comprised physicians, chemists and biochemists, engineers and physicists working in a variety of professional environments: research, academia, inspection, safety, government, and private institutions. There were three invited lecturers from USA, United Kingdom and The Netherlands. The organizers aimed to facilitate contacts in order to share expertise, learn new information and explore issues that could be of mutual interest; the last, but not the least, to enlarge the opening to the international Occupational and Environmental Hygiene community.

The Symposium consisted in two sessions of one day each. The two main

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topics were approached by means of long and short presentations and posters.

Assessment and prevention in exposure to occupational hazards

It is well documented that every virtual human activity generate exposure. Extensively focused on industrial environment in the past, the occupational hygiene has now enlarged its preoccupation toward more and more areas of activity. New pollutants and a more detailed approach of the old ones require new strategies for the risk assessment. However, the entire process still rely on the Threshold Limit Value (TLV) concept; in the case of the chemical substances, these standards are expensive to generate and increasingly falling behind the pace of industrial change. Consequently, a more practical level of control is desired, from the introduction of a new compound or technology to the elaboration of prevention measures for the substances already in usage. An alternative might be to take the classification data (the Risk Phrases) which are globally harmonized and link these directly to control advice given a knowledge of the process and purpose of the chemical - information immediately available to many.

Environmental and occupational impact of extensive industries

Many industrial processes, especially the extensive ones, are potential sources of pollution that have a strong impact upon the environment but also to their own personnel and the communities in the neighbourhood. These industries ensure jobs and influence the regional development but often affect water and air quality,

produce noise and may induce large impact environmental accidents. The change of technologies solve the pollution problem in some cases, but this strongly depends on resources, profit and market demands. The new solutions induce often further problems, such in the case of food production- an older but ever young industry. The introduction of new technologies create diversity but consume more resources; to support this aspect it was presented an analysis of transition from animal to plant protein production and consumption, including the environmental and occupational consequences.

Conclusions and outcome

The concept of Occupational Hygiene do not change but the circumstances in which it is practiced require more flexibility and continuous information. There is a difference from case to case and, generically, between East and West. The presentations and discussion detailed specific preoccupation but also future trends, such as the tendency of introducing unanimous accepted OEH&S standards and the difficulties of bringing this action into practice. One way would be to strengthen the international cooperation at professional level by means of professional associations, because they are flexible in disseminating the information.

ARIO used this opportunity to initiate contacts with The International Occupational Hygiene Association (IOHA) and The British Occupational Hygiene Society (BOHS).

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