

Neurotox News

Nr 1
2000



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

A new issue of the NeurotoxNews, and a new management.

I sincerely hope that this new situation means a positive input for the committee! As this issue of our newsletter may reach you by Christmas, I would like to take this opportunity to wish you all a joyful Christmas and a happy and prosperous New Year!

At our committee meeting in Singapore, I officially replaced professor Shunichi Araki as chairman of our committee. I wish to take this opportunity to thank professor Araki for his accomplishments during seven years as chairman, for his hard work in the committee, and for our collaboration over the two terms! I'm sure professor Araki will keep up his good work for the committee and our common interests also in the future.

When I took over as chairman, I was replaced in turn as the secretary of the committee. The new secretary is Dr. Roberto Lucchini from Brescia. As you all know, he has been working for many years in our area of research, and he's the hard working organizer of the 8th International Symposium, to be held in June 2002. Elsewhere in this newsletter you'll find more information about the progress of his planning of the 8th Symposium.

Apart from the planning of the 8th Symposium we are presently working on two scientific mini-symposia at other meetings. We are now finalizing

programs for mini-symposia on the neurotoxicity of manganese at the INA8 in Portugal, and at the INFACON in Quebec, both in June 2001. At these meetings our committee will officially be a co-organizer due to these events.

We are working on plans for collaboration also with other ICOH committees, and we warmly welcome your suggestions for further activities. When you have ideas where the committee may be involved to the benefit of the realization of the events, please do not hesitate to bring your proposals to our committee!

Hoping for still more activity within our committee!

Anders Iregren
Your new chairman



A few notes from the new Secretary

More than anything, these notes are intended to wish all of you a Merry Christmas and all the best for the New Year. I have been working within this committee for many years now, first I was introduced to it by Renato Gilioli and afterwards I joined Anders Iregren in many adventures. I would like to thank these two "maestros" for building and carrying on through the years this important committee. I feel pleased and honored to work in this area of toxicology and prevention and hopefully the new management will be able to give new impulse to the discipline.

A little change has already been made in the layout of this newsletter which is now edited in MSWord, so it can be distributed more readily using email. All committee members are strongly invited to write for the bulletin. Just send me the text by email and I can easily put it in the next number, that should come out in March 2000.

Anders and I wish to have many "regional secretaries", following the suggestion of the former chairman Shunichi Araki. Prof. Araki himself offered to act as regional secretary for Asia and prof. Landrigan for the USA. We also have Krystyna Pawlas from Poland who was asked by me during the excellent conference "Metals in Environmental Medicine" held in Wroclaw, Poland, on October 19-21, 2000. Ideally this will be an additional important link to the East European area.

I will ask the regional secretaries to write me about the situation in their geographical areas, regarding environmental and occupational exposure to neurotoxic hazards. This is a simple intellectual undertaking, but it is very important for us to start up the discussion and the exchange of views and ideas within the committee.

Roberto Lucchini

Committee membership

It is my duty to inform you that we have an important problem concerning the members of our committee. The present membership list was returned to us by the officers of ICOH, with indications who were and who were not members in good standing with the ICOH. Unfortunately the statistics for our committee are not very flattering. Out of the 49 "members" on our list only 30 are in good standing. For 8 of the remaining membership expired in 1999, but for the other 11 membership expired earlier, or was never even established. This situation is of course not acceptable, since the scientific committees are the backbone of the ICOH. Committee members simply have to be ICOH members.

Therefore, we will now employ the following procedure: This issue of NeurotoxNews is distributed according to our old address list. For the next issue, which is planned for distribution in March 2001, an updated list that contains only ICOH members will be used.

Thus, when you want to stay with us and contribute to the work of the committee, and continue to receive mail and information from us, you must be an ICOH member, and you have to pay your dues. By the end of February 2001 we will update the address list with ICOH centrally, and only members in good standing will be kept on this mailing list.

Anders Iregren.

The 7th International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health

The proceedings from the 7th symposium are printed and distributed!!

The special issue of Neurotoxicology, vol.21, n.5, October 2000, is now available with the peer reviewed papers. There are 5 reviews, 19 research reports, 1 case report and all the abstracts presented. The list of contents from the international journal Neurotoxicology is attached.

All of the most relevant topics in our field are covered with very high quality, stimulating and innovative contributions. Out of a total number of 25 papers, 14 articles deal with methodological aspects, 5 with exposure to organic solvents, 2 with manganese, 1 with aluminum, 1 with lead, 1 with insecticides, and 1 with occupational exposure limits.

A book was sent by the editor in chief Joan Cranmer to each corresponding author and all participants at the symposium.

