



Call for abstracts

ISBM 2010

8<sup>th</sup> International  
Symposium  
on Biological  
Monitoring  
in Occupational and  
Environmental Health  
Hanasaari, Espoo,  
Finland  
6–8 September 2010



[www.ttl.fi/ISBM2010](http://www.ttl.fi/ISBM2010)

## Welcome

We are pleased to invite you to the 8th International Symposium on Biomonitoring in Occupational and Environmental Health (ISBM 2010), to be held on 6–8 September 2010 in Espoo, Finland.

The symposium aims to gather together scientists, public and occupational health professionals, and policy-makers to consider the recent developments in biomonitoring and both the current and future roles and possibilities of biomonitoring in occupational and environmental risk assessment and management.

The main topic areas include the role of biomonitoring in chemical risk assessment and management, advances and new techniques in biomonitoring, the biomonitoring of new exposures, modelling as a tool in biomonitoring, and the use of biomonitoring in environmental exposure assessment and population surveys. The symposium will also cover other aspects related to the biomonitoring of susceptible populations, and quality assurance in biomonitoring. The scientific programme will consist of keynote lectures, proffered oral and poster presentations, and a roundtable discussion.

In concurrence with the symposium, the Nordic Institute for Advanced Training in Occupational Health (NIVA) will conduct a workshop on Biomonitoring in Occupational Health Practice.

The Symposium will provide a forum for presenting developments and exchanging experiences in the field of biomonitoring, and for considering future trends, opportunities and challenges.

We anticipate an exciting and productive symposium, and look forward to seeing old friends and making new acquaintances.

On behalf of the ISBM 2010 Organizing Committee  
Tiina Santonen, Team Leader  
Chair of the Organizing Committee

## Aims

The aim of the ISBM 2010 symposium is to provide an international forum for exploring the recent advances in biomonitoring, from sample collection and analysis to the interpretation of results, and for evaluating the role of biomonitoring in chemical safety in today's constantly changing workplaces and society in general. It will cover the use of biomonitoring at the workplace, and as part of environmental chemical risk assessment and management.

In concurrence with the Symposium, NIVA will conduct an interactive workshop focusing on the use of biomonitoring for identifying and solving chemical safety problems in occupational health practice.

## Who should attend?

The Symposium is intended for scientists, occupational and public health professionals, policy-makers, and all others in the field of chemical risk management. Its purpose is to develop and evaluate current biomonitoring practises and future role of biomonitoring in chemical risk assessment and management.

The NIVA workshop is aimed at OHS practitioners and experts who are interested in the practical use of biomonitoring as a component of workplace exposure assessment. Together with the ISBM Symposium, the NIVA workshop will provide participants with a firm basis for building a link between biomonitoring, studies in industrial hygiene, and workplace practices. The symposium's plenary sessions are open to the participants of NIVA's workshop.

## Organizers

The Symposium is organized by the Finnish Institute of Occupational Health (FIOH) and the ICOH Scientific Committee on Occupational Toxicology (SCOT), in co-operation with the Nordic Institute for Advanced Training in Occupational Health (NIVA), the ICOH Scientific Committees on Toxicology of Metals (SCTM) and on Rural Health (SCRH), and the French Institut National de Recherche et de Sécurité (INRS).

## Organizing Committee

Finnish Institute of Occupational Health (FIOH)

**Tiina Santonen**, Chair of the Organizing Committee, Finland

**Antero Aitio**, Finland

**Eivor Elovaara**, Finland

**Mirja Kiilunen**, Finland

**Juha Laitinen**, Finland

**Hannu Norppa**, Finland

**Simo Porras**, Finland

Nordic Institute of Advanced Training in Occupational Health (NIVA)

**Mia Latta**, Finland

**Siv Jansson**, Finland

ICOH Scientific Committee on Occupational Toxicology (SCOT)

**Maurizio Manno**, Chair, Italy

**Glenn Talaska**, Secretary, USA

**Claude Viau**, Past Chair, Canada

ICOH Scientific Committee on Toxicology of Metals (SCTM)

