

**PREVISIONNAL  
PROGRAMME**

**ECOTECHS 2010**  
3-4 September 2010  
<http://www.ecotechs2010.org>

**FRIDAY 3<sup>rd</sup> OF SEPTEMBER 2010**

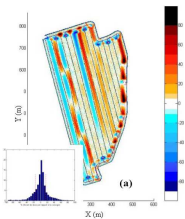
## Ecotechs

The context is ripe for developing environmental technologies. In 2004, the European Commission launched ETAP (the Environmental Technology Action Plan), which, in 2010, will lead to a directive introducing an ETV (Environmental Technology Verification) system, so as to facilitate recognition of manufacturers' efforts by the market. In France, the Grenelle Environment Forum has also recommended investing in "environmentally-friendly intensive and sustainable agriculture".

AXEMA in France, along with CEMA and ENTAM in Europe, are keen to take part in this initiative.



In relation to the AgEng 2010 conference, the focus will be on applied research in the area of eco-design practices serving agricultural equipment.



**Eco-design** is the "incorporation of environmental considerations into the design or redevelopment of a product so as to improve its environmental performance throughout its life cycle."

### The aims of this workshop:

- to present the innovative methods and tools being developed, particularly those stemming from the ANR-Ecodefi project
- to see how the concept is being applied in firms in the sector,
- to reflect on ways in which its implementation could be increased, with an ambition that could go as far as European eco-labelling

Organised by :



Within the framework of **ANR-ECODEFI project** (ECOconception et Développement de méthodologies de Fabrication Innovante de machines d'épandage)  
– ANR / Programme Ecotechnologies et Développement Durable



### Scientific Committee:

Sandro Liberatori – ENAMA (Italy) / Ulrich Rubenschuh – DLG (Germany) / Krister Persson – DIAS (Denmark) / Daniel Froelich – ENS Arts et Métiers (France) / Frantz Barnabé - CETIM (France) / Grigore Gogu – IFMA-Clermont Université (Fr) / Michel Cariolle – ITBetterave (France) / Jean François Goupillon – AXEMA (France) / Daniel Clochard – Et Sulky (France) / Pierre Havard – Ch Rég Agri Bretagne (Fr) / Pierre Guiscafré – FNCUMA (France) / René Delouvé – SAF (France) / Philippe Roux – Cemagref (France) / Marc Rousselet – Cemagref (France)

**Language:** The official language will be English or French

Sponsored by :



This Symposium is being pooled with 2 other events :

- The AgEng 2010 Conference  
<http://ageng2010.com>
- The Robotics 2010 Symposium  
<http://www.robotics2010.org/>

### Contact:

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**Please note that modification of this  
programme may occur until the  
conference**

**Presentation (15 min) + discussion at the end  
of each session (20 min)**

**– Campus des Cézeaux –  
ENGREF Lecture Hall – Aubière**

**9:00 - Coffee – Welcome**

**9:15 - Introductory talk by Pascal RAY** –  
IFMA Director (*Institut Français de Mécanique  
Avancée*)

Introduction of the **concept of Ecotechnology**  
applied to Agricultural equipment by **Dominique  
Didelot** – Cemagref-

**9:45 – 11:05 - Assessing the environ-  
mental performances of agricultural  
equipment under real and/or simulated  
conditions of use.**

**Chairman: Sandro LIBERATORI** – Director of  
ENAMA Italy (*Ente Nazionale per la  
Meccanizzazione Agricola*).

▪ *The European Network for Testing Agricultural  
Machines and the environmental performance  
assessment of agricultural machines* – by **Giulio  
FANCELLO** - ENTAM Secretary

▪ *Environmental performance indicators of organic  
spreading machines* – by **Pierre HAVARD and al**  
- Chambre Régionale d'Agriculture Bretagne

▪ *Assessing nitrogen losses after sewage sludge  
spreading: a method based on simulation models  
and spreader technological performances*, by  
**Thomas PACAUD and al** – Cemagref Montoldre

▪ *Simplified LCA software for assessing  
environmental performances of spreading  
scenarios as a tool for optimising practices,  
equipments and logistics*, by **Philippe ROUX** –  
Cemagref Montpellier

▪ Questions – answers: 20 min

**Break**

**11: 30 – 12:30 -Technological creativity  
and production system innovations for  
Eco-design**

**Chairman: Grigore GOGU** - LaMI Director  
(Université BP and IFMA of Clermont-Ferrand)

▪ *Grigore Gogu will introduce the session by  
presenting principles and concepts of innovation  
methodology (20 min)*

• *An Eco-innovative Design Approach: Concept  
Generation and Evaluation*, by **Mahmoud  
CHAKROUN** – LaMI/ UBP Clermont Ferrand

