

Neurotox News

Nr 11
December
2004



**The Scientific Committee on Neurotoxicology and Psychophysiology
of the International Commission on Occupational Health**

Chairman editorial

Dear colleagues,

It is with deep regret that I share with you the message that Professor He Feng-Sheng, a well-known member of our committee, has passed away on November 16th. Professor He had a remarkable and successful career within Chinese as well as international organisations of occupational medicine, and one of her special interests was neurotoxicology.

On a personal note, Dr. Roberto Lucchini and myself had the opportunity to work with Professor He, travelling in China in 1994 to set up a research proposal for studies of neurotoxic effects in workers exposed to manganese. I was impressed by her pleasant personality and enlightening scientific discussions. Furthermore, she was a very good guide and host on this tour of central China. I am grateful for having had the opportunity to work with Professor He.

Professor He will be surely missed, and the moments of interactions with her will always be in our memory.

Anders Iregren



Fengsheng He, Xinyu, Jiangxi, October 1994

From the secretary

Dear committee members,

I still remember that trip to China; we traveled in the immensity of that big country and reached a wonderful place full of colors and life: Xinyu, situated in the Jiangxi province in central China. Anders and I went there to visit the *Xinyu Steel Industry*, a large industrial complex with several types of metallurgic production. Professor He was the trip organizer and our scientific and spiritual guide. Her immense contribution to the development of Occupational Medicine will be never forgot.

On January 28 there will be a mid term meeting of all ICOH officers from the various Scientific Committee. Chairmen and Secretary will report about the SC activities and discuss the future proposals.

Regarding the preparation of ICOH2006 in Milan, I would like to remind you that some special themes and events have been proposed by our Committee:

- 1) Neurosensory data to be used in risk assessment

- 2) New statistical approach for the evaluation of neurobehavioral data;
- 3) New approach in the diagnosis of solvent related toxic encephalopathy
- 4) Advances in children neurobehavioral evaluation

Please let us know about your intention to participate in one of these mini-symposia, and if you have more ideas and suggestion for ICOH2006. The second announcement of the congress will be available soon on <http://www.icoh2006.it/it/index.html>.

In the meantime, do not forget to check the web page of the next 9th International Symposium in Korea for September 2005 <http://home.kosha.net/~neurotox>, remember the deadline for abstract submission on March 31st, 2005 !

In this issue you will find a short report by Christoph van Thriel on the chemosensory workshop that was held in Cologne, Germany, on November 16, 2004. This is a very important topic that will surely see our SC very active in the future.

With my best regards and wishes !
Roberto Lucchini

I have been asked to forward the following message.

By Jordi Llorens, INA Secretary:

To the International Toxicology Community

Dear Colleagues,

We are including in this message two links to files for a Call for Proposals for Symposium, Workshop and Continuing Education Sessions for the Eleventh International Congress of Toxicology (ICT 2007) to be held July 15 - 19, 2007 in Montreal, Canada. The first is the Call for Proposals <http://www.ict2007.org/pdf/ictcallproposals.pdf> .

The second is the Form <http://www.ict2007.org/pdf/ict-subproposals.pdf> for Submitting Proposals. This message is being sent to the Presidents and Secretaries of each of the IUTOX constituent societies. We ask that you forward this message to your members.

Thank you for your assistance in forwarding this information and we look forward to receiving your Proposals.

The ICT XI Scientific Program Committee

Evaluation of chemosensory effects due to occupational exposures



An expert meeting initiated by the German "MAK-Commission"

November 16th, 2004

Organized by the Institute for Occupational Physiology at the University of Dortmund

Recently, the "Adversity Workshop" was held in Cologne, Germany, and more than 80 participants from all over the world visited this important workshop. During that workshop various experts from inhalation toxicology, behavioral toxicology, occupational medicine and experimental psychology talked about recent study results and their thoughts about chemosensory effects of occupational exposures.

Scientific Background

It has become necessary to evaluate chemosensory effects in the process of derivation of OELs (Occupational Exposure Limits) of hazardous chemicals at the workplace. A valid discrimination between sensory irritations affecting the upper respiratory tract and odor effects, as well as the separation of annoyance and adverse health effects appears to be difficult. This problem has been discussed by the "MAK-Commission" (Senate Commission of the DFG on the Investigation of Health Hazards of Chemical Compounds in the Work Area), as well as in the European context (SCOEL, Scientific Committee for Occupational Exposure Limits). The "MAK-Commission" has taken the initiative to organize this workshop.

Aims

The lectures given during the workshop addressed general regulatory needs, odor effects, olfactory and trigeminal chemoreception in humans. Based on these lectures the evaluation of chemosensory effects in view of standard setting have been discussed, and further research needs have been debated.

In order to assist in further evaluations of chemical substances the results of the Workshop will be published in the International Archives of Occupational and Environmental Health.

Agenda of the lecture session

(a) Regulatory needs

L.S. Levy (Leicester, UK)

European regulation of chemicals: Criteria for the use of neurobehavioral data within the process of limit setting.

(b) Odor effects

F. Gobba (Modena, Italy)

Olfactory toxicity: long-term effects of occupational exposures.

G. Winneke (Düsseldorf, Germany)

Features of environmental odor annoyance and its regulation: Comparison with occupational exposure settings.

R.L. Doty (Philadelphia, USA)

Factors that influence olfactory function.

J. Hoffmann, A. Ihrig, G. Triebig (Heidelberg, Germany)

Experimental approach to evaluate chemosensory effects of chemical compounds at the workplace.