**Lars Barregård**, Chair, Sweden

**Monica Nordberg**, Past Chair, Sweden

ICOH Scientific Committee on Rural Health (SCRH)

**Claudio Colosio**, Chair, Italy

Institut National de Recherche et de Sécurité (INRS)

**Alain Robert**, France

**Florence Pillière**, France

## International Advisory Committee

**John Cocker**, Health and Safety Laboratory, United Kingdom

**Gayle DeBord**, National Institute for Occupational Safety and Health,  
USA

**Hans Drexler**, Friedrich-Alexander-University Erlangen-Nuremberg,  
Germany

**John W. Edwards**, Flinders University, Australia

**Åse Marie Hansen**, National Research Centre for the Working  
Environment, Denmark

**Marek Jakubowski**, Nofer Institute of Occupational Medicine, Poland

**Gunnar Johanson**, Karolinska Institute, Sweden

**Jyrki Liesivuori**, Finnish Institute of Occupational Health, Finland  
**Dominique Lison**, Catholic University of Louvain, Belgium  
**Jaroslav Mráz**, National Institute of Public Health, Czech Republic  
**Raymond Olsen**, National Institute of Occupational Health, Norway  
**Choon Nam Ong**, National University of Singapore, Singapore  
**Paul Scheepers**, Radboud University Nijmegen Medical Centre,  
the Netherlands  
**John E. Snawder**, National Institute for Occupational Safety and  
Health, USA  
**Gerhard Triebig**, University of Heidelberg, Germany  
**Sheng Wang**, Peking University Health Science Center, People's  
Republic of China

## Preliminary programme – Invited speakers

The scientific programme will consist of invited keynote speakers, free oral and poster communications on 6–8 September 2010, and the NIVA workshop (6–7 September 2010).

### Monday, 6 September 2010

#### Opening addresses:

##### **Finnish Institute of Occupational Health**

Harri Vainio, Director General

##### **International Committee on Occupational Health (ICOH)**

Maurizio Manno, Chair of the ICOH Scientific Committee on Occupational Toxicology

##### **Nordic Institute for Advanced Training in Occupational Health (NIVA)**

Mia Latta, Director

##### **Institut National de Recherche et de Sécurité (INRS)**

Marie-Thérèse Brondeau, Head of Pollutants and Health Department

#### Opening keynote:

##### **Environmental exposure assessment: collateral damage in the genomic revolution?**

Christopher Wild, Director General, International Agency for Research on Cancer (IARC), France

**Session 1** (plenary):  
**Biomarkers of exposure, effects and susceptibility**

**Keynote:**  
**The use of biomarkers in occupational health research, practice and policy**  
Paul Schulte, USA

**Session 2a** (parallel to session 2b and NIVA workshop):  
**Biomonitoring in environmental exposure assessment and population surveys**

**Keynote:**  
**Goals and challenges of population surveys and biomonitoring**  
Speaker to be announced

**Session 2b** (parallel to session 2a and NIVA workshop):  
**Biomonitoring and susceptible populations**

**NIVA workshop** (parallel to sessions 2a and 2b):  
**Biomonitoring in Occupational Health Practice**

**Opening keynote:**  
**The use of industrial hygiene and biomonitoring in risk assessment**  
Claude Viau, Canada

**Method session**

**Keynote:**  
**Analytical methods for biomonitoring – basic techniques, problems and solutions**  
Kate Jones, United Kingdom

Presentations of participants' studies and projects

**Session 3** (plenary):  
**Poster session**

**Tuesday, 7 September 2010**

**Session 4** (parallel to NIVA workshop):  
**Modelling as a tool in biomonitoring**

**Keynote:**  
**Integration of biological monitoring, environmental monitoring and modelling into the interpretation of pesticide biomonitoring results**  
Claudio Colosio, Italy

