

## GENERAL INFORMATION

Based on the collaboration between the Fraunhofer-Gesellschaft and the University of Bologna, the Fraunhofer Institute UMSICHT, the Interdepartmental Center for Research in Environmental Sciences (CIRSA) and the Interdepartