



Dioxin '89: Ninth International Symposium on Chlorinated Dioxins and Related Compounds Toronto, Ontario, September 17-22, 1989

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Introduction

The Hilton International Hotel provided an excellent, downtown Toronto venue for Dioxin '89, with some 700 delegates representing 23 countries. Unlike more recent meetings, the Dioxin '89 technical program consisted of only two parallel sessions Monday through Thursday, plus three on Friday. This was supplemented by three dedicated poster sessions, which represented a total of 326 papers presented.

Unlike the more recent meetings in this series, no corporate sponsorship was solicited to help Dioxin '89 – initial funding for the work of Congress Canada, a conference management company, was provided by the Ontario Ministry of the Environment (MOE). A small vendor's exhibit of about a half-dozen booths provided some financial support, but the bulk of the finances required to operate the conference was provided by delegate registration fees.

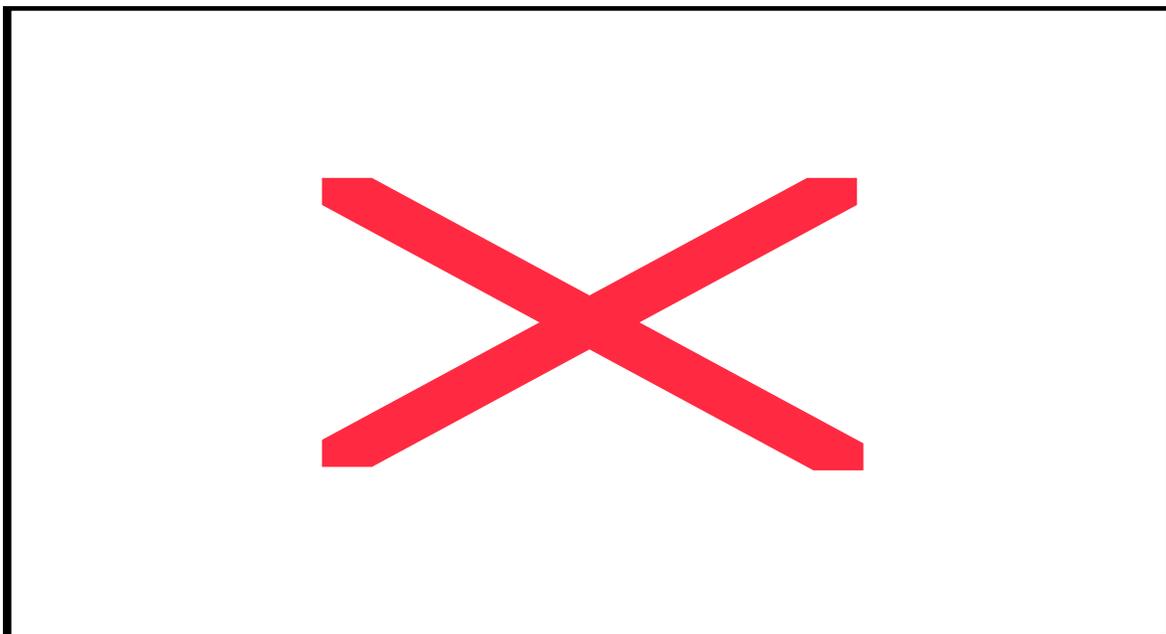
This meeting was the first to be run by a government organization, as the co-chairs (Helle Tosine and Ray Clement) were both MOE employees, and the initial funding was provided by the Ontario Ministry of the Environment, Laboratory Services Branch. Many of the volunteer helpers were also MOE staff, who supplemented the workers provided by Congress Canada.

Conference Planning and Organization

The co-chairs divided the tasks along technical program issues (R. Clement) and venue, social program, and financial management (H. Tosine). Sharon Suter of MOE played a critical role in ensuring all the details were taken care of, including staying up all night Thursday to photocopy as much information as possible to provide delegates with their information to pick up before the official conference closing Friday noon!

