

SECOTOX
– THE INTERNATIONAL SOCIETY OF ECOTOXICOLOGY
AND ENVIRONMENTAL SAFETY IN THE THIRD MILLENNIUM
– TRENDS AND CHALLENGES

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Motto: To think globally, to act regionally.

HISTORY

This year SECOTOX celebrates its 30th Anniversary. It was formally established in 1972 as non-profit scientific society. Among several distinguished scientists from all over the world, which initiated the creation of SECOTOX was Dr. Rene Truhaut, a member of the French Academy of Sciences, who for the first time used around 1969 the term “*Ecotoxicology*” in order to define the study of adverse effects of chemicals with the aim of protecting natural species and populations, and Dr. Friedheim Korte, the founder of the Institute of Ecological Chemistry of the National Research Center for Environment and Health in Munich/Neuherberg, Germany. This Institute was accepted as the geographical site of SECOTOX. From the very beginning SECOTOX activity follows the motto “To think globally, to act regionally”. The venue and datary of SECOTOX symposia and meetings comprise Japan (1973), Bonn (1974), Vienna (1975), Nice (1979), Copenhagen (1982), and Rome (1985). SECOTOX formally sponsored and co-sponsored meetings on ecotoxicology in Dublin (1989), Munich (1990), Paris (1989) and La Rochelle, France (1991). In the 80's SECOTOX initiated a series of biannual European Conferences of Ecotoxicology and Environmental Safety that were held subsequently in Copenhagen (1988), Amsterdam (1992), Zurich (1994), Metz, France (1996) and Munich (1999). The venue of European Conferences reflected the nationality of SECOTOX presidents elected every 2 years at the SECOTOX General Assembly: Prof. Drs. F. Bro-Rasmussen (Denmark), Jan H. Koeman (The Netherlands), Paule Vasseur (France), and Antonius F. Kettrup (Germany). In between the European conferences, a number of widely attended meetings and workshops dealing with specific issues and regional problems took place under the auspices of SECOTOX.

It was under the presidency of Prof. Dr. F. Bro-Rasmussen in 1988–1991, when great political changes in Central and Eastern Europe opened new possibilities for contacts and collaboration with colleagues from these countries that resulted in the organization of the Meeting on Highly Contaminated Areas in Eastern Europe in Gosen, Germany (1991), with great involvement of Prof. Dr. H. Heinisch (Germany). This meeting stimulated the popularization of SECOTOX activity and its objectives in this new area.

Since the 2nd European SECOTOX Conference in Amsterdam (1992), one of the major activities of the Society has been the organization of regional scientific meetings in various parts of Central Europe. The first meeting took place in 1992 in Nitra, Republic of Slovakia. During the meeting, the first regional section was established under the name Central and Eastern European Regional Section of SECOTOX (CEERS–SECOTOX) that was formalized in 1993 during the 2nd regional meeting in Porąbka-Kozubnik, Poland, in 1993. This section appeared to be a very active one, due to personal involvement of such outstanding scientists and brilliant organizers as Prof. Drs. Marite Bake from Latvia, Ivan Holoubek from the Czech Republic, Jana Kovacicova from the Slovak Republic, Katarzyna Sawicka-Kapusta from Poland and in particular Alan Pinter from Hungary, who organized never-to-be-forgotten meetings of CEERS–SECOTOX in Balatonaliga (1994) and Balatonfoldvar (1999). These meetings were remarkable, besides of high scientific level, due to beautiful venue and particularly friendly atmosphere created by Alan. He passed away untimely last year, but the SECOTOX community will always remember him. Other very successful meetings of CEERS–SECOTOX section comprise those held in Luhačovice, the Czech Republic (1996), Jurmala, Latvia (1997) and Bratislava, the Slovak Republic (2000). The forthcoming Regional Meeting will be held in Brno (The Czech Republic) this year.

Prof. Dr. Jan H. Koeman, President of SECOTOX 1992–1994, deserves the special credit for initiating establishment of this Section. In 2001, he was elected as an Honorary Member of SECOTOX. Other Honorary Members of SECOTOX elected for this title due to outstanding contribution to the development of ecotoxicology and SECOTOX activity, are Prof. Drs. Ph. Bordeaux (France), F. Bro-Rasmussen (Denmark), F. Coulston (USA) and R. Korte (Germany).

Simultaneously with the foundation of the CEERS–SECOTOX and West-East link, another regional workshop that was held in Rome in 1993 initiated Mediterranean Section and North-South link of SECOTOX. The regional approach has appeared to be very successful and fruitful for stimulation of interdisciplinary discussions and developing solution of ecotoxicological and environmental safety problems on the regional basis, at the same time strongly coordinated internationally. This approach, as the most rational and scientifically sound one, has been consequently presented and developed at the SECOTOX events. A Regional Section of the Mediterranean Region was formally established during 8th International Symposium on Environmental Pollution and its Impact on Life in the Mediterranean Region, held in Rhodes, Greece, in 1995. The next meeting of this section in Antalya, Turkey (1998) and the recent one in Cyprus (2000) were focused on the specific regional issues and general European environmental problems. The initiative of Prof. Dr. Paule Vasseur, the President of SECOTOX in 1994–1996 on extending of North-South link on African countries resulted in the first International Symposium on Environmental Pollution and Impact Assessment held in Mohammadia, Morocco in 1996.

