

EuCheMS International Conference on Chemistry and the Environment

11–15 September, 2011 in Zurich, Switzerland



Emerging Issues in Environmental Chemistry: from Basic Research to Implementation

Themes:

- Emerging contaminants
- Nanomaterials
- Drinking water quality and treatment
- Atmospheric chemistry and aerosol
- Soil and sediment pollution
- Transformation processes
- Model predictions
- Effects to organisms and ecosystems

Venue: ETH Zurich, Campus Science City

President: Walter Giger Chair, Division of Chemistry and the Environment (DCE)
European Association for Chemical and Molecular Sciences (EuCheMS)

For more information see www.icce2011.org

Rational and Goals

The local organizing committee cordially invites you to the International Conference on Chemistry and the Environment (ICCE 2011), the 13th biannual conference organized by the Division of Chemistry and the Environment (DCE) of the European Association of Chemical and Molecular Sciences (EuCheMS) which will be held from 11 to 15 September 2011 in Zurich, Switzerland.

The main targets of ICCE 2011 are:

- To link pioneering research with existing and up-coming environmental issues
- To discuss the fate of chemicals in the environment
- To generate awareness for emerging contaminants

ICCE 2011 will be hosted by the Swiss Chemical Society in cooperation with the Division of Environmental Chemistry and Ecotoxicology of the German Chemical Society. Several environmental research institutes in the area of Zurich support the organization of ICCE 2011.

Venue

ETH Campus Science City, Zurich-Hönggerberg
Detailed information is available on the web site www.icce2011.org

Schedule

Sep 11 Satellite events and welcome reception
Sep 12–14 Lecture and poster sessions
Sep 13 Conference dinner
Sep 15 Site visits and excursions

Participants

Environmental scientists from academia, agencies and industries/consultancies. You are all warmly welcome to present and discuss your most recent work and results at ICCE 2011.

Sessions and Exhibition

Each session will be started with keynote lecture by an invited speaker, who will review the field and set the stage for discussion.

The scientific programme will be amended by an exhibiton presenting equipment and services in the field of environmental chemistry. Last but not least, social gatherings will be organized.

Invited Speakers

Laurent Charlet, Grenoble, France
Gerard Cornelissen, Oslo, Norway
Timothy Eglinton, Zurich, Switzerland
Martin Hassellöv, Gothenburg, Sweden
Dick Janssen, Groningen, The Netherlands
Gerhard Lammel, Mainz, Germany, and Brno, Czech Republic
Juliette Legler, Amsterdam, The Netherlands
Matthew MacLeod, Stockholm, Sweden
Kristopher McNeill, Zurich, Switzerland
Derek Muir, Toronto, Canada
Bernd Nowack, St. Gall, Switzerland
Spyros Pandis, Patras, Greece
Carsten Schmidt, Cologne, Germany
Ivana Teodorovic, Novi Sad, Serbia
Andreas Wahner, Julich, Germany
Hao Zhang, Lancaster, United Kingdom

Abstracts

You are invited to submit a one-page abstract for an oral or poster contribution. Abstracts will be reviewed by the members of the Scientific Committee based on the clarity of their presentation and the relevance for the suggested presentation for the topics addressed at ICCE 2011.

Important Dates

May 1 Deadline for abstract submission
June 15 Notification of abstract acceptance
July 1 Deadline for early registration
August 19 Deadline for late registration

Registration Fees (Swiss Francs, CHF)

Registration Type	Early	Late
EuCheMS Member	525	675
Non-Member	650	850
EuCheMS Member Student	450	600
Non-Member Student	525	675
One-day Ticket	350	

The registration fee includes coffee, tea, beverages and pastries at the breaks as well as full lunches during the whole conference, the welcome reception on Sunday 11 September, the Abstracts and Programme book and 24 hours tickets for the public transport system in Zurich during the conference days.

Accommodation

To help you with your accommodation in Zurich, a booking interface will be available on-line at www.icce2011.org.

Scientific Programme

This conference invites oral and poster contributions on novel issues related to chemicals and the environment. The listed topics should be of high priority, but not be exclusive.

Emerging organic and inorganic contaminants

Recent research efforts have revealed the presence of numerous environmental contaminants that have not been known to be out there two decades ago.

