# **Highlights DIOXIN'90**

#### Heidelore Fiedler and Otto Hutzinger

The 10<sup>th</sup> International Symposium on Chlorinated Dioxins and Related Compounds (DIOXIN'90) was held from 10 to 14 September 1990 in Bayreuth, Germany. DIOXIN'90 was organized by the Chair of Ecological Chemistry and Geochemistry of the University of Bayreuth under the chairmanship of Professor Otto Hutzinger and Dr. Heidelore Fiedler. For the first time in the history of the International Dioxin Symposia, the 1990 conference was also incorporated the "EPRI Seminar" with Dr. Gil Addis from the Electric Power Research Institute (EPRI) as co-organizer.



Heidi Fiedler at "Schlosshotel Thier-garten", the most fancy of all hotels in Bayreuth



Above: Gil Addis, co-organizer of DIOXIN'90

DIOXIN'90 was attended by 832 participants from 25 countries. It should be noted that in 1990, we had already participants from Brazil, China or Israel but the dioxin issue was not yet subject to research in Korea. Notably, the political situation has changed considerably between 1990 and today (2005) with countries such as Czechoslovakia (CSFR), Union of Socialist Soviet Republics (USSR), and Yugoslavia no longer existing under these names.

Australia	China	Germany	Netherlands	United Kingdom
Austria	Czechoslovakia	Israel	Norway	U.S.A.
Belgium	Denmark	Italy	Spain	USSR
Brazil	Finland	Japan	Sweden	Vietnam
Canada	France	New Zealand	Switzerland	Yugoslavia

The University of Bayreuth with its modern campus provided an ideal environment to hold a scientific meeting of this size.



The Richard Wagner Opera House on Bayreuth's Green Hill



Signs posts at the University Campus

A total of 436 papers were presented either as oral or poster presentations. They were published in four volumes of Organohalogen Compounds (total of 2,044 pages). A number of papers containing additional and new information were published in Chemosphere, volume 23, issues 8-10 and 11-12 (total of 1,005 pages) in 1991.

## **NEW DEVELOPMENTS**

The 1990 Symposium introduced a number of novelties with the publishing of short papers. Since 1990 – with the exception of the 1991 Symposium – authors are asked to present their data in a manuscript of approximately four pages. Submissions are reviewed and corrected if necessary before being published in a book series named Organohalogen Compounds. Since the beginning, papers published in Organohalogen Compounds were considered as publications and not just as abstracts as is the usual practice at most conferences. From the Bayreuth Symposium, the volumes 1-4 of Organohalogen Compounds were printed and available in the week of the Conference as "DIOXIN'90" - EPRI Seminar" and published by ECO-INFORMA Press, Bayreuth. Papers contained in these volumes and all subsequent volumes dedicated to International Dioxin Symposia are referenced by the Chemical Abstract Service (Ohio, OH, United States of America).



First volumes of Organohalogen Compounds

The Conference Management with the two chairs was located at Jean-Paul-Strasse 30 in Bayreuth and supported by staff of the Chair of Ecological Chemistry and Geochemistry. Special thanks for her hard work is given to Ms. Ingrid Hilpert, who lead the registration and handled all local arrangements with the University administration. She was assisted by virtually all academic and technical staff of the Institute and additionally a large number of student volunteers. Without their enthusiasm and never-ending patience assistance it would not have been possible to realize this international conference.



Office at Jean-Paul-Strasse 30 served as DIOXIN'90 headquarters



G. Pusch, R. Twele, and J. Towara of the Symposium Secretariat



Ms. Ingrid Hilpert managing registration



DIOXIN'90 and Bayreuth memorabilia

With DIOXIN'90, we did not only include a foreign partner – EPRI – but also enlarged the topics beyond the typical sessions found at the international dioxin symposia. There was a special session on short-chain aliphatics and DIOXIN'90 "gave birth" to the brominated compounds. The flame retardants' issue was presented and discussed for the first time at an international conference. Starting with a small session and only four papers – but an opening plenary lecture – brominated flame retardants are today one of the topics that receive most attention.

#### LOCAL AND HISTORIC CONTEXT

A bit of geography and history: Bayreuth is a city of approximately 70,000 inhabitants located in northeast Bavaria 30 km from the border to the border of the former Czechoslovakia and 55 km from the border to the former German Democratic Republic (also called East Germany). It is famous for its Wagner Opera Festivals (Richard Wagner Festspiele), which are held annually from end of July until the last week of August. 1989, more precisely, 9 November 1989, was an important date in (German) history: the Berlin wall came down, which signified the end of the cold war, and the first step to German reunification was done. Consequently, with free travel and movement between the two parts of Germany, many East Germans moved to West Germany to settle down and start a new life.

#### CHALLENGES FACED

#### Accommodation

Although the Richard Wagner Festival has 2,000 visitors each day during the festival period that stay overnight, this did not mean that, in 1990, the city of Bayreuth was able to provide 2,000 beds in single rooms equipped with bath or shower – the need of most of the typical DIOXIN participants. Instead, visitors often prefer and use in pension-type accommodation and stay outside of the city. In addition, they lodge in double and triple rooms because they come with family. Many stay with families in individual houses because private persons, during festival time, are allowed to sub-let their homes.

Thus, when receiving registration of DIOXIN'90 participants and requests for accommodation, within approximately four weeks all single rooms with showers in Bayreuth city hotels were booked and we had to make arrangements with hotels in the larger environment of Bayreuth.

We did not only "loose" the 3- or 4-star hotels but also the cheaper places that we planned to offer to DIOXIN'90 participants, especially to students: In summer 1990, there were many "immigrants" from the just former GDR that lived for several weeks or months in small hotels or pensions that have been converted to family homes.

