

## Scientific committee

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## WORKSHOP

# Methodologies for prioritising hazardous chemicals in European waters: the state of play and the need for improvement



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### About NORMAN

NORMAN, a network of reference laboratories and research centres, is an independent and competent platform in the monitoring of emerging environmental contaminants. NORMAN facilitates an exchange of information, debate and research collaboration at the global level, with the European Commission's in-house science service. <http://www.norman-network.net/>

### About SOLUTIONS

SOLUTIONS is a recently launched European Integrated project with a specific focus on the identification, assessment and prioritisation of contaminants and mixtures thereof. To this end a group of 39 partners from 18 different European countries develops novel approaches, models and tools to find solutions for present and future emerging pollutants in land and water resources management on a river basin and European scale. <http://solutions-project.eu/>

### About the venue

The International University Campus (the *Cité U*) in Paris is a very special place. It was founded in 1925 to promote peace between nations by hosting students from around the world who are studying at any of the universities in Paris and the Ile de France. At present, it is home to 12,000 students, doctoral candidates, young researchers and young artists from 140 countries. The fine mid-20<sup>th</sup> century campus buildings – some of them inspired by Oxford colleges – are set in their own private park, which contributes to the creation of a welcoming and relaxing atmosphere.

### Timing

**Day 1** (Tuesday 24 June)

**09h30 to 17h30**

**Day 2** (Wednesday 25 June)

**09h30 to 15h00**

### Registration and cost

Registration for the workshop (including coffee & lunch) is free of charge. A dinner will be organised and offered by INERIS. Please [register by 16 June 2014](#) using the form on the NORMAN website <http://www.norman-network.net/?q=node/21>



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### Organised jointly by

The NORMAN network  
and  
SOLUTIONS

### Hosted by

INERIS, France

**24–25 June 2014**

Cité Universitaire - Paris, France  
Fondation Deutsch de la Meurthe

Attendance is free of charge, but registration  
forms must be returned by **16 June 2014**



### For further information:

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## Context

Our highly technological society relies on an increasing number of chemicals, every one of which may result in a large number of transformation products. In this highly complex chemosphere the identification of the substances that pose the greatest threat to ecosystems and human health is vital.

Two serious limitations are identified in current prioritisation methodologies:

- 1) the focus on well-known and intensively studied contaminants means a high risk of overlooking emerging pollutants for which data on exposure and effects are lacking;
- 2) individual pollutants are assessed as if they occur in isolation, whereas they are part of complex, multi-constituent mixtures.

Environmental managers need to justify their Programme of Measures defined in the national and international River Basin Management Plans and need to guarantee consistency between the list of prioritised substances and the pressures responsible for the decline in biodiversity.

## Objectives & Expected Outcomes

This workshop aims to: i) assess the current state of prioritisation methodologies, ii) identify the current gaps and barriers and iii) make recommendations for further development and improved integration of innovative approaches in user-friendly decision-support tools to define priority actions for research and risk management.

The main outcome of the workshop will be the publication of a Position Paper which will provide recommendations for a harmonised European approach to prioritisation of chemical contaminants in the aquatic environment, addressing the wide range of stakeholders, DG ENV, EEA, DG RESEARCH, representatives of the drinking water sector and international river basin authorities, etc.

## Who should attend?

Experts from research institutes, reference laboratories, co-ordinators of on-going or recent EU and national research projects dealing with emerging pollutants in different fields (water, air, soil) and receptors (human health, drinking water, ecosystems, etc.).

Experts from regulatory bodies, organisations in charge of risk assessment / management and industry.

## Outline content

### Two complementary perspectives

- Methodological approaches and innovative tools for prioritisation of chemicals
  - Modelling-based (exposure, hazardous properties, effect prediction)
  - Monitoring-based (exposure, effects-based monitoring)
  - Integrated (into prioritisation schemes)
- Prioritisation approaches applied in the current practice in specific media
  - Surface water
  - Sediments
  - Groundwater and drinking water
  - Wastewater

### Structure

**Day 1** A wide-ranging review of current prioritisation practices, state-of-the-art methodologies, the experience gained, lessons learnt, and remaining gaps. Presentations by invited experts from both the research and management communities, plus participant brainstorming.