This final product is a good conclusion of the very successful 7th Symposium, that was held in Stockholm in June 1999.

The 8th International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health

- As you all should know by now, the 8th symposium will take place June 23-26 2002 in Brescia, Italy. This city is situated some 100 km to the east of Milan, close to the very famous Garda Lake. The Institute of Occupational Health at the local university is the official organizer, together with the National Institute for Occupational Safety and Prevention, and the person responsible for the planning of the symposium is myself, Roberto Lucchini.
- The 1st announcement is now available, and it was mailed to about 7000 people all around the world. It was also made available at several international meetings, including the ICOH conference in Singapore. More printed copies are still available, and will hopefully be distributed in the Developing Countries. Please contact me if you have ideas on how to handle this in a practical way.
- A special effort is aimed to raise funding for colleagues from Developing Countries, continuing the tradition of our triennial symposia.
- New Regional Secretaries helped a lot in distributing the first announcement, they are Shunichi Araki, from Japan, Philippe Landrigan from the USA, and Krystyna Pawlas from Poland. More colleagues are welcome to act as regional secretaries, in order to cover other geographical areas of the planet.
- A letter was sent to all the colleagues involved in the Scientific Committee and in the International Organizing Committee asking for a direct contribution in the identification of the key topics. In addition to this, each member of our committee is more than welcome to present ideas and suggestions. All input will be discussed very soon, since a second announcement is scheduled for next spring.

Minutes from the Committee Meeting

The Committee meeting was held on August 29, 2000 at the ICOH 26th International Congress on Occupational Health, Singapore.

Members Present: Shunichi Araki (Chair), Anders Iregren (Secretary), Fensheng He, You Xin Liang, Arne Wennberg, K.Yokohama, FabrizioMaria Gobba, R.Kishi, Sin Eng Chia, Philippe Landrigan, Seong-Kyu Kang, Roberto Lucchini, Gerhard Triebig.

Others present: Song-Yen Tsai, Wilawan Jungprasert, Jamal Darandari, Gert van der Laan.

New Members: Song-Yen Tsai, Wilawan Jungprasert, Jamal Darandari, Gert van der Laan, expressed interest in joining the committee. CV's are to be submitted in the usual way to the Secretary.

1. Prof. Araki welcomed all the Committee members and gave a report on the activity by the Scientific Committee in the past year as published in the ICOH report from the Scientific Committees and working groups. He explained also the procedure for the nomination of the new Chairman of the Committee that took place recently. Based on the votes from the Committee members, prof. Anders Iregren was appointed by the President of ICOH Prof. Caillard as the new Chairman of the Committee. The results of the votes for the new secretary indicated Roberto Lucchini.
2. Anders Iregren thanked prof. Araki for the work done during the past 7 years of his chairmanship, and after consultation with the Committee members appointed Roberto Lucchini as the new secretary. Anders reported also about the 7th Symposium that was held in Stockholm last June. The proceedings will be published in the next issue of Neurotoxicology (Sep-Oct 2000). Following a peer review process 25 papers will be printed out of the 62 manuscripts submitted.
3. Roberto Lucchini explained the actions undertaken for the preparation of the next 8th symposium that were mainly concerned about the acquisition of proper funding. A formal agreement has been reached with the Italian National Institute for Occupational Safety and Prevention in Rome. The pre-print of the first announcement was published for the participants to the ICOH Congress in Singapore, and the final print will be distributed on a larger scale in the near future. Furthermore, a letter will be send to all the colleagues involved in the Scientific Committee and in the International Organizing Committee asking for a direct contribution in the identification of the key topics. Finally, a substantial effort for the next Symposium will focus on rising funding to support the participation of scientists from the developing countries.
4. Another issue discussed during the meeting was represented by the membership of the Committee: each member should demonstrate recent activities related to the field of neurobehavioral toxicology, otherwise he/she will be asked to resign. We should also get a recent update from the secretary general of ICOH to see whether our committee members are all in good standing. Non-active members who are not in good standing with ICOH could be excluded.
5. On the other hand there is a clear need for the involvement of new active members. INA (the International Neurotoxicology Association) has recently proposed some collaboration with our Committee. This will be discussed further in the near future, since they have asked a contribution for the preparation of the next INA meeting that will be held next year in Portugal. Such contacts were approved by this meeting.
6. Finally, the possibility of organizing teaching courses in the developing countries has been proposed and will be further discussed.
7. A call for proposals for the venue of the 9th Symposium will be opened soon.

World Occupational Exposure Values Symposium

International Cooperation on Scientific and Technical issues

3-5 November 2001
Brussels, Belgium

The Mission of the Symposium is to bring together those with an interest in the scientific basis for occupational exposure limit values; to address common themes relating to their development; to spread awareness of the work being carried forward; and to establish ongoing networks of interested parties. The symposium will also bring occupational exposure limit setting bodies together to achieve international cooperation on these scientific and technical issues.