**Keynote:**  
**Toxicokinetic modelling and dermal exposure**  
Gunnar Johansson, Sweden

**NIVA workshop** (parallel to session 4):  
**Exposure to metals at work**

**Keynote:**  
**Cadmium exposure in the glass industry**  
Mirja Kiilunen, Finland

Presentations of participants' studies and projects

**Session 5a** (parallel to session 5b and NIVA workshop):  
**New exposures and new biomonitoring techniques**

**Keynote:**  
**Stress biomonitoring**  
Åsa-Marie Hansen, Denmark

**Keynote:**  
**Opportunities for OMICS techniques in biomonitoring**  
Anne Puustinen, Finland

**Session 5b** (parallel to session 5a and NIVA workshop):  
**Quality Assurance**

**Keynote:**  
**Quality control of quality control**  
Andrew Taylor, United Kingdom

**NIVA workshop** (parallel to sessions 5a and 5b):  
**Exposure to organic chemicals and pesticides at work**

**Keynote:**  
**Organic compounds**  
Speaker to be announced

**Keynote:**  
**Exposure to chemical cocktails: firemen's chemical exposure**  
Juha Laitinen, Finland

Presentations of participants' studies and projects

**Session 6a** (parallel to session 6b):  
**Advances and new challenges in metal biomonitoring**

**Keynote:**  
**Low-level exposure to toxic metals – challenges for biomonitoring in risk assessment**  
Staffan Skerfving, Sweden

**Session 6b** (parallel to session 6a):  
**Advances and new challenges in the biomonitoring of organic industrial chemicals and pesticides**

## **Wednesday, 8 September 2010**

**Session 7** (plenary):  
**Biomonitoring in the risk assessment and management of chemicals**

**Keynote:**  
**Towards better chemical management – the role of biomonitoring in chemical risk management in Europe**  
Antti Karjalainen, European Chemicals Agency (ECHA)



## **Roundtable discussion:**

### **The future role of biomonitoring in chemicals management**

#### **State-of-the-art biological monitoring in risk assessment**

Maurizio Manno, Italy

#### **Will biomonitoring play a role in future chemical risk management?**

Tiina Santonen, Finland

#### **Discussion**

### **Closing plenary**

## **Free communication themes; ISBM 2010**

1. Biomarkers of exposure, effects and susceptibility
  - Biomarkers in epidemiological studies
  - Hair, nails, saliva, breast milk, exhaled air and other non-traditional matrices in biomonitoring
  - Developments in effect biomarkers for genotoxic carcinogens
  - Utilization of susceptibility biomarkers
  - Biomarkers of organ toxicity
2. Biomonitoring in environmental exposure assessment and population surveys
  - Goals of population surveys and monitoring
  - Sampling strategies in population surveys
  - Identification of sources of exposure
  - Population studies in risk management
3. Biomonitoring and susceptible populations (unborn babies, children, the elderly; hypersensitivity)
  - Genetic polymorphism – a tool for identifying susceptible individuals and populations?
  - Relationships of genotype and phenotype in chemical metabolism
  - Ethical questions
4. Modelling as a tool in biomonitoring
  - Dermal and other non-inhalation exposure
  - Biomonitoring of chemicals with short half-times
  - Assessing target organ concentrations
5. New exposures and new biomonitoring techniques
  - Immunological and receptor assays in biomonitoring
  - Pattern recognition and OMICS
  - Biomarkers and nanoparticles

6. Quality Assurance
  - Standardization of biomonitoring results (e.g., concentrations per volume blood vs. mass lipid)
  - Effect of external quality assurance on quality
  - Quality assurance of effect and susceptibility biomarkers
  - Quality assurance of sample collection
7. Advances and new challenges in metal biomonitoring
  - Speciation as a tool and problem
  - Monitoring of low metal exposures
  - Reference values
  - In vivo measurement of metals
8. Advances and new challenges in the biomonitoring of organic industrial chemicals and pesticides
  - Biomonitoring of lipid soluble organochlorine compounds such as DDT and PCB
  - Marker chemicals in the biomonitoring of mixtures – e.g. biomonitoring of PAH compounds
  - Protein and nucleic acid adducts as biomarkers
  - Biomonitoring of mixtures
9. Biomonitoring in chemical risk assessment and management
  - Epidemiological and clinical human data in the setting of guidance values for biomonitoring
  - Biomonitoring of individuals vs. groups
  - Ethics of using biomonitoring data in chemical management
  - Biomonitoring and risk management of genotoxic carcinogens