**Day 2** Presentations on planned SOLUTIONS research activities for better prioritisation of chemicals and mixtures and the future activities of the NORMAN network on prioritisation of emerging contaminants. Three parallel working sessions will follow, for small-group discussions of recommendations for improving current methodologies; the conclusions on follow-up actions will be reported to the plenary and will form the basis of the final Position Paper.



# PROGRAMME - DAY 1

**09:30** REGISTRATION / COFFEE

**10:00** WELCOME ADDRESS *Raymond Cointe, INERIS DG*

**10:15** SETTING THE SCENE

- ✓ SOLUTIONS perspective *Werner Brack, UFZ, Coordinator SOLUTIONS*
- ✓ NORMAN perspective *Valeria Dulio, INERIS, Executive Secretary NORMAN Association*
- ✓ Introductory overview on existing prioritisation schemes and approaches: results from a SOLUTIONS literature review *Antonio Ginebreda, CSIC, Spain*

**11:00** SESSION I : SUBSTANCE-BASED APPROACHES FOR PRIORITISATION OF CHEMICALS

**Chair: Michael Faust, (co) Chair: Valeria Dulio**

- ✓ Prioritisation of emerging contaminants by action category: the NORMAN approach *Valeria Dulio, INERIS, NORMAN Association*
- ✓ Prioritising chemicals of emerging concern: some approaches being used in Canada and the USA *Derek Muir, University of Toronto, Canada*
- ✓ Using model-based screening to help discover unknown environmental contaminants *Anna Sobek, Stockholm University, Sweden*

**Discussion**

**12:15** LUNCH BREAK

**13:15** **Chair: Valeria Dulio, (co) Chair: Michael Faust**

- ✓ Chemical genomics as a tool for environmental toxicity testing: *Matias Attenes Ramos, University of Quebec, Canada*
- ✓ ChemScreen's quantitative high throughput screening methodologies to assess biological activity of chemicals and water samples: their use in the context of REACH and the Water Framework Directive *Bart van der Burg, BDS b.v, The Netherlands*
- ✓ Prioritisation of environmental contaminants through MOA-focussed *in silico* approaches and other non-animal testing systems *Gerrit Schüürmann, UFZ, Leipzig, Germany*

**Discussion**

**14:30** SESSION II : MONITORING-BASED APPROACHES FOR PRIORITISATION OF CHEMICALS

**Chair: Werner Brack, - (co) Chair: Antonio Ginebreda**

- ✓ Prioritisation of substances from non-target screening *Jaroslav Slobodnik, EI, Slovakia*
- ✓ The potential of effect-directed analysis approaches to support prioritisation of chemical contaminants *Werner Brack, UFZ, Leipzig, Germany*
- ✓ Taking into account mixture effects in prioritisation schemes *Andreas Kortenkamp, Brunel University, UK*
- ✓ Linking ecology and the identification of priority environmental contaminants: lessons learned from river biofilms *Sergi Sabater, University of Girona*

**Discussion**

**15:40** COFFEE BREAK

**16:00** SESSION III: CURRENT PRACTICE IN SPECIFIC MEDIA

**Chair: Antonio Ginebreda, - (co) Chair: Werner Brack**

- ✓ Tox-Box: an enhanced health-related approach for risk assessment of drinking water in Germany *Tamara Grummt, UBA, Germany*
- ✓ The water cycle and drinking water perspective for prioritisation of chemical contaminants, including water treatment *Annemarie van Wezel, KWR, The Netherlands*
- ✓ ECHA's thematic workshop on sediment risk assessment: outcome and implications on prioritisation of chemicals *Francesca Pellizzato, ECHA*
- ✓ Prioritisation of chemicals and effects in wastewater effluents for improved mitigation measures *Juliane Hollender, Eawag, Switzerland*

