

## Participating organisations:

Dresden University of Technology  
Institute of Waste Management and Contaminated Sites Treatment

Chemical and Environmental Research Institute; Barcelona

Laboratory of Environmental Chemistry and Toxicology,  
Mario Negri; Milan

Universitat Politecnica de Catalunya ; Barcelona

University of Leiden  
Institute of Environmental Sciences

Swedish Environmental Research Institute ; Gothenburg

Universitat Rovira i Virgili; Reus  
Laboratory of Toxicology and Environmental Health

University Cattolica del Sacro Cuore; Piacenza  
Institut of Agricultural and Environmental Chemistry

Technical University of Denmark; Kgs. Lyngby  
Department of Management Engineering  
Department of Environmental Engineering

Bureau de recherché géologiques ; Orléans  
l'Unité Gestion des Déchets Service Environnement et Procédés

Universidade Federal do Rio de Janeiro  
Fundacao Coordenacao de Projetos Pesquisas e Estudos Tecnologicos

Shenyang University of Aeronautical Engineering  
Institute of Clean Energy & Environmental Engineering  
Institute of Aeronautical Engineering

The Energy and Ressources Institute; New Dehli  
Energy and Environment Technologies Division

Hanoi University of Science  
Faculty of Chemistry

Hamburg University of Applied Sciences

NORDEConsult Sweden AB; Lund

CEFIC - European Chemical Industry Council

OECD Environment Directorate

SCHER - Scientific Committee on Health and Environmental Risks of the  
European Commission

University of Wollongong  
School of Earth and Environmental Sciences

Chinese Academy of Social Science

German Federal Agency for Environment

BZL GmbH

Technische Universität Darmstadt

German Federal Institute for Risk Assessment

## Workshop topics:

- Diffuse emissions from global trade of products and recyclables
- Environmental problems due to waste recycling in Brazil
- Impact to health
- Impact to the environment
- Environmental impacts of use and recycling of additives in products: a lifecycle perspective

## Meeting place:

Casa da Ciencia da UFRJ  
Rua Lauro Muller, 3  
Botafogo, Rio de Janeiro, Brazil



## Fees:

Participation fee: free

## Registration:

Please register via e-mail

Veit Grundmann: [veit.grundmann@tu-dresden.de](mailto:veit.grundmann@tu-dresden.de)

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Further information: [www.wadef.com](http://www.wadef.com)



3<sup>rd</sup> RISKCYCLE workshop

# Environmental and health risks of chemical additives and recycling materials

2<sup>nd</sup> – 6<sup>th</sup> May 2011

## Organizers:



**Prof. Dr. Claudio Fernando Mahler**  
Universidade Federal do Rio de Janeiro  
Universidade Federal Rural do Rio de  
Janeiro



**Prof. Dr.-Ing. habil. Dr. h. c. Bernd  
Bilitewski**  
Technische Universität Dresden  
Institute of Waste Management and  
Contaminated Sites Treatment

## Tuesday 3<sup>rd</sup> May 2011

### 1. Session - Moderator: Prof. Dr. Bernd Bilitewski (TUD)

- 9.00 am** Welcome speech
- 9.20 am** Riskcycle – A new paradigm in waste assessment and management  
Prof. Dr.-Ing.habil. Dr. h.c. Bernd Bilitewski  
Dresden University of Technology
- 9.40 am** 20 years of a slow evolution of solid waste management in Brazil  
Prof. Claudio Mahler, COPPE/UFRJ  
Prof. Adriana Schueler UFRuRJ
- 10.00 am** Discussion
- 10.30 am** Coffee break

### 2. Session - Moderator: Prof. Dr. Damià Barceló (CSIC)

- 11.00 am** Additives in WEEE: A Challenge for Recycling  
Prof. Julio Carlos Afonso,, UFRJ
- 11.20 am** WEEE in Brazil - local impacts of a pervasive product  
Eng Marcelo Guimarães Araújo, M.Sc COPPE/ UFRJ
- 11.40 am** Discussion
- 12.00 am** Lunch break