## Free communication themes; NIVA Workshop

- Chemical exposure at workplaces
- Analytical methods for biomonitoring
- Exposure to metals at work
- Exposure to pesticides and industrial organic chemical at work
- Safety aspects of human exposure to chemicals at work

## Call for abstracts

Brief abstracts on the free communication themes (see list at 9–10 page), for both the ISBM 2010 Symposium and the NIVA Workshop, should be submitted by **15 March 2010** using the **online abstract form** at **[www.ttl.fi/ISBM2010](http://www.ttl.fi/ISBM2010)**. Maximum abstract length is 1 page, i.e. 2200 characters. Please see the Symposium website for details on how to format abstracts and how to submit them via the online abstract programme.

## Registration and reserving accommodation

Participants should register using the online registration form. All reservations (including social programme and hotel) should be made on the same registration form. Please see the Symposium website at [www.ttl.fi/ISBM2010](http://www.ttl.fi/ISBM2010) for detailed information on registration, payment, confirmation, cancellation, and the refund policy.

### Symposium fees

	Before 2 May	From 2 May
ISBM delegate fee	EUR 450	EUR 550
NIVA delegate fee	EUR 450	EUR 550
Accompanying person	EUR 100	EUR 120
Symposium dinner	EUR 80	EUR 80

The Symposium fees are VAT-free. Lunches and refreshments during the breaks are included in the delegate fees.

See the Symposium website for the list of Symposium hotels and room prices. Accommodation is reserved using the same online form as for registration.

## Social programme

### Monday, 6 September 2010, 19.00 – 20.30

City Reception, hosted by the City of Espoo. Included in the participation fee but pre-booking on the registration form is requested.

### Tuesday, 7 September 2010, 19.30 – 22.30

Symposium dinner at Restaurant Pörssi, Fabianinkatu 14, Helsinki.  
Price: EUR 80/person