As the Internet was not available to Dioxin '89 organizers, delegate communications were handled by telephone and fax. Congress Canada played a key role acting as communications centre for the organizers. Close communications between the conference organizers and Congress Canada was a key factor in organizing a very successful meeting. The various sessions were all set-up in three parts of a single ballroom, which meant only seconds were required to switch from a talk in one session, to one in a different parallel session. Posters were all displayed until Thursday afternoon, but selected authors were only required to be available for discussing their work on one day (Monday, Tuesday, or Thursday). Because the poster display

area was patrolled by hotel security extended poster viewing times were permitted, which allowed delegates ample time to review the content of any posters of interest to them. A unique feature of the organization is that the conference co-chairs hosted a daily session chairs'



Dioxin '89 Session Chairs at Thursday breakfast: (back l-r) C. Rappe, co-Chair H. Tosine, Y. Masuda, co-Chair R. Clement; (front l-r) B. Jansson, A. Gilman
breakfast every morning for all session chairs scheduled for that day. At the breakfast all session chairs were updated on any changes for their sessions, special announcements to be made, details on A/V assistance, and were reminded of the importance of keeping their respective sessions on time.

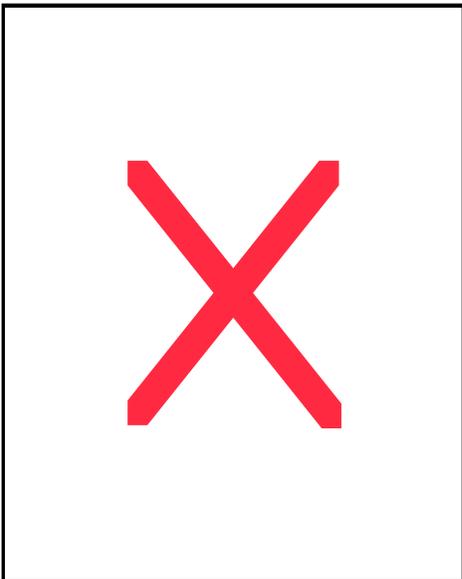
Throughout the conference, volunteers ever-present to assist delegates were identified by their Dioxin '89 sweat-shirts with the distinctive conference logo. Volunteers were specifically chosen who represented various cultural groups and who could communicate with delegates in various languages. To underscore a conservation philosophy in running the meeting, food remaining from the various Dioxin '89 functions was donated to Scott Mission, a Christian non-denominational agency in down-town Toronto dedicated to helping the poor.

Unique Accomplishments

Dioxin'89 was the first meeting in this series to hold a poster presentation competition. Wellington Laboratories sponsored these inaugural awards, which were chosen by a delegate voting process in each of six research areas. In recent meetings, these awards emphasize contributions by students, and these awards are now one of the highlight activities of each conference in this series.

One of the big hits of Dioxin '89 was the copy centre. Poster and platform presenters were all asked to submit copies of their slides or poster elements to the conference organizers. A filing

system was set up where delegates could request copies of the information submitted by authors. Even though each delegate received a coupon for 10 free presentations, lineups formed for delegates who wished to pay for many more. Some asked for a copy of everything! Copiers worked around the clock, but could not keep up with the demand. In the end, some copies had to



Organizer Colleen Tashiro beside the Report Display.

be mailed to delegates after the conference. We don't know what impact the copy centre had on future conferences, but it was the very next meeting in Germany where the conference short papers were first prepared as volumes 1-4 of Organohalogen Compounds.

Another first for this conference was a report display, where researchers and organizations world-wide submitted 118 reports and books of studies – many of which were not general journal publications may not have been prepared. Colleen Tashiro (MOE) took the lead role in making sure the many reports were displayed in a manner convenient to delegates. The report display and copy centre initiatives represented a step forward in providing delegates with timely information not readily available from conventional sources – some of which would have been very difficult to track down.