The event will be administered by ACGIH Worldwide. All correspondence and inquiries should be directed to:

ACGIH Worldwide
1330 Kemper Meadow Dr.
Cincinnati, Ohio 45240, U.S.A.
Telephone: +1 513 742 2020
Fax: +1 513 742 3355
E-mail: meetings@acgih.org
Web: <http://www.acgih.org>

The Manganese 2001 Health Issues Symposium

Held as part of INFACON NINE, June 3-6 2001, Quebec City, Canada

Issues to be addressed: Manganese toxicokinetics and bioavailability, Monitoring and characterization of manganese exposure, Benefits and risks of human exposure, Mechanism(s) for toxic effects, Risk assessment and regulatory decision making, Occupational exposure and effects

More information is available at <http://www.infacon.com>

The Eight Meeting of the International Neurotoxicology Association

Estoril, Portugal
June 17-22, 2001

INA8 is organized by

Dr. Maria Camila Cantgiro Batoréu
E-mail: mccbatoréu@ff.ul.pt
Dr. Anna Paula Marreilha dos Santos
E-mail: apsantos@ff.ul.pt

who can provide further information.

Two mini-symposia on the neurotoxicity of manganese

Both the meetings of INFACON in Québec City and of the INA in Estoril, will include a Symposium on Manganese neurotoxicity, which will be co-organized by our committee. The program of these symposia on manganese is now being finalized, and will definitely be available in the next issue of this bulletin. The program will be substantially similar in both events, but as in Québec more emphasis will be put on industry-related issues, in Estoril we will focus on the interactions between human neurobehavioral research and basic sciences.

These events are both very important; the first one because of the emerging need to discuss manganese neurotoxicity based on the possible introduction of MMT in gasoline on a world scale, and the second one as a first step towards closer interactions with INA and experimental toxicologists in general. Hopefully many members of our committee will have a chance to attend at least one of these meetings !

Conference on Occupational Health and Public Health

September 6-9, 2001, Norrköping, Sweden

Themes/sessions:

Socially constructed illnesses and diseases
Changing concepts of health
Risk, setting standards and quality management
Regulations and responsibilities
Cross-cultural development
The impact of structures of production and industrial relations on work environment and health
Health in the information era
Roots of occupational and public health
Education and public information
Science and health protection
Changes in the social distribution of health

More information is available at
www.tema.liu.se/ohph

X2001 – Exposure Assessment in Epidemiology and Practice

June 10-13, Göteborg, Sweden

Major topics:

Chemical factors
Ergonomic factors
Psychosocial factors
Physical factors
Biological factors

More information is available at
www.ymk.gu.se

and by E-mail
X2001@ymk.gu.se

17th Asian conference on Occupational Health

November 1-4, 2002, Taipei, Taiwan

Major topics:

Air pollution	Health promotion
Cancer	Law & compensation
Climate change	Musculoskeletal disorders
Dermatosis	Neurologicla disorders
Epidemiology	Radiation
Ergonomics	Reproductive hazards
Stress	Exposure & Risk assessment
Semi-conductor Industry	Gene-environment interaction

More information is available at
www.ach2002.org.tw

XVIth World Congress on Safety and Health at Work

26-31 May, 2002, Vienna, Austria

Congress themes:

A New technologies, New Patterns of Work Organization – New Challenges for Health at Work
B Methods, Procedures and Instruments of Prevention
C Institutional and Political Aspects of Prevention
D Prevention in Small and Medium-Sized Enterprises
E Prevention in Developing Countries

More information is available at
www.safety2002.at

◆ The newsletter

This newsletter is compiled quarterly by

Roberto Lucchini, MD
Institute of Occupational Health
University of Brescia
P.le Spedali Civili 125125 Brescia, ITALY

Fax: +39030 3996-080

Tel: +39030 3995-735

Contributions to the newsletter are most welcome, preferably as text files via E-mail, or on diskette by ordinary mail. Preferred file format is plain text or MSWord. The newsletter layout is now produced using MSWord.

Deadlines for contributions are:

- March 31 for the spring issue
- July 31 for the summer issue
- September 30 for the autumn issue
- December 31 for the winter issue.

Feel free to contact me when you have any questions or suggestions related to contributions and/or the contents of this newsletter!