We had to react rapidly and made provisional reservation in all types of hotels and pensions in Upper Franconia and provide options for accommodation. We also had to hire buses that would transport participants from as far as Nürnberg (85 km south of Bayreuth) or Hof (55 km north of Bayreuth). Finally, there were quite a number of participants that "enjoyed the beautiful countryside of Upper Franconia during the DIOXIN'90 Symposium week.

As a matter of fairness, we have also to admit that we caused lodging problems to others: During DIOXIN'90, there was a group of young opera singers that gathered in Bayreuth to present themselves to agents for possible engagements at opera houses. They were stunned by the fact, that two weeks after the closure of the Wagner Opera Festival no hotel rooms were available. When they investigated for the cause of their problem, we came together and hired them for our social event on Thursday night: They put on the stage for us their best singers to entertain DIOXIN'90 participants with excerpts from opera and operetta. Later, we were informed that some of them actually got a contract for the next theater season at European opera houses.

#### Infrastructure

Although Germany is a highly industrialized country and in our Institute we made highly sophisticated dioxin and furan research, back in 1990, communication systems such as fax, email, mobile phones did either not exist or were not well developed. For example: in 1989, when we started preparation of DIOXIN'90, we figured out that we would need an additional telephone number from the University to connect it to our newly acquired fax machine. This was not possible, since we had the first fax machine within the University and erroneously, it might have been considered as THE central fax for the whole University. Thus, within a University Institute, we had a public fax number. Do you remember? Heidi's phone number was a 6-digit direct number after the country and the city codes (+49-921-55 2154) and the fax number only had 5-digits (+49-921-54626).

### **Receiving and Printing Short Papers**

The conference organizing team was able to realize the ambitious project and have three volumes of Organohalogen Compounds printed and ready for distribution at DIOXIN'90. This was a major challenge. In 1990, e-mail was not well established and definitively, there was no possibility to send attachments with e-mails. Consequently, we received manuscripts in hardcopy and by normal mail as letters (only a very few authors included a diskette). Since some authors were late to meet the deadline for their papers to be reviewed, they send them by fax to respect the time limit. We will not disclose the name but there was one author who was late with his submission and sent seven papers (four papers each) per fax on virtually the last day. Unfortunately, the author got a transmission error report and to make sure that all his papers were received okay, he re-sent them. Can you imagine how the office looked the next morning with all the individual pages rolled up from a fax machine that utilized thermo paper?

Text processing as well was not at the stage as it is today – I believe, we were on Microsoft Word, Version 3.1 (DOS system). Once the manuscripts were reviewed and corrected, if necessary, we had to print the headers and footers on each page. This meant, we had to place each page into the printer and pass them through the printer and add headers and footers. WE had a laser printer but many papers were printed on ink-jets that would not survive the high temperature in the laser printer. We found this out after we had damaged several originals and thus, had to retype these papers. We also received a large number of papers on B4 or legal format, which did not fit into our A4 printer. The solution, and to prevent re-typing, was that we copied all papers onto A4 size paper so that we could run them through the laser printer to add headers and footers. Many manuscripts that were type with typewriters (some mechanical) or where the formatting could not be adjusted to our book format were typed – Many thanks to the students that spent hours and hours with typing! We are sure that they learned a lot about publishing scientific papers!

Students were a great assistance for us, the local organizers. They helped a lot and did things that were not included in their curriculae. They worked over-time without complaints and developed unprecedented skills: after receiving more than 500 envelopes with manuscripts, one of the students was able to identify the sender's country by the smell of the glue! She was convinced that envelopes from Japan had a different odor than those from the Netherlands, the United States, Canada or Germany, *etc*.

We had a great printer company – a family-owned company from a city about 60 km from Bayreuth. They were available to us and the whole family made extra shifts during the last weekend before the conference to have the books ready for distribution on Monday. Of course, they had to make the trip several times due to the large mass of books.

### **VENUE AND PROGRAM**

The opening of DIOXIN'90 was performed in the Stadthalle of Bayreuth where the Secretary for Environment of the Federal Republic of Germany welcomed the participants on behalf of the official sponsor, Germany's Minister for Environment, Nuclear Safety, and Nature Conservation. The 1990 German Minister for Environment was Dr. Klaus Töpfer, who today is the Executive Director of the United Nations Environment Programme (UNEP) and who was invited to give the opening plenary speech at the next Dioxin Symposium, which was

celebrated in 2004 in Berlin. Other opening ceremony speakers were the Lord Mayor of Bayreuth, Dr. Dieter Mronz and the President of the University of Bayreuth, Dr. Wolf.

After the opening ceremony on Monday morning, the conference moved to the campus of the University where the scientific program including oral presentations mostly in four parallel sessions and posters on display during the whole week.

Since this was the 10<sup>th</sup> International Dioxin Symposium, all past conference organizers were invited to be represented with a booth. Toronto'89 made most efforts and shipped a large box, which unfortunately arrived only at mid-week but finally could be displayed (see photo next page).

Bayreuth is a small city and thus, many participants could walk to the venue or rented a bicycle (as can be seen by our colleague and friend from Japan, right).

During the day, there was strongly science on the program. However, after sessions, "Bavarian bread" (= beer) was made available in the tent. A Bavarian band plaid the typical music of the region, well-known all over the world.

Symposium dinner (below) in the Stadthalle, Bayreuth



















Above from left to right:

- DIOXIN'89 Toronto exhibit
- Theodore Brna and Jim Kilgroe of US-EPA
- Tom Tiernan from Wright State University

Left: Some of the leading dioxin researchers were deviated and made a day trip to Berlin to see the unified Germany and to secure some pieces of the Berlin Wall.

Below: Half a year later, Heidi Fiedler, Chris Rappe and others in sunny Arizona



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