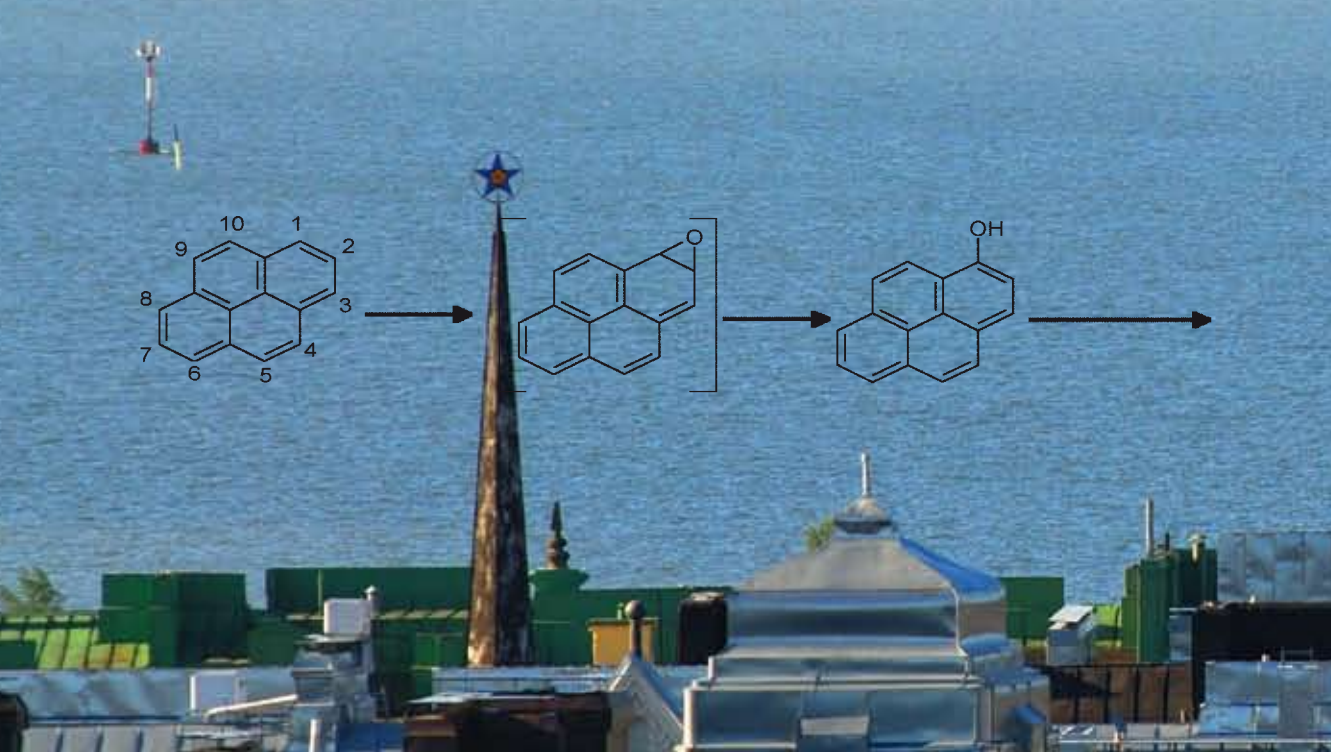


Photo: Niklas Sjöblom, Helsinki Turist&Convention Bureau

## Important dates

Deadline for abstract submission: 15 March 2010

Notification of acceptance: 15 April 2010

Deadline for early registration: 1 May 2010

## Contact information

[www.ttl.fi/isbm2010](http://www.ttl.fi/isbm2010)

### Practical information on registration, accommodation and abstract submission:

Tavicon Ltd. (Congress Bureau)  
Varpu Taavettila, Project Manager  
Tel. +358 3 233 0400  
Fax +358 3 233 0444  
Email: [ISBM2010.symposium@tavicon.fi](mailto:ISBM2010.symposium@tavicon.fi)

### Scientific programme:

ISBM 2010 Organizing Committee  
Finnish Institute of Occupational Health  
Email: [ISBM2010@ttl.fi](mailto:ISBM2010@ttl.fi)

NIVA workshop  
Siv Jansson, Course Coordinator  
Email: [siv.jansson@ttl.fi](mailto:siv.jansson@ttl.fi)

[www.ttl.fi/ISBM2010](http://www.ttl.fi/ISBM2010)



## Sponsors

The Finnish Work Environment Fund



Työsuojelurahasto  
Arbetarskyddsfonden  
The Finnish Work Environment Fund

# ISBM 2010

6–8 September 2010, Espoo, Finland

Monday, 6 September		Tuesday, 7 September		Wednesday, 8 September	
8.00–	Registration and information	8.00–	Registration and information	8.00–	Registration and information
9.00–	<p><b>Opening plenary</b></p> <p>Opening keynote Coffee/tea break</p> <p><b>Session 1</b> Keynote Free communications</p>	9.00–	<p><b>Session 4</b> Keynotes</p> <p>Coffee/tea break Free communications</p> <p>Lunch</p> <p><b>Session 5a</b> Keynote Free communications</p> <p>Coffee/tea break <b>Session 6a</b> Keynote Free communications</p>	9.00–	<p><b>Session 7</b> Keynote Free communications</p> <p>Coffee/tea break <b>Roundtable discussion</b> Opening remarks Discussion</p> <p><b>Closing plenary</b></p>
–17.30	<p>Lunch</p> <p><b>Session 2a</b> Keynote Free communications</p> <p>Coffee/tea break <b>Session 3</b> Poster plenary</p>	–17.00	<p><b>Session 5b</b> Keynote Free communications</p> <p>Coffee/tea break <b>Session 6b</b> Keynote Free communications</p>	–15.00	Lunch
19.00–20.00 Espoo City Reception at Karhusaari		19.30–22.30 Symposium dinner			