- Environmental pollutants that have been recently detected
- Strategies to uncover hidden contaminants
- Novel tools for contaminant studies

Nanomaterials

The increasing use of engineered nanomaterials (ENM) in industrial and household applications leads to the release of such materials into the environment. This requires an understanding of emissions, mobility, reactivity, persistence, bioavailability, ecotoxicity and the analytical capability to trace ENM in the environment and within biota.

- Analytical method development and applications
- Environmental occurrence and mass balances
- Ecotoxic effect studies and risk assessment

Drinking water quality and treatment including groundwater contamination

Anthropogenic as well as geogenic and biogenic contamination, such as arsenic, fluoride, cyanotoxins, taste and odour compounds of water resources are increasing threats to drinking water quality. While industrialized countries are confronted with emerging organic contaminants, many developing regions are struggling with geogenic hazards.

- Occurrence of geo- and biogenic contaminants
- Removal of organic and inorganic contaminants by novel treatment technologies
- Source control to protect water resources

Atmospheric chemistry and aerosols

Novel analytical techniques and modelling approaches increase the understanding of atmospheric chemistry towards a consistent description in multiphase systems and to a wide range of molecular masses.

- Photo-oxidant and acid formation
- Sources of particulate matter
- Long-range transport of air pollutants
- Atmospheric chemistry and global change

Soil and sediment pollution

Soils and sediments are major recipients of chemical pollution and play a key role in contaminant exposure to ecosystems, e.g., by governing the (bio) availability and (bio) degradation of pollutants.

- Monitoring levels and trends
- Transformation and transport processes
- Contaminated sites and site remediation

Biochemical and chemical transformation processes

Biochemical and chemical transformations are important processes that govern the environmental behaviour of many organic contaminants. There is an increasing awareness that metabolites and transformation products also need to be evaluated in risk assessments of contaminants.

- Elucidation of transformation mechanisms
- Occurrence and toxicity of transient and recalcitrant metabolites and transformation products

Model evaluation and model prediction for the environmental fate of chemicals

Environmental fate models are needed for spatially and temporally large-scale mass budgeting. They are helpful for the interpretation of monitoring data, and enable the understanding of environmental processes.

- Applications of environmental fate models
- Validation of models by field data
- Good modelling practice and quality assurance

Effects to organisms and ecosystems

The detection of emerging contaminants in the environment raises the question whether these substances that mostly occur at low to very low concentrations may cause toxic effects to organisms and ecosystems.

- New approaches for measuring toxic effects
- Regulatory tools for assessing the risks of emerging contaminants

Satellite Events

- Per- and polyfluorinated chemicals
- Nanomaterials regulations
- Nontarget screening
- Good modelling practice

Poster Session

Posters will be on display during the whole conference.

Organizing Committee

Walter Giger, *Conference President*
Michael Berg, *Eawag, Switzerland*
Christian Bogdal, *ETH Zurich, Switzerland*
Thomas Bucheli, *Agroscope ART, Switzerland*
Andreas Gerecke, *Empa, Switzerland*
Thomas Knacker, *GDCh, Germany*
Hans-Peter Kohler, *Eawag, Switzerland*
Gerhard Lammel, *GDCh, Germany*
Paolo Demaria, *Demaria Event Management, Switzerland*

International Scientific Committee

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Kristopher McNeill, Bernd Nowack,
Johannes Ranke, Michel Rossi, Martin Scheringer,
Kristin Schirmer, Laura Sigg, Vera Slaveykova,
Johannes Staehelin, Christoph Studer,
Josef Tremp, *Switzerland*

Contact and Information

Registration, payment, abstract submission, logistics, travel, funding, organizational issues:
Paolo Demaria, Conference Secretariat (icce-2011zurich@demariaevent.ch)

Scientific programme, topics, conference content:
Walter Giger, Conference President (giger@giger-research.ch)

Fellowships and Grants

The Organizing Committee will evaluate applications for financial support. Applicants should submit by email (icce2011zurich@demariaevent.ch) their CV, a motivation letter, a one-page abstract for a contribution (talk or poster).

Sponsors

Check out our sponsors at the ICCE 2011 website:
www.icce2011.org



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