Under the presidency of Prof. Dr. Antonius F. Kettrup in 1996–1999, the inauguration of Asian SECOTOX branch occurred during the cruise along the Yangtze River between Wuhan and Chongqing in 1998. Foundation of Indian chapter of SECOTOX in 1999 was the next step in further establishing of SECOTOX in Asia and Pacific region. Currently, All-India SECOTOX meeting is planned.

In 1999, as an expression of appreciation for the activity of Central and Eastern European Section of SECOTOX, and in particular of its Polish Chapter, the first president of the Society from this area was elected for a cadence 1999–2001. I happened to be honored by this title and thoroughly realize that I share this honor with all my colleagues from Poland and CEERS–SECOTOX. During the SECOTOX World Congress and 6th European Conference entitled “Ecotoxicology and Environmental Safety on the Verge of the Third Millennium: Trends, Threats and Challenges” held in Krakow, Poland, in 2001, Prof. Dr. Harun Parlar from Germany became the next president.

The foundation in 1979 of dynamically expanding SETAC North America and in 1989–1990 SETAC–Europe, a similar Society of Environmental Toxicology and Chemistry, gave a new impulse to the development of new ideas in ecotoxicology. The scientists active in SECOTOX including the members of its Scientific Board are mostly very actives in SETAC and are its members.

OBJECTIVES OF SECOTOX

The statutory purpose of SECOTOX is:

- To bring together its members and other interested persons from all aspects of science and the general public and to promote a scientific co-operation in order to evaluate the current problems of environmental quality and safety and to investigate solutions to these problems on a national, regional and worldwide basis. For this purpose SECOTOX considers, among other issues, the question of air, soil and water quality standards, the safe use of food additives, drugs, pesticides, power generation, waste etc., as well as the protection of plants, animals and humans from the harmful impact of chemicals and physical agents, both natural and man-made.
- To develop and to publish suggestions, including the necessary data, in order to enable the regulatory agencies of various countries to make proper decisions with regard of the evaluating the safety of chemicals, toxic and physical agents in the total environment.
- To make recommendations concerning exotoxicological education and training.
- The SECOTOX organ of publication is the periodical “Ecotoxicology and Environmental Safety” founded in 1972/1973. Since 2001, the publication activity of SECOTOX has been extended on the periodical “Fresenius Environmental Bulletin” that in a short time has gained popularity and a vast circle of the devoted readers and contributors.

NEW TRENDS AND CHALLENGES

After three decades of ecotoxicology, we face new problems that require higher degree of predicting toxicity with respect to long-term effects of micro-pollutants. A generic risk

assessment needs developing and applying new regulatory tools based on sound scientific approach that should form the basis for the derivation of environmental quality criteria. It became clear that only integration chemical and biological aspects could assure an objective risk characterization. The recently developed models and techniques for assessing metal bioavailability in aquatic systems, soil and sediments exemplify this approach. Still, much more research efforts are needed to optimize these tools.

The times of focusing on the ecosystem health, when the environmental and human health is tightly coupled are upon us. Ecological risk assessment is now imperative and constitutes current trends and challenges in ecotoxicology at the beginning of the Third Millennium. The time of SECOTOX World Congress and 6th European Conference held in Krakow, Poland in 2001 was remarkable and symbolic. It was time to look back, to summarize our accomplishments, successes and failures. It was time to look forth, to define our goals and priorities, our responsibilities for the Environment in all its diversity, and to formulate individual, local, regional and global tasks in our efforts to protect and save the Environment for the next generations in the new Millennium, to keep it clean, healthy and sustainable.

The outcome of the Congress comprised papers and posters presented by authors from all over the world during 5 days of tightly filled scientific sessions. Most of contributions to this Congress will be published in two scientific journals: a Special Issue of *Environment International* and in *Fresenius Environmental Bulletin*. In this issue of *Archives*, a modest part of contributions (5 papers) will be presented to symbolize the link with SECOTOX and with Polish part of SECOTOX history. It should be mentioned, that the first outcome of the CEERS–SECOTOX – Central and Eastern Section of SECOTOX was published by *Archives* as a Special Issue in 1995. The papers published here mark the end of a cadence of the first Polish president of SECOTOX and were submitted and presented to Congress by the authors – scientists of the Institute of Environmental Engineering, of the Polish Academy of Sciences and the authors that were invited to *Archives* due to its scientific profile that fit to their research activities, among them Prof. Dr. Marite Bake from Latvia – one of the most active members of CEERS–SECOTOX and a member of the SECOTOX Scientific Board.