

REPORT BACK: FIFTH INTERNATIONAL CONFERENCE ON INDOOR AIR QUALITY AND CLIMATE HELD IN TORONTO FROM 29 JULY - 3 AUGUST 1990

R. Truter,
City Health Dept, City of Johannesburg

The conference was attended by delegates from 60 countries from every country on every continent. Many people of different cultures united to exchange ideas and gain insight into the subject of Indoor Air Quality (IAQ). The conference commenced on Sunday 29 July with a reception for all delegates. The next day the conference was officially opened with much fanfare. More than 1 250 delegates were registered by the end of the first day.

That evening another reception was held at the Toronto Science Museum and a interesting time was had by all. On Tuesday the conference gained momentum and in the course of the week 530 papers were delivered. The proceedings consist of six volumes and certainly make interesting reading. It is easy to become overwhelmed by the magnitude of the conference when one compares the tremendous strides being made by other researchers. Whereas almost every facet of IAQ is being investigated overseas, one becomes newly motivated by the lack of such research efforts in this country.

The most advanced research in the field of Sick Building Syndrome (SBS) is being done by the Danes and the Americans.

The preliminary results of various major Indoor Air Quality surveys were presented at the conference. One of these is in the Madison Building of the Library of Congress and the US E P A buildings in Washington. Over 8 000 employees are employed in these buildings.

The study consisted of various phases, the main phases were the following:

1. Environmental monitoring
 - 103 sites at LOC.
 - 189 at other three buildings.
2. Questionnaire Survey
 - 8 076 questionnaires
3. Supplementary Questionnaires
 - 1 300 questionnaires

The overall response rate for the Questionnaire survey was 84%. The analyses of the results will be published in subsequent reports.

There were seven papers devoted to this project alone.

The second major study to be presented was the Office illness project in Northern Sweden. It's full title is "A Prevalence study of Sick Building Syndrome (SBS) related to demographic data work characteristics and building factors".

The study involved 6 000 office workers in a questionnaire study. The aim of the study was to provide local prevalence of SBS symptoms and perception of dermatological and psychosocial factors, to study the role of demographic and personal factors, work and building characteristics for SBS symptoms and the impact from UDT use on skin symptoms.

It was again confirmed in the study that SBS cases are more prevalent among females than males. Age was a factor as those younger than 40 reported more symptoms than those over 40 years.

It was also noted that SBS cases are more prevalent among persons with a history of asthma or hay fever (Atopy).

These above results are only preliminary and further results are yet to be published.

Many people ask if a solution to SBS has been found. The answer is not as clear cut. This is because solutions are not singular in nature and various approaches are required. Furthermore, the lack of standardised TLVs for Indoor Environments and of standard methodologies make solutions difficult to validate.

Most researchers conclude that inadequate air flows play a major role in contributing to this phenomenon. Added to this is the possible unknown interaction of low levels of pollutants and trigger mechanisms in certain individuals who work in sealed buildings.

The trend towards law enforcement in the USA is now taking precedence among many international agencies involved in this field. There are various options and they are:

1. IAQ standards similar to the NAAQS
2. Emission standards for construction materials used in buildings and homes
3. Increased air flow rates for air conditioning systems (already in operation)
4. Enforcement of no smoking bans in sealed buildings (already in operation)

This issue was hotly debated and many different viewpoints given at the forums. Some form of legislation is required and it remains to be seen which options will be adopted by various countries.

Another issue which received much attention was the lack of standardised methodologies. To this end an International Academy on Indoor Air Sciences was launched at

the conclusion of the conference to facilitate the exchange of ideas and proposals after the conference.

In conclusion we need to ask if the money spent was worthwhile in view of the infancy of the field in South Africa. I would answer that question by saying that we do not really know what the state of the IAQ problems are in this country are. The response of the public to this subject has been very strong and we suspect that this is only the tip of the iceberg. This country has a different set of circumstances which will make for very interesting studies.

The conference was valuable in terms of the great amount of information obtained and advice given by various specialists.

It also serves as a measure for the speakers to ascertain the progress being made by their research.

The next conference will be held in Finland in 1993. Let's hope that next time there will be more papers from this country.

I would like express my sincere thanks to all those who have supported this project in some way and especially the following organizations:

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