▪ *Infra level: Centrifugal spreading of pasty  
materials – An example of understanding approach  
of mechanism for generating eco-innovation  
tracks*, by **Jean Christophe ROUX** - Cemagref

▪ *Supra level : Technologies to improve  
productivity and reduce the environmental impact  
of dairy systems – An example of technological  
system approach to open innovative solutions and  
uses*, by **Ian YULE** – Massey University,  
Palmerston North, New Zeland

▪ Questions – Responses: 20 min

**12:50 – 13:50 – Lunch**

**14:00 -15:30 – Today's implemen-  
-tation of eco-design in the industrial  
and agricultural equipments**

– **Chairman: Frantz BARNABE** – CETIM  
*Engineer, (Centre d'Etudes Techniques des  
Industries de la Mécanique) of St Etienne.*

▪ *Frantz Barnabe will introduce the session by  
presenting the eco-design guide for spreaders – A  
result of the ANR-ECODEFI project (20 min).*

▪ *From site specific to a product life cycle  
environmental design, a network based approach  
in the automotive sector ,by **Stephane MOREL** –  
Renault.*

▪ *How to integrate the environmental regulations  
at the first design of the machine* – by **Christophe  
ROUSSEAU** - Berthoud SA.



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- *An Ecodesign methodology for the improvement of gardening machinery* – by **Mario FARGNOLI** and AI – University of Rome "La Sapienza"
- *Extension of Eco-design concept and methods for improving the efficiency of testing procedures*, by **Emmanuel PIRON** – Cemagref

▪ **15:30 Coffee break**

**16:00 – 17:00 - Panel discussion on "how to boost Eco-design use in this applied sector?"**,

*animated by **Daniel FROELICH** - "Arts et métiers" national school - professor in Eco-design -*

*Key figures will introduce the discussion with*

- **Pierre GUISCAFRE** – FNCUMA - *Overview on agro-technologies used by end-users.*
- **Sandro LIBERATORI** - ENAMA Italy - *" the change of paradigm : from selling a product to selling a service"*
- **An industrial partner**

**17:15** Visite of **Mecaprod** platform of **IFMA**

**FRIDAY NIGHT 3<sup>th</sup> OF SEPTEMBER 2010**  
Common dinner with **ROBOTICS** Conference

*At 20 minutes from Clermont Ferrand (travel by bus included), discover the Volcano of Lemptegy. After a guided tour (in English), and a nice dinner, the night will end with a fireworks display.*  
Volcan de Lemptegy – RD 941 – 63230 Saint-Ours

[com@auvergne-volcan.com](mailto:com@auvergne-volcan.com)

**SATURDAY 4<sup>th</sup> OF SEPTEMBER 2010**

**Cemagref Experimental Site at Montoldre (Allier)**

**9:00- Bus Departure** from Campus des Cézeaux – Aubière to Montoldre

**10: 30 – 12:30 - 7 examples of Eco-innovation applied to agricultural technologies**

- **SULKY** system of "Stop&go" – to reduce under and over-applications of fertilisation spreading in the field

- **BUCHET** organic spreader – To know the real spread amount and for the evenness control
- **TIXAD** system – A pack implementable on sprayer for continuous monitoring and recording pesticide application
- **DE SANGOSSE** slug-pellets spreader – for using "mono-disc" and even so, managing border and working width
- **VAUDOUR** "No tillage" sower prototype – a new concept for allowing manufacturing and use of this technology in developing countries
- **SIRTEC** innovative sludge pellet spreader, designed by using "Inventive Problem Solving" (TRIZ) methodologies
- Presentation of software tools for supporting Eco-design use: **Spreading simulator – Simplified ACV tool (acv3E) – Eco-design guide.**

**12:30 – 13:30 - Lunch on site**

**13:30 – 14:30 -Disseminating Eco-technologies to stakeholders and end-users**

Chairman: **Xavier LONGAYGUES** - *Commissariat Général au Développement Durable du MEEDDM – Coordinateur du GT "Vérification des performances des éco-innovations »*

- **Xavier LONGAYGUES** will introduce the session by speaking about the ETV approach (Environmental Technology Verification system) in France and in Europe
- 125 years of testing and labelling agricultural machines and farm inputs in Germany, by **Ulrich RUBENSCHUH** (DLG – Germany).
- A new Quality approach for spreading applicators - "QualiTerritoires", by **Hélène COULOMBEIX** – Enterprises For Territories (EDT)

**14:30 – 15:30: Debate about a better promotion of eco-innovations on the national and international market ?**

*animated by **Sandro LIBERATORI***

**Back to Clermont Ferrand (around 16h30)**

