



Workshop

on

Mercury speciation analysis – The basis for sound risk assessment, and optimized remediation strategies for contaminated soils, sediments and sludge

Under the auspices of
EVISA – the European Virtual Institute for Speciation Analysis
(www.speciation.net)

EVISA is kindly inviting you to this two-day workshop focused on mercury speciation. Well renowned experts as well as experienced practitioners will report on the solutions provided by mercury speciation analysis to characterize and solve mercury issues.

Date: 27.03.2006 - 28.03.2006

National/International: International

Language: English

Type: Workshop

Location: Scandic Plaza Hotel, Umeå, Sweden

Contact: **Organizing Committee:**
Thomas Liljedahl, Umeå University, Sweden (Coordinator)
[thomas.liljedahl@chem.umu.se]

Douglas Baxter, Analytica AB, Sweden
Kevin Bishop, Swedish University of Agricultural Sciences (SLU),
Sweden
Erik Björn, Umeå University, Sweden
Wolfgang Buscher, University of Münster, Germany
Wolfgang Frech, Umeå University, Sweden
Michael Sperling, EVISA, University of Münster, Germany

Background:

Until recently, risk assessment of mercury pollution has mainly been based on total element concentrations. Unfortunately, the determination of such a virtual sum parameter provides limited information only, since chemical and physical characteristics, biological activity or toxicity, mobility and bioavailability do not depend on the presence and concentrations of elements but rather on chemical species. Today, advances in analytical methodology make it possible to perform speciation analysis, and improved understanding of geochemical and

metabolic processes makes it advisable to utilize the enhanced information provided by speciation analysis for adequate risk assessment, optimization of remediation strategies and for solving other mercury related problems.

Objective:

It is the major objective of the workshop to highlight the value of the enhanced information provided by speciation analysis and to demonstrate how this information can be used to tackle mercury related problems such as, but not limited to, selecting an efficacious remediation strategy for soil, sediments and sludges and to improve its efficiency. Primary target groups are industries, laboratories, consultants, decision makers and other stakeholders interested in speciation analysis and the biogeochemistry of mercury.

Workshop Schedule:

Day 1: Start of Workshop: 10:30 h

Introductory Lecture

10:30 – 10:50 Chemical forms, occurrence, and speciation analysis of mercury,
Petra Krystek, RIVM, The Netherlands

The importance of mercury speciation for society

10:50 – 11:20 Global mercury pollution,
John Munthe, Swedish Environmental Institute, Gothenburg, Sweden

11:20 – 11:50 Forestry and mercury pollution,
Kevin Bishop, SLU, Uppsala, Sweden

11:50 – 12:10 Mercury in crude oil and natural gas. A concern for the oil industry regarding, health and environment, as well as product quality assurance and for producing installations.
Audun Gangstad, Statoil Research Center Trondheim, Trondheim, Norway

Lunch Break: 12:10 – 13:20

How do speciation data improve risk assessment?

13:20 – 14:00 Human toxicity and mercury speciation,
Ulrike Bernauer. Bundesinstitut für Riskobewertung (BfR), Berlin, Germany

14:00 – 14:20 Mercury in the work environment and human health,
Owen Butler, Health and Safety Executive, Sheffield, U.K.

14:20 – 14:40 Combining speciation and isotope labelling to assess net mercury methylation in sediment and soil samples,
Mats Nilsson, SLU, Umeå, Sweden

14:40 – 15:00 The importance of mercury-sulphur speciation for solubility, methylation and demethylation rates in sediments contaminated by the paper and pulp

industry - implications for risk assessment,
Ulf Skyllberg, SLU, Umeå, Sweden

Coffee break 15:00 – 15:30

State-of-the-art mercury speciation analysis

- 15:30 – 16:30 The art of mercury speciation analysis,
Wolfgang Frech, Umeå University, Umeå, Sweden
- 16:30 – 17:00 Round Table Discussion with all lecturers of the day,
Chair person: Wolfgang Frech

Social event

In the evening of the 27th the organisers are planning a social event. Let us surprise you!

Day 2

Ongoing routine mercury speciation analysis in service laboratories: 08:30 – 10:00

Speakers from high level European laboratories involved in routine speciation analysis will report about modern techniques and methods that are applied in daily speciation work.