**Discussion**

**17:30** END OF DAY 1

**20:00** SOCIAL DINNER

## PROGRAMME - DAY 2

### 09:30 SESSION III: OUTLOOK, WHAT'S NEXT

Planned SOLUTIONS research activities for prioritisation of chemicals and mixtures:

- ✓ Novel effect-based tools (SOLUTIONS SP T) *Rolf Altenburger, UFZ, Leipzig, Germany*
  - ✓ Improved modelling approaches (SOLUTIONS SP M) *Jos van Gils, Deltares, The Netherlands*
  - ✓ Advanced integrated methodologies (SOLUTIONS WP S2) *Michael Faust, F+B, Germany*
- NORMAN activities on prioritisation *Valeria Dulio, INERIS, NORMAN Association*

### 10:45 COFFEE BREAK

### 11:00 PARALLEL SESSIONS (3 WORKING GROUPS FOR DISCUSSION OF RECOMMENDATIONS FOR IMPROVEMENT OF CURRENT PRIORITISATION SCHEMES)

Working Group I (Chair: Michael Faust; Rapporteur: Valeria Dulio)

Working Group II (Chair: Werner Brack; Rapporteur: Jaroslav Slobodnik)

Working Group III (Chair: Juliane Hollender; Rapporteur: Sandrine Andres)

### 13:00 LUNCH BREAK

### 14:00 REPORTING TO THE PLENARY AND WRAP-UP CONCLUSIONS

Rapporteur Working Group I, II, III

Conclusions and next steps for the drafting of a common Position Paper summarising the outcomes of the workshop and providing recommendations for improved prioritisation of chemical contaminants in the aquatic environment.

### 15:00 END OF THE WORKSHOP

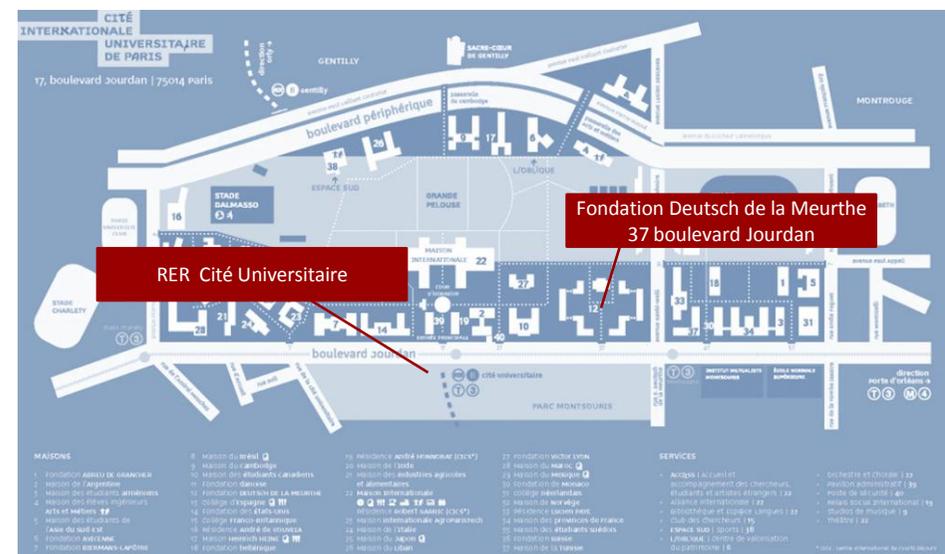
## General information

### HOW TO GET TO THE CITÉ UNIVERSITAIRE

**FROM CDG OR ORLY AIRPORTS - FROM GARE DU NORD**

RER B → Get off at « Cité Universitaire »

Follow the signs to « Fondation Deutsch de la Meurthe » → 5 minutes walk from main entrance (see N°12 on the ciup map below)



### ACCOMODATION

A list of hotels is proposed on the NORMAN website <http://www.norman-network.net/?q=node/21>. However, the list is only indicative: other hotels in the 5th and 6th arrondissement, close to RER B are also handy for reaching the meeting venue.