Example: ammonia

(c) Olfactory and trigeminal chemoreception in humans

J.H. Arts (Zeist, The Netherlands)

Incorporating local effects into the regulatory process.

D. Paustenbach and D. Shusterman (San Francisco, USA)

Are chemosensory effects of inhaled chemicals adverse?

M.A.M. Smeets and P. Dalton (Utrecht, The Netherlands)

Psychological approaches modeling human response to chemosensory stimulation. - What has to be considered for OEL settings?

C. van Thriel and E. Kiesswetter (Dortmund, Germany)

From chemosensory thresholds to whole body exposures:

Experimental approaches to evaluate chemosensory effects of chemicals.

Panel of the round table (17.15 - 19.00)

H.M. Bolt (Dortmund, Germany)

A. Iregren (Stockholm, Sweden)

L.S. Levy (Leicester, UK)

P. Orbaek (Kopenhagen, Denmark)

D. Paustenbach (San Francisco, USA)

M. Schaper (Arlington, USA)

G. Triebig (Heidelberg, Germany)

R.A. Woutersen (Zeist, The Netherlands)

Results of the round table

The discussants of the round table agreed that in general odor effects are not adverse. However, there was an agreement that some substances (e.g. amines) with offensive odors might be regulated to avoid inferences of the odor with performance. Neuropsychological tests should be developed and used to identify such distractive effects.

With respect to sensory irritations it was stated that human data should be the preferred basis for deriving Occupational Exposure limits. Nevertheless, there was consensus that data from animal studies (e.g. RD₅₀ values) might serve as a starting point for further investigation. Moreover, chemosensory thresholds psychophysically assessed in humans, as well as their modeling based on quantitative structure-activity relationship analysis should be used for the preliminary evaluation of the chemosensory potency of a chemical.

A comprehensive evaluation should be based on well-conducted studies using perceptual, behavioral, physiological, and psychophysical methods to identify chemosensory effects.

It was encouraged to set up guidelines for the evaluation of studies investigating chemosensory effects like it had been previously done in EU Key Document: "Criteria for the Qualitative Evaluation of Human Neurobehavioral Studies of Neurotoxicity" (Report EUR 17390 EN. 1997).

International Meetings

9th International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health

September 26 (Mon) - 29 (Thu), 2005, Gyeongju, Korea

Theme:

"Linkage between Developed countries and Developing countries on neurotoxicology"

Major topics:

- Neurobehavioral changes by various neurotoxic substances
- Environmental Issues by neurotoxic substances
- Biological Monitoring and Biomarkers
- Work Stress related conditions
- International collaboration on moving neurotoxic chemicals from developed countries to developing

<http://home.kosha.net/~neurotox>
neurotox@kosha.net

INA-10 - The 10th Meeting of the International Neurotoxicology Association

26 June -1 July 2005, Hotel Haikko Manor, Porvoo, Finland

Aims of the INA-10 Jubilee Meeting

1. To promote interaction between neurotoxicology and other fields of neurosciences
2. To increase collaboration between neurotoxicologists, epidemiologists and clinicians
3. To provide an exciting forum for graduate and postgraduate students
4. To increase knowledge of the mechanisms of neurotoxic adverse effects to provide basis for
 - a. safety regulations to prevent occupational and environmental neurotoxic effects
 - b. clinical practice and reliable diagnostics
 - c. identification of new neurotoxic hazards
 - d. treatment strategies of adverse effects

<http://www.neurotoxicology.org/ina10.htm>

"International Conference on Occupational Health Services 2005, OHS2005"

25-27 January 2005,
Marina Congress Centre
Helsinki, Finland

The Conference is organized by the Finnish Institute of Occupational Health and the Finnish Ministry of Social Affairs and Health. Co-sponsored by WHO, ILO and ICOH. Contact info: OHS2005 Secretariat, Finnish Institute of Occupational Health, Ms. Taina Pääkkönen, Topeliuksenkatu 41 a A, FIN-00250 Helsinki
 E-mail: taina.paakkonen@ttl.fi
<http://www.ttl.fi/OHS2005>



◆ The newsletter

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*Contributions to the newsletter are most welcome, preferably as .rtf files via E-mail.
 Preferred file format is Rich Text Format or MSWord. The newsletter layout is produced using MSWord.
 Feel free to contact me when you have any questions or suggestions related to contributions and/or the contents of this newsletter!*

Committee's members

To avoid the generation of spam messages using email addresses, we listed only the names and countries of our committee's members. More info can be obtained by the SC officers.

Amr Mahmoud
Cairo, Egypt

Anger Kent
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Araki Shunichi
Kawasaki, Japan

Bleecker Margit
Baltimore, USA

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Kiev, Ukraine

Cassitto Maria Grazia
Milan, Italy

Cheong Hae-Kwan
Kyongbuk, South Korea

Cherry Nicola
Alberta, Canada

Chia Sin Eng
Singapore, Singapore

Darandari Jamal
Randwick, Australia

Dryson Evan
Auckland, New Zealand

Edling Christer
Uppsala, Sweden

Gao Xing
Beijing, PR China

Gobba Fabriziomaria
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Grandjean Philippe
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Harari Raul
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Igisu Hideki
Kitakyushu, Japan

Iregren Anders
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Jin Huiqing
Hefei City, PR China

Juengprasert Wilawan
Nonthaburi, Thailand

Juntunen Juhani
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Yokoyama Kazuhito
Mie, Japan