- 8:30 – 8:50 Sample preparation and analytical methodology solving matrix dependent problems in mercury speciation analysis, S. McSheehy, LCABIE, UMR CNRS 5034 - Université de Pau et des Pays de l'Adour, France
- 8:50 – 9:10 Mercury speciation in routine analysis – current status and future prospects, Jürgen Kuballa GALAB, Hamburg, Germany
- 9:10 – 9:30 More samples, fewer methods. Douglas Baxter, Analytica, Luleå, Sweden
- 9:30 – 9:50 To be announced, IVL, Gothenburg, Sweden

Coffee break 10:00 – 10:30

The benefit of speciation analysis for soils, sediments and sludges

- 10:30 – 10:50 Safe remediation of soil at an industrial site in Sundsvall, Sweden, Sven-Åke Heinemo, Sweco-Viak
- 10:50 – 11:10 A simple field method to quantify mercury volatilization from soils. Risk assessment of contaminated North Sea tidal flats, Anja Stubbe, UFZ, Halle, Germany
- 11:10 – 11:30 Development, Analysis and Assessment of Processes, S. Mangold, Institut für Synchrotronstrahlung, Forschungszentrum Karlsruhe

11:30 – 11:50 Inorganic Mercury Speciation – Application for Risk Assessment and Remediation Strategies of Contaminated Soils, Groundwater and Sediments, H. Biester. Institute of Environmental Geochemistry, Heidelberg, Germany

Lunch Break: 11:50 – 13:00

How EVISA, the European Virtual Institute for Speciation Analysis, will assist users

13:00 – 13:30 EVISA - the premium source of speciation related information, Michael Sperling, EVISA, University of Münster, Germany

13:30 ***General discussion***
What benefits do we see using mercury speciation?
Moderator: Michael Sperling, EVISA, University of Münster, Germany

The topics for the final round table discussion will be composed throughout the workshop in order to cater for the primary interests of the audience. Suggestions from the participants will be collected and complemented by additional topics from the Organizing Committee.

End of Workshop: 15:00 h.

Participation fees

Early registration (until 10.01.2006): 210,- €
Late registration (until 26.02.2006): 260,- €

The registration includes workshop participation, all meals including the workshop dinner, and the workshop's social event.

The cost for accommodation at the conference hotel is 90,- €per night. (The organizer has pre-booked rooms at a special room rate)

Please use the enclosed form for registration.

[→ Registration Form](#)

Timetable:

Start of the Workshop: 27.03.2006, 10:30 h.

End of the Workshop: 28.03.2006, 15:00 h.

Proposal deadline for oral presentations: 15.01.2006

Final Workshop programme: 07.02.2006

Early registration deadline: 10.02.2006

Late registration deadline: 26.02.2006

Travel planning

Information about Umeå and the workshop venue may be found at the weblink

→ <http://www.scandic-hotels.com/plazaumea>.

Please note that you may need Swedish currency during your stay in Umeå.

Airport transfer: Umeå Airport, 5 km from the hotel, is connected via airport buses or taxi at 15,- €

Flights: Umeå Airport (ume) connects to Stockholm Arlanda International Airport (arn), serviced by SAS and FlyNordic. An alternative flight service to Umeå is provided by Malmö Aviation, with departures from Stockholm Bromma Airport and further connections to Gothenburg, Malmö, and Brussels.

More information at:

→ www.malmoaviation.se

→ www.sas.se

→ www.flynordic.se

Deadlines

January 15, 2006	Submission of abstracts
January 20, 2006	Notice of acceptance
January 20, 2006	Announcement of final program
February 10, 2006	Early registration at reduced fee
February 26, 2006	Late registration

Workshop: Mercury speciation analysis: The basis for sound risk assessment, and optimized remediation strategies for contaminated soils, sediments and sludge

European Virtual Institute for
Speciation Analysis (EVISA)
Attn. Dr. Wolfgang Buscher
Corrensstrasse 30
D-48149 Münster, Germany

Workshop Registration:

Early Registration until February 10th
210:- €

Late Registration until February 26th
260:- €

Fee includes all meals, including workshop
dinner.

I wish to participate in workshop dinner:
March 27th at 19.00

Specific meal desires, vegetarian etc.

- I register herewith for the
EVISA Workshop on Mercury speciation
analysis: The basis for sound risk
assessment, and optimized remediation
strategies for contaminated soils,
sediments and sludge, taking place in
 Umeå, Sweden, March 27-28, 2006

Hotel Reservation:

Single room
Scandic Plaza Hotel 90.- €/night

Arriving _____

Departing _____

Smokers Non-smokers room

Fees to be charged:

Registration: _____

Accommodation: _____

Total: _____

Date _____

Signature _____

Title: _____ First Name _____

Family
Name _____

Organisation _____

Department _____

Billing
address _____

Zip
code _____ City _____

Country _____

Tel. _____ Fax. _____

E-mail: _____

- I intend to present a poster

Please Note! Your registration should
have reached us February 26th at the
latest. However, since the number of
participants is limited early registration is
recommended. Your registration will
become binding by the written
confirmation of the workshop organiser.
Payments are to be made after receipt of
the invoice. For cancellations after March
12th no refund is possible. For further
inquiries and registration at short notice
please call: ++49 251 83 366 59.