



University of Napoli Federico II  
Department of Agriculture



**International Mid-Term Conference**  
**Italian Association of**  
**Agricultural Engineering**



**Naples, Parthenope Congress Centre, June 22-23, 2015**

## **New Frontiers of Biosystems and Agricultural Engineering for Feeding the Planet**

### **First announcement**

The challenge of research in agriculture and forestry today is to cope the rapidly growing food demand (to be doubled in 2050) with the environmental impacts related to agricultural expansion. We are seeing an agricultural intensification in richer nations and a growing land clearing in poorer nations; this joint process will increase environmental pressure in terms of greenhouse gas emissions, land and water resources, energy demand. Diversely, additional production – in the whole food chain - should be achieved without further damaging to essential ecosystem services or excessive use of land, water and non-renewable energy resources. The concept of “sustainable intensification” in agriculture means increasing together yields and efficient use of input, by reducing in the same time the negative environmental effects of food production. High quality research in Agricultural Engineering may contribute very significantly to address a more complex set of goals than just increasing yield, by developing new technologies which can be transferred to applications and best practices.

In the year of EXPO2015, which is focused on this theme, this conference, organized by the Italian Association of Agricultural Engineering and the University of Naples Federico II – Department of Agriculture, in the year of EXPO2015, in collaboration with the European Network for Engineering and Systems in the Rural Sector (EurAgEng) and the International Commission of Agricultural and Biosystems Engineering (CIGR) aims at presenting the state of the art of R&D in the following topics:

- 1) **Innovative Systems, Structures and Technologies for Sustainable Agriculture and Forestry:** *advancements in understanding processes and new technologies for reducing the environmental impact of agriculture and forestry production chains; “green” and “smart” bio-processes*
- 2) **The Land, Water & Energy Nexus:** *integrated frameworks for optimal utilization of natural resources and land planning in agriculture and forestry systems (i.e.: renewable energy land occupation vs. afforestation; impact of food vs. no-food biomass production on land and water resources)*
- 3) **Information and Communication Technologies: management, modelling and monitoring:** *advanced sensors and control techniques, management of data and information, expert systems to improve quality and sustainability of the agro-forestry systems*
- 4) **Transfer of Knowledge and Cooperation in Developing Countries:** *experiences and case-studies on the impact of research in agricultural engineering in Developing Countries; the role of the Italian community of researchers in this sector in the context of international cooperation.*

#### **Scientific committee**

- Monarca Danilo
- Scarascia Giacomo
- Santini Alessandro
- Lenzi Mario Aristide
- Fichera Carmelo Riccardo
- Cavalli Raffaele
- Balsari Paolo
- Schillaci Giampaolo
- Colelli Giancarlo
- D'Urso Guido
- Molari Giovanni
- Barbagallo Salvatore
- Tassinari Patrizia
- Vieri Marco
- Foppa Pedretti Ester
- Berruto Remigio
- Guidetti Riccardo
- Mazetto Fabrizio
- Daniel M. Tartakovsky

#### **Venue**

The Congress Center Partenope of the University of Naples Federico II is located in Via Partenope 36, at sea-front, in close proximity of Borgo Marinaro and the city centre.  
<http://www.centrocongressi.unina.it/images/mappa.jpg>  
Excellent hotel facilities are available in this area. Main tourist attractions of Naples and surrounding areas can be easily reached. Frequent connections to Capodichino Int' Airport and to the Islands of Capri and Ischia.

## 22 June 2015, monday

- 8.30 *Registration open*  
9.30 Welcome Address from Authorities  
10.00 **Invited Key-note: t.b.d.**  
10.45 **Session 1: Innovative Systems, Structures and Technologies for Sustainable Agriculture and Forestry**  
13.30 *Lunch –break & Poster session*  
15.00 **Session 2: The Land, Water & Energy Nexus**  
17.00 *Coffe –break & Poster session*  
18.00 *Assembly of Italian Association of Agricultural Engineering*

## 23 June 2015, tuesday

- 9.30 **Session 3: Information and Communication Technologies: management, modelling and monitoring**  
11.00 *Coffe –break*  
11.30 **Session 3: con't**  
13.00 *Lunch –break*  
14.30 **Session 4: Transfer of Knowledge and Cooperation in Developing Countries**  
16.30 **Workshop Conclusions**  
17.00 *AIIA Section meetings (optional)*

### Organisation committee

- Boccia Lorenzo
- Chirico Giovanni Battista
- Di Fiore Paola
- D'Urso Guido
- Faugno Salvatore
- Palladino Mario
- Pindozi Stefania
- Romano Nunzio
- Sarghini Fabrizio
- Severino Gerardo
- Sommella Angelo

### Organisation

Dept. of Agriculture, University of Naples Federico II – Division of Agricultural, Forest and Biosystems Engineering  
*Technical support: Ariespace s.r.l., spin-off company of the University of Naples Federico II*

### REGISTRATION FEE:

AllIA Members pre-paid: € 200,00  
On-site and non AllIA: € 250,00  
PhD students: € 100,00

### Important Dates

**14 February 2015: Abstract submission**

**6 March 2015:** Confirmation of acceptance - Definitive program

**22 May 2015:** **Registration and payment of fee** - Hotel confirmation  
- **Manuscript presentation**

### Abstracts

The Abstracts format is: 1 page A4 (2000 characters approx.), with all margins equals to 2.5 cm, character Times Roman 12 pt.; Title 14 pt bold; Authors and affiliation Italic. Use of figures and tables should be avoided. Complete address, fax no. and E-mail address of presenting Author should be indicated. Plain ASCII, Word and Adobe files are accepted. Submission of abstract should be made exclusively via E-mail at the following address: [URSO@UNINA.IT](mailto:URSO@UNINA.IT) before 14 February 2015.

**Publications:** Selected papers will be published after peer review process on JAE, the Journal of Agricultural Engineering.