NeuroToxicology®

VOL. 21
NO. 5

OCTOBER 2000

SPECIAL ISSUE

*Seventh International Symposium on Neurobehavioral Methods and Effects
in Occupational and Environmental Health*

FOREWORD AND ACKNOWLEDGMENTS

Seventh International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health: Foreword and Acknowledgments	651
Anders Iregren	

RESEARCH REPORTS

The Significance of Neurobehavioral Tests for Occupational Exposure Limits: An Example From Sweden	653
Christer Edling and Per Lundberg	
Organic Solvent Induced Chronic Toxic Encephalopathy: Extent of Recovery, and Associated Factors, Following Cessation of Exposure	659
E. W. Dryson and J. A. Ogden	
Influence of Personality Traits on Neuropsychological Test Performance in Toxic Encephalopathy Cases and Healthy Referent Subjects	667
Roger Persson, Kai Österberg, Björn Karlson and Palle Ørbaek	
Subjective Symptoms Due to Solvent Mixtures, Dioxin and Toluene: Impact of Exposure Versus Personality Factors	677
A. Seeber, P. Demes, K. Golka, E. Kiesswetter, M. Schäper, C. van Thriel and M. Zupanec	
Neurobehavioral Study on the Interactive Effects of Age and Solvent Exposure	685
E. Kiesswetter, B. Sietmann, M. Zupanec and A. Seeber	
The Applicability of WHO-NCTB in Korea	697
Seong-Kyu Kang	
Validity of a Computer-Assisted Neurobehavioral Test Battery in Toxicant Encephalopathy	703
Susan P. Proctor, Richard Letz and Roberta F. White	
Establishing Stable Test Performance in Tests From the Behavioral Assessment and Research System (BARS)	715
Diane S. Rohlman, Steffani R. Bailey, Mark Brown, Melissa Blanock, W. Kent Anger and Linda McCauley	
Standardization of a Neuromotor Test Battery: The CATSYS System	725
Christine Després, Daniel Lamoureux and Anne Beuter	
Reliability of Some Tremor Measurement Outcome Variables in Field Testing Situations	737
R. Letz and F. Gerr	

Utility of Vibration Sense Testing for Use in Developing Countries: Comparison of Extinction Time on the Tuning Fork to Vibration Thresholds on the Vibratron II	743
L. London, M. L. Thompson, W. Capper and J. E. Myers	
Relationships Between Quantitative Measures and Neurologist's Clinical Rating of Tremor and Standing Steadiness in Two Epidemiological Studies	753
F. Gerr, R. Letz and R. C. Green	
Epidemiological Case Definitions of Peripheral Neuropathy: Experience From Two Neurotoxicity Studies	761
F. Gerr and R. Letz	
Brain Magnetic Resonance Imaging and Manganese Exposure	769
R. Lucchini, E. Albin, D. Placidi, R. Gasparotti, M.G. Pigozzi, G. Montani and L. Alessio	
Evolution of Color Vision Loss Induced by Occupational Exposure to Chemicals	777
Fabriziomaria Gobba and Alessandro Cavalleri	
Euroquest: The Validity of a New Symptom Questionnaire	783
Björn Karlson, Kai Österberg and Palle Ørbaek	
Neuropsychiatric Symptoms in Active Construction Painters With Chronic Solvent Exposure	791
G. Triebig, M. Nasterlack, W. Hacke, K. H. Frank and H. Schmittner	
Switching Attention - Additional Aspects for the Analysis	795
Christoph van Thriel, Thomas Kleinsorge, Michael Zupanic and Andreas Seeber	
Assessment of Neurobehavioral Performance as a Function of Current and Cumulative Occupational Lead Exposure	805
R. Lucchini, E. Albin, I. Cortesi, D. Placidi, E. Bergamaschi, F. Traversa and L. Alessio	

REVIEWS

The Toxicology of Aluminum in the Brain: A Review	813
Robert A. Yokel	
Neurotoxic Effects of Insecticides - Current and Future Research: A Review	829
Fengsheng He	
Lessons Learned -15 Years of the WHO-NCTB: A Review	837
W. Kent Anger, You-Xin Liang, Victor Nell, Seong-Kyu Kang, Donald Cole, Barbara Bazylewicz-Walczak, Diane S. Rohlman and O. J. Sizemore	
The Use of Neuroimaging Techniques for Clinical Detection of Neurotoxicity: A Review	847
Christoph J. G. Lang	
Color Vision: A Sensitive Indicator of Exposure to Neurotoxins	857
Fabriziomaria Gobba	

CASE REPORT

Occupational Mn Parkinsonism: Magnetic Resonance Imaging and Clinical Patterns Following CaNa₂-EDTA Chelation	863
Gianluigi Discalzi, Enrico Pira, Elena Herrero Hernandez, Consuelo Valentini, Marco Turbiglio and Fabrizio Meli	

