International Conference

Pharmaceutical Products in the Environment: Is there a problem?

June 3 - 4, 2013, Nîmes, France

Registration form is available at www.pharmas-eu.org/international-event

Preliminary Program

Supported by

Pharmas (www.pharmas-eu.org) and Cytothreat (www.cytothreat.eu) are two collaborative research projects funded by the EU under the 7th Framework Programme. Together, they address the need to assess the risks of antibiotic and cytostatic drugs released to the environment.

Pharmas (Ecological and human health risk assessment of antibiotics and anticancer drugs found in the environment) aims to develop a general overview of the issue. This includes assessing the potential exposure of humans and wildlife to a selection of antibiotics and anticancer drugs (and their transformation products), as well as the impact of these drugs on organisms, in order to define the range of possible risks for these populations. Moreover, social and policy considerations are also included in order to inform the public and to support appropriate changes in regulation.

Cytothreat (Fate and effects of cytostatic pharmaceuticals in the environment and identification of biomarkers for an improved risk assessment on environmental exposure) addresses the need to assess the risks of cytostatic pharmaceuticals (their metabolites and transformation products in water treatment systems and in the environment) released to the environment by developing new analytical methods, as well as exploring potential effects in aquatic experimental models in comparison to those obtained in human experimental models and by exploring effects of mixtures.

‘PharmaCluster’ is an informal cluster for exchange and discussion around the pharmaceutical products in the environment topic. It includes several EU project (more information at www.pharmas-eu.org/home2)

Scientific Committee

Benoit Roig, Pharmas scientific coordinator, EHESP, Nîmes, France (Chair)
Metka Filipic, Cytothreat coordinator, NIB, Slovenia
John Sumpter, Pharmas coordinator, Brunel University, UK
Rodrigo Vidaurre, Ecologic, Berlin, Germany
Klaus Kummerer, Leuphana University, Germany
Thomas Backhaus, Göteborg University, Sweden
John Munthe, IVL, Sweden
Ester Heath, JSI, Slovenia
Monday 3rd June 2013 (9h00 – 18h00)

08.00 Registration
09.00 Chairman’s welcome and opening remarks

09.15 Keynote Lecture: EE2 in the aquatic environment. Is it a bitter pill? **Susan Jobling**, Brunel University

**Session 1: Actions at the European level**

10:00 Plenary Lecture: Policy developments at EU level on pharmaceuticals in the environment. **Helen Clayton**, European Commission, DG Environment

10:30 Environmental risk assessments (ERA) in the authorisation of pharmaceuticals – strengths and weaknesses. **Annette Kuester**, Federal Environment Agency Germany

10:50 MORNING COFFEE and Poster session

11:30 JRC conference to be confirmed

11:50 IPCHEM conference to be confirmed

12:10 Discussion and remarks

12.30 LUNCH, poster session

**Session 2: Environmental and Human Risk Assessment of Pharmaceuticals**

14:00 Plenary Lecture – title to be confirmed. **Christina Ruden**, ITM, Stockholm University

14:30 Relevance of the read-across approach to the environmental risk assessment of pharmaceuticals. **Luigi Margiotta-Casaluci**, Brunel University, UK

14:50 New chronic fish data on diclofenac challenge the current perception of its risk to aquatic wildlife. **Andreas Hartmann**, Novartis International, Switzerland

15:10 An environmental risk assessment for human-use trimethoprim in European surface waters. **Oliver Straub**, F. Hoffmann-La Roche Ltd, Switzerland

15:30 Antibiotics and cytostatics in hospital wastewater and their contribution to environmental risk of pharmaceutical compounds. **Sven Lyko**, Emschergenossenschaft und Lipperverband, Germany

15:50 AFTERNOON COFFEE and Poster session

16:20 Prioritisation of Human Pharmaceuticals for Environmental Risk Management and Drug Prescriptions. **Rick Oldenkamp**, Radboud University, The Netherland

