

Dioxin '91 – The 11th International Dioxin Symposium

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*11th INTERNATIONAL SYMPOSIUM ON
CHLORINATED DIOXINS AND RELATED COMPOUNDS*



The 11th International Symposium on Chlorinated Dioxins and Related Compounds, Dioxin '91, was held in Research Triangle Park, North Carolina, USA, September 23 – 27, 1991. It was hosted by the Chemical Industry Institute of Toxicology, the Health Effects Research Laboratory of the U.S. Environmental Protection Agency (EPA), the International Institute for Environmental Information and Communication, the National Institute of Environmental Health Sciences, and the Department of Environmental Sciences and Engineering, School of Public Health, The University of North Carolina at Chapel Hill. Terri Damstra of the NIEHS and Linda Birnbaum of the US-EPA served as Co-Chairs of the of the Dioxin '91 Organizing Committee, ably assisted by M. Judith Charles and Richard Dideriksen (University of North Carolina), J. Chris Corton and William F. Greenlee (CIIT) and George W. Lucier (NIEHS).

Dioxin '91 emphasized an integrated approach to assessing the consequences of exposure to dioxins and other structurally related compounds, based on biological mechanisms of action. Current research in new analytical techniques, transport and fate, abatement technology, human exposure/human cancer, and other important areas were also presented. For the first and only time in the history of the International Dioxin Symposia, abstracts were only one page. They were collected, reviewed, and printed for distribution to all participants during the conference following the precedent set by Dioxin '90. This single volume also contained the address of all the first authors and presenters.

The format for Dioxin '91 was unique. It was the first time that all of the oral presentations were invited talks. Each day, Monday through Thursday, there were concurrent sessions each with three presentations. There were three sessions on Monday, five on Tuesday, seven on Wednesday, and six on Thursday. Symposia topics included: tissue dosimetry; new analytical techniques;



bioavailability; Ah receptor; sources; toxic equivalency factors; reproductive development and endocrine effects; atmospheric fate and transport; immunotoxicity; bioaccumulation and partitioning in the aquatic environment; new technologies for emission control; neurotoxicology; dioxin-induced cancers in laboratory animals; fish and wildlife contamination; induction of cytochrome P-450 in humans; humane exposure and human cancer; regulation of gene expression; mechanisms of carcinogenesis and cell proliferation; levels in food; risk assessment methodology; and human exposure and health effects. There was also an opening plenary session on Monday morning and a closing plenary overview on Friday morning.

Two other innovations were introduced into the Dioxin Meetings. It was the first time that poster discussion sessions were held. All of the submitted abstracts were scheduled either as straight poster sessions, which were available for viewing an entire day, or as part of poster/discussion sessions, in which the posters were available all day but a discussion of the related posters was held. There were ten straight poster sessions and eleven poster discussion sessions. Poster session included ones on toxicology, toxic equivalency factors, human health effects, human tissue levels, sources/fate and transport, bioaccumulation/bioexposure, analytical procedures, and control/treatment. Poster/discussion sessions focused on sources/fate and transport, immunotoxicity, endocrine interactions, food chain effects, determinants of disposition, quality assurance, tumor promotion and cell proliferation, gene regulation, emissions control, risk assessment, and relative species sensitivity.

Social activities were also part of the venue. An opening banquet was held Monday night highlighted by a talk given by EPA's Assistant Administrator for Research and Development, Erich Bretthauer, who had been involved in earlier Dioxin meetings. Tuesday night was a "free" night for participants to explore the Research Triangle Park area, with buses provided to take everyone to surrounding towns. A North Carolina barbecue was held on Wednesday night, complete with traditional food, mountain music, and country dancing!



Over 950 people attended Dioxin '91, setting a new attendance record, not broken until eight years later at Dioxin '99 in Venice. It was the first time this annual international meeting was not held in a major city, and its success prompted a wider choice of venues and approaches to Dioxin meetings in the following years.

(This manuscript does not reflect EPA policy.)