

# INVITATION and CALL for PAPERS



## **5th EuCheMS Chemistry Congress *with the scientific topic* “Research and Environment” in Istanbul, Turkey, 31 August to 4 September 2014**

The 5th EuCheMS Chemistry Congress will be held in Istanbul from 31 August to 4 September 2014. It will be organised by the Turkish Chemical Society under the auspices of EuCheMS (European Association for Chemical and Molecular Sciences). The aim of this congress is to bring together scientists from academia, industry, governmental authorities and private institutes. The latest progress in all areas of chemistry will be presented and discussed. Eminent scientists from all over the world have been invited as plenary and topic keynote speakers. The scientific programme of the 5th EuCheMS Chemistry Congress includes six scientific topics subdivided into various specific symposia.

### **Plenary Lecture**

#### **Water-Food-Energy Nexus: Impact on Water Quantity and Quality**

***Alexander J. B. Zehnder,***

Alberta Innovates – Energy and Environment Solutions, Alberta, Canada; Nanyang Technological University, Singapore; TripleZ Ltd., Switzerland and Prof. emeritus, ETH Zurich, Switzerland.

Prof. Zehnder’s major knowledge areas comprise qualitative and quantitative aspects of water, water policy, relation between food and water security, virtual water trade, water infrastructures; scientific and economic fundamentals for sustainable development; developing capital market instruments; microbiology; managing small and medium enterprises and large public institutions and universities.

### **Symposia on “Resources and Environment”**

The EuCheMS Division of Chemistry and the Environment and the Division of Environmental Chemistry of the American Chemical Society will jointly organize the scientific topic “Resources and Environment”.

Manfred Grasserbauer from the Vienna University of Technology in Austria acts as convener. During 4 days 2 parallel sessions will be run and will be structured into the following 5 symposia:

- Environmental contaminants of emerging concern
- Advanced oxidation processes in water and wastewater treatment and reuse
- Water quality and food production
- Natural resources and mining
- Air pollution

## **Scientific programme, sessions and keynote lectures**

The programme will include platform sessions with invited keynote lectures and submitted oral contributions as well as poster presentations.

### **Environmental contaminants of emerging concern**

convened by *Ester Heath*, Slovenia, and *George Cobb*, USA.

#### **Occurrences**

*Miren Lopez de Alda*, IDAEA-CSIC, Spain

Occurrence of drugs of abuse in the aquatic and atmospheric compartments and its significance for the environment and the society

*Adrian Covaci*, University of Antwerp, Belgium

Monitoring of human exposure to contaminants of emerging concern

#### **Fate and transformation**

*Juliane Hollender*, Eawag, Switzerland

Strategies to characterize polar organic contamination in the aquatic environment: exploring the capability of high-resolution mass spectrometry

#### **Effects, risk assessment and measures**

*Brian Brooks*, Baylor University, USA

Understanding risks of fish on Prozac and other harbingers of an urbanizing water cycle

### **Advanced oxidation processes in water and wastewater treatment and reuse**

convened by *Walter Giger* and *Urs von Gunten*, Switzerland, and *Dion Dionysiou*, USA.

Scientific Committee: *Idil Arslan-Alaton*, Turkey; *Zekije Cinar*, Turkey; *Despo Fatta-Kassinos*, Cyprus; *Gianluca Li Puma*, UK; *Ana Lopes*, Portugal.

#### **Efficiency of advanced oxidation processes – Characterization, kinetics, basics and applications**

*Yunho Lee*, Gwangju, Institute of Science and Technology, Korea

Interplay between oxidant stability and efficiency of micropollutant abatement in conventional and advanced oxidation processes

*Fernando Juan Beltran*, Universidad de Extremadura, Spain

Combined ozone-based catalytic processes for the degradation of organic micropollutants

#### **Product formation – identification of oxidation products, mechanisms, effects**

*Thomas Ternes*, German Federal Institute of Hydrology, Germany

Oxidative transformation of micropollutants: Mechanisms and effects

#### **Oxidation/disinfection by-products – kinetics, mechanisms**

*William Mitch*, Stanford University, USA

Oxidant-matrix interactions: Formation of oxidation/disinfection by-products

#### **Disinfection – kinetics, mechanisms**

*Tamar Kohn*, École Polytechnique Fédérale Lausanne, Switzerland

Virus disinfection by advanced oxidation: Can we kill them all?