16:40 Ecotoxicity of the pharmaceutical compounds of hospital effluents. **Frédéric Orias**, French National School of Public Works, France

17:00 Potential adverse effects of the residues of cytostatic drugs in aquatic environment. **Metka Filipic**, National Institute of Biology, Slovenia

17:20 In situ reprotoxic effects of effluents containing pharmaceuticals compounds on caged mudsnails. **Marion Gust**, IRSTEA, France

17.40 – 18.00 Final discussion and remarks

19.30 SOCIAL DINNER
Tuesday 4th June 2013 (8h30 – 17h15)

08.30  Poster session

Session 2bis: Environmental and Human Risk Assessment of Pharmaceuticals

9:00  In vitro bioassays for risk assessment of oncologic treatments released in hospital waste water - Application to hospital effluents. Nicolas Mater, Laboratory Chemical engineering, Toulouse, France

09:20 Estimating the transfer of antibiotics and anticancer drugs into crops. Charlotte Legind, DTU, Lyngby, Denmark

09:40 Uptake of oxytetracycline, sulfamethoxazole and ketoconazole from fertilised soils by plants. Tina Zuidema, RIKILT Wageningen, The Netherland

10:00 MORNING COFFEE, Poster session

10:40 Sludges from Sewage Treatment Plants as a source of antibiotic residues and resistant bacteria to the environment. Cristina Corpa, Instituto de Salud Carlos III, Spain

11:00 Effect-based monitoring as a relevant tool to assess adverse effects in aquatic ecosystems receiving effluents from pharmaceutical factories. Wilfried Sanchez, Ineris, France

11:20 Pharmaceuticals' exposure on Mediterranean (Iberian) rivers: occurrence, risk and effects on the aquatic ecosystem. Maja Kuzmanović, IDAEA-CSIC, Girona, Spain


12:00 Discussion and Remarks

12:30 LUNCH and Poster session

Session 3: Perspectives on Problem Assessment and Future Actions

14:00 Plenary Lecture: Pharmaceutical Products in The Environment – The “Problem” in Perspective. David Taylor, WCA environment, UK

14:30 Venue to be confirmed. Rakesh Kanda, Brunel University, UK

14:50 Pharmaceuticals in the Aquatic Environment – The global Perspective. Tim aus der Beek, IWW Water Centre, Germany

15:10 AFTERNOON COFFEE and poster session

15:40 Options for prioritization and environmental assessment for pharmaceuticals currently in use. Frank Mastrocco (Pfizer Inc), Dan Caldwell (Johnson & Johnson)

16:00 An EU-Wide Environmental Classification System for Pharmaceuticals – opinions from European experts. Konrad Goetz, ISOE, Germany

16:20 Residues of Pharmaceuticals in Drinking Water – or how to avoid the unavoidable. Alexander Eckhardt, German Federal Environment Agency

16:40 Pharmaceuticals in the environment – the perspective of EUREAU for a way forward to protect drinking water resources. EUREAU, European Federation Of National Associations Of Water Services

17h00 Concluding remarks. John Sumpter, Brunel University, UK
Pharmaceutical residues: parent compounds, metabolites and transformation products as environmental contaminants

5th June, 2013, ATRIA Novotel Nîmes Centre, Nîmes, France

Chaired by

Esther Heath (Jožef Stefan Institute, Ljubljana, Slovenia)

08.00 Registration

09.00 Chairman’s welcome and opening remarks

09:10 Study of the reactivity of cytostatics in water with free chlorine by ultra performance liquid chromatography - hybrid quadrupole-Orbitrap - tandem mass spectrometry
Noelia Negreira, IDAEA-CSIC, Girona, Spain

09:30 Formation of stable transformation products of pharmaceuticals in the water treatment processing. Jana Weiss, IVM, Amsterdam University, The Netherland

09:50 Transformation of the anticonvulsant lamotrigine in the aquatic environment. Sandra Perez, IDAEA-CSIC, Girona, Spain