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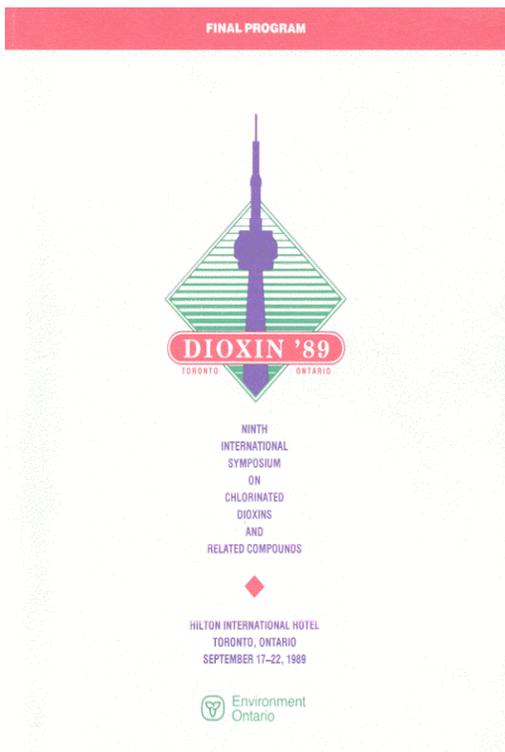
Technical Program

The whole conference was kicked off by a Plenary presentation that had delegates talking throughout the week. Curtis Travis, Director of the Office of Risk Analysis for Oak Ridge National Laboratories, USA, presented a convincing argument that much of the environmental burden of the chlorinated dioxins (up to 90%!) was still produced by unknown sources. Analytical methods were now past the stage of spending all of the effort to prove the identity of a detected peak was correct, and now the challenges remained to keep pushing detection limits lower, and to increase the throughput while lowering analytical costs. To investigate Travis's claim it was accepted that many more potential sources, and at much lower detection limits, needed to be investigated.

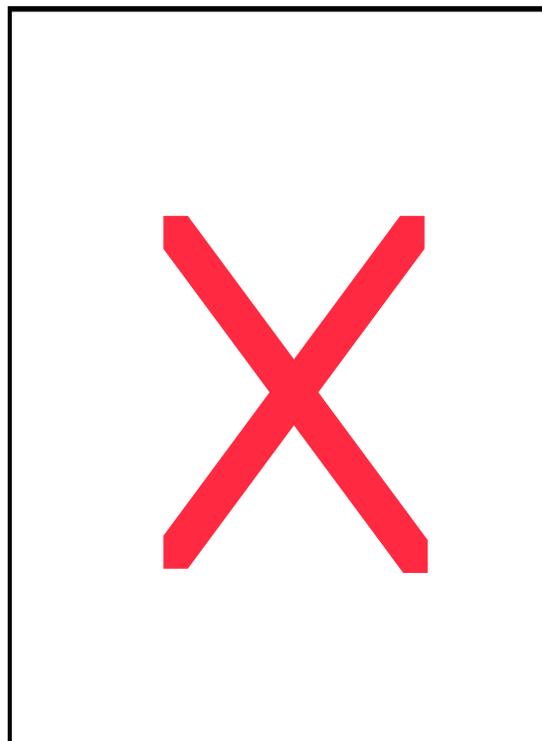
By coincidence, a significant portion of the Dioxin '89 technical program was dedicated to sources – especially from combustion, formation & mechanisms, environmental levels, and transport & fate. New sources continue to be identified because of several factors: improvements in analytical technology had allowed much lower detection limits with good precision and accuracy, many more laboratories and research groups world-wide were qualified to perform the required determinations, and awareness was high concerning the likely sources to investigate – any combustion source, and chemical processes where possible chlorinated precursors were present.

In addition to the regular technical program, two special workshops were organized around the Dioxin '89 conference. First was an Ambient Air Workshop September 17, 1989 where some 100 attendees discussed proper sampling and analysis techniques for trace organic dioxin and related compound determinations. A future Dioxin Conference Chair, Gary Hunt, and MOE staffer Maris Lusic co-chaired this successful event. The other Special Workshop highlighted issues important to the Pulp & Paper industry. Led by Larry LaFleur (NCASI) and Colleen Tashiro (MOE), the workshop was well-attended, and provided an effective lead-in to the special Pulp & Paper session held as part of Dioxin '89.