### **Water quality and food production**

convened by *Philippe Garrigues*, France, and *Livia Simon Sarkadi*, Hungary.

*Heinz-Jürgen Brauch*, Technology Center Water, Karlsruhe

Emerging contaminants in water resources: Fate studies and assessment for drinking water supply

*Jana Hajslova*, Institute of Chemical Technology, Prague, Czech Republic

Sources and transfer of emerging halogenated contaminants across the food chain

*Andrew Meharg*, Queen's University Belfast, Northern Ireland

Speciation and localisation to explain why arsenic is so problematic in rice

## Natural resources and mining

convened by *Thilo Hofmann*, Austria, and *Britta Planer-Friedrich*, Germany.

### The future of mining – from waste to resources

*Paul Brunner*, Technology University Vienna, Austria

Sustainable and safe resource management: Sinks as limited resources?

### Unconventional gas resources and carbon sequestration – two solutions for a better future?

*Gregory Lowry*, Carnegie Institute, USA

Carbon sequestration in the United States: Using biogeochemistry to improve our understanding of the environmental risk

## Air pollution

convened by *Selahattin Incecik*, Turkey, and *Gerhard Lammel*, Germany.

*George Kallos*, University of Athens, Greece

Physical and chemical properties of aerosols in the Mediterranean and their impact on regional climate

*Mustafa Odabasi*, Dokuz Eylul University, Buca-Izmir, Turkey

Spatial variation of persistent organic pollutants in air, soil and tree components in an industrial region

*Semra Tuncel*, Middle East Technical University, Ankara, Turkey

Persistent organic pollutants in the environment: Analyses, methodologies and concentration levels in Turkey

## Abstract submission and registration details

The deadline for abstract submission is **May 15, 2014**. The submission of the abstracts can be made online:

[www.euchems2014.org](http://www.euchems2014.org)

Authors will be allowed only one oral presentation and totally 2 presentations.

Registration is open with discounted fees available for students and members of EuCheMS member societies. **Early registration until June 4, 2014** are for EuCheMS members: 400 € and for EuCheMS student members: 200 €. Members of the Division of Environmental Chemistry of the American Chemical Society and of the Association of Environmental Engineering and Science Professors are also eligible for discounted registration fees.

## Travel grants by individual Chemical Societies

National Chemical Societies members of EuCheMS will provide special travel funds for students and young researchers to attend the 5th EuCheMS Chemistry Congress. Contact your National Chemical Society for more details.

## Publications

The journal *Environmental Science and Pollution Research (ESPR)*

<http://www.springer.com/environment/journal/11356> intends to publish a Special Issue with selected papers based on keynote lectures and submitted oral or poster presentations. Manuscripts must be submitted online before 1 October 2014. The manuscripts will be peer-reviewed as regular research or review articles.

Questions can be mailed to *Philippe Garrigues*, ESPR editor-in-chief: [p.garrigues@ism.u-bordeaux1.fr](mailto:p.garrigues@ism.u-bordeaux1.fr) .

## Contact

For further information, please contact *Manfred Grasserbauer*, convener of the scientific topic *Resources and Environment*: [manfred.grasserbauer@aon.at](mailto:manfred.grasserbauer@aon.at) , or *Walter Giger*, chair of the EuCheMS Division of Chemistry and the Environment: [giger@giger-research.ch](mailto:giger@giger-research.ch) . Detailed information is also available on the congress website: [www.euchems2014.org](http://www.euchems2014.org) .