### 3. Session - Moderator: Prof. Claudio Fernando Mahler (COPPE/UFRJ)

- 2.00 pm** Coprocessing - Sustainable destination for municipal solid waste  
Eng Francisco José Piffer Leme,  
Lafarge Group
- 2.20 pm** Where we are now? A practical view of co-processing in Brazil  
Químico Antonio Lacerda de Menezes,  
Essencis Soluções Ambientais
- 2.40 pm** The separation of waste experience at UFRJ: Recicla CT  
Prof. Walter Issamu Suemitsu, UFRJ
- 3.00 pm** The challenger of chemical contamination in plastics recycling  
Vladimir Kudrjawzew
- 3.20 pm** Discussion
- 3.40 pm** Coffee break

### 4. Session - Moderator: Elena Boriani (IRFMN)

- 4.10 pm** Reutilization of Residues in High Aggregated Value Products - Biorefinery Concept  
Prof Marisa Fernandes Mendes, UFRuRJ
- 4.30 pm** Healthcare Wastes Management in Rio de Janeiro City  
Eng Zilton José Sá da Fonseca, M.Sc,  
Aborgama do Brasil Ltda
- 4.50 pm** Environmental and health risks of perfluorinated compounds at global scale: From the kitchen to Antarctica  
Prof. Dr. Damià Barceló,  
Chemical and Environmental Research Institute;  
Barcelona
- 5.10 pm** Final Discussion  
Prof. Claudio Mahler  
Prof. Adriana Schueler  
Prof. Dr.-Ing.habil. Dr. h.c. Bernd Bilitewski  
Prof. Dr. Damià Barceló
- 6.00 pm** End of Day 1

## Wednesday 4th May 2011

### 1. Session - Moderator: Dr. Rosa-Maria Darbra (UPC)

- 9.00 am** State of the art collection and recycling of oils and lubricants in Brazil  
Eng Ricardo Baptista, Manager of Planning and Industrial Control Petrobras Distribuidora SA
- 9.20 am** Prioritisation of chemicals in the environment: analytical, modelling and risk issues  
Dr. Antoni Ginebreda  
Chemical and Environmental Research Institute;  
Barcelona
- 9.40 am** Environmental risk assessment of brominated flame retardants using fuzzy logic  
Dr. Rosa-Maria Darbra  
Universitat Politècnica de Catalunya; Barcelona
- 10.00 am** Discussion
- 10.40 am** Coffee break

### 2. Session - Moderator: Dr. Henrik F. Larsen (DTU)

- 11.10 am** Additives and Life Cycle Assessment – introduction and overview  
Dr. Tomas Rydberg  
Swedish Environmental Research Institute;  
Gothenburg
- 11.30 am** Additives in plastics: (lack of) information from LCA databases and case studies  
Ass. Prof. Dr. Ester van der Voet  
University of Leiden
- 11.50 am** Life cycle assessment (LCA) of printed matter: Potential “additives” in recycled paper  
Dr. Henrik Fred Larsen  
Technical University of Denmark, Copenhagen
- 12.10 am** Discussion
- 1.00 pm** Lunch break

### 3. Session - Moderator: Dr. Tomas Rydberg (IVL)

- 2.30 pm** Research relationships in Waste Management between Brazil and Germany  
Veit Grundmann  
Dresden University of Technology
- 2.50 pm** E-Waste around the world  
Prof. Dr. Susanne Heise  
Hamburg University of applied science
- 3.10 pm** Health risk assessment for Lead released by e-waste recycling processes, using a multimedia exposure model (2-FUN model) – Preliminary calculations based on a case study designed for a region located in South of China  
Dr. Ing. Nicoleta Alina Suciú,  
University Cattolica del Sacro Cuore, Piacenza
- 3.30 pm** Recycling as a measure of energy efficiency  
Dr Luciano Basto Oliveira, EPE
- 3.50 pm** Discussion
- 4.10 pm** Coffee break
- 4.30 pm** Final Discussion  
Prof. Claudio Mahler  
Prof. Adriana Schueler  
Prof. Dr.-Ing.habil. Dr. h.c. Bernd Bilitewski  
Prof. Dr. Damià Barceló
- 5.30 pm** End of Day 2