In the closing ceremonies, conference co-chair Ray Clement presented a summary of key questions in each of six research areas that still needed to be resolved. Researchers have made significant progress in all of these areas as reported in subsequent conferences in this series. The Dioxin '89 meeting was the last one in which the only scientific dissemination of the research presented was through publication in special Chemosphere issues. Even though only 60% of the papers presented ended up as Chemosphere publications, this still represented 1,251 journal pages of information. Previous Chemosphere volumes of this size were rather unwieldy to use, so the Proceedings editors decided to publish in two volumes, with contributions divided by thematic content into Chemosphere 20, Nos. 7-9, pp729-1262 (1990), and Chemosphere 20, Nos. 10-12, pp 1263-1979 (1990).



Dioxin '89 Final Program.

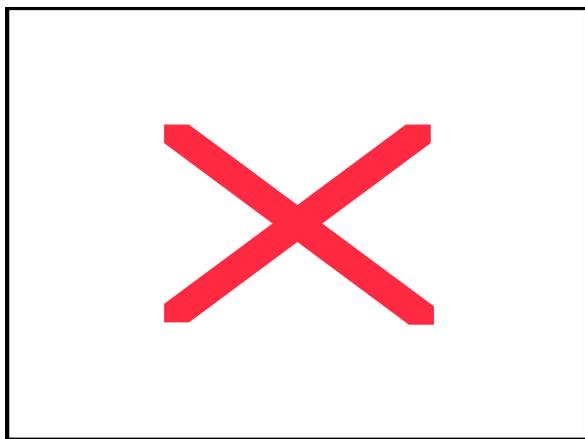


Cover of Chemosphere Proceedings, Part 1.

Social Program

Organizers feel that the social activities were a highlight of the Dioxin '89 experience. Although not as elaborate as the social programs organized for more recent conferences in this series, the Dioxin '89 meeting introduced some unique features. The typical Sunday mixer was organized (Ontario wines were highlighted), but a Monday reception was not yet part of the expected conference features. Dioxin '89 was the first meeting to close their technical program early on Wednesday – however, not to provide delegates with a “tourist day”.

The technical program concluded Wednesday at 1240h, followed by a Conference Cruise by two ships, IMAX movie at Ontario Place, and conference banquet. Delegates were bused to the cruise site by school buses because a local strike by Toronto bus drivers made the more comfortable tour buses unavailable. A box lunch was given to delegates for the short bus ride, but ample refreshments were available on the cruise ships. After a cruise on Lake Ontario during a perfect summer day, the two ships docked at Ontario Place and delegates were treated to two IMAX movies, then the conference banquet. In addition to a wonderful dinner, delegates enjoyed the entertainment of a Ukrainian dance team, and a Canadian Aboriginal ensemble.



Aboriginal dancers were a highlight of the Dioxin '89 conference banquet.



Ukrainian dancers: when they were finished with the barrel, they rolled it aside – where it cracked one of the plate glass windows!

The other unique social feature of the Dioxin '89 program was the series of special lunches organized around non-science Toronto/Canadian themes. Delegates could pre-register for one of these special lunches – for these earlier meetings in the Dioxin Symposium series, financial resources were not available to permit paid lunches for delegates for the whole meeting. The lunch themes included an introduction to Inuit art (Razie Brownstone), the history of Toronto (Mike Filey), and wines of Ontario (Tony Aspler). The lunch speakers were all leading Canadian authorities on their respective topics, and were very well received by delegates. In addition, optional tours were organized including a City Tour/CN Tower, Dinner Theatre, and visit to the Royal Ontario Museum.

Summary and Acknowledgements

Organizers worked hard to deliver an effective forum to maximize networking and information transfer among delegates, yet in a relaxed and friendly atmosphere. Overall objectives of the Dioxin '89 organizers were not only to achieve these goals, but to introduce delegates to a taste of Canadian and Toronto culture.

We acknowledge the many people who worked so hard for a full year to make Dioxin '89 possible. It would take several pages to list them all, so we have compromised by showing below the complete list of conference committees scanned from the inside-cover page of the Final Program book.

CONFERENCE COMMITTEES	
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