10:10 MORNING COFFEE

10:40 Enzymatic degradation of tetracycline and generation of transformation products. Marta Llorca, Catalan Institute for Water Research-ICRA, Girona, Spain

11:00 Cytostatics in the environment: analysis and occurrence. Ester Heath, Jožef Stefan Institute, Slovenia

11:20 Multi-analyte determination of 26 cytostatics and metabolites by liquid chromatography-electrospray-tandem mass spectrometry: optimization, analytical performance, and study of the stability and optimum storage conditions for their determination in wastewater. Miren Lopez de Alda, IDAEA-CSIC, Girona, Spain

11:40 Identification of ozonation and chlorination by-products of ciprofloxacin by analysis by LC/HR-MS. Véronique Boireau, Veolia Environnement Recherche et Innovation, France

12.00 Identifications of phototransformation products of antiviral zanamivir with HILIC-LTQ-Orbitrap-MS in aqueous matrices. Bozo Zonja, IDAEA-CSIC, Girona, Spain

12:20 Degradation and transformation of 5-fluorouracil and capecitabine. Tina Kosjek, Jožef Stefan Institute, Slovenia

12:40 Discussion and final Remarks

13:00 End of Workshop
About Nîmes

Roman and Hispanic and with contributions from the Camargue and the Cévennes, the Languedoc and Provence, Nîmes is a city of all accents! Two thousand years of history, architecture, art and passions. Just push a door ajar to meet the seventeenth century and wander around the streets to feel the Roman atmosphere. Here, contemporary art always goes hand in hand with history. Nîmes would like to share these two thousand years and share the twenty-first century. This is why it has joined the national network Villes et Pays d’art et d’histoire. Nîmes the Mediterranean cultivates the art of living well above all. When there is the least ray of sunshine—300 days a year—terraces and conversations grow lively and the city is jubilant. And from the market to the arena, from the Jardins de la Fontaine to the discreet courtyards of private mansions, friendliness is the rule, whatever the weather.

Accommodation (some hotels in Nîmes)

Novotel Atria (☆☆☆) - Rooms from 135€ incl. breakfast (conf. special rate)
For conference special rate contact: h0985-SB@accor.com

Royal Hôtel (☆☆☆☆) - Rooms from 75€.
www.royalhotel-nimes.com/index.htm

Empire Hôtel (☆☆)  - Rooms from 60€
www.hotel-empire.com

Hôtel Côté Patio (☆☆) - Rooms from 68€.
www.hotel-cote-patio.com

Hôtel Kyriad Nîmes Centre (☆☆) - Rooms from 71€
www.hotel-kyriad-nimes.com

Hôtel Les Tuileries (☆☆☆) - Rooms from 66€
http://www.hoteldestuileries.com/

Conference location

ATRIA Novotel Nîmes Centre
5, boulevard de Prague – 30000 Nîmes - FRANCE

How to get to Nîmes

By plane
Nîmes airport
Montpellier Airport at 40 mn by car
Marseille Airport at 1h10 by car

By train
Paris - Nîmes : 2h55
Nîmes station at 5 min walking from Conference Centre
**REGISTRATION FEES***

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<thead>
<tr>
<th>Fee includes VAT (19.6%)</th>
<th>registration (by 30 / 05 / 2013)</th>
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<tbody>
<tr>
<td>Regular participants</td>
<td>€ 550,00</td>
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<tr>
<td>PhD students</td>
<td>€ 350,00</td>
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<tr>
<td>PharmaCluster partners</td>
<td>€ 150,00</td>
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<tr>
<td>Post conference Workshop (5/06/13)</td>
<td>€50 (conference attendant) €100 (only workshop attendant)</td>
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*Fees will cover attendance to the conference, the abstract book, coffee breaks, lunches and the social dinner.

Payment in Euro (€), should be made in advance by bank transfer (payment by cheque will be accepted upon request)

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Registration form is available at [www.pharmas-eu.org/international-event](http://www.pharmas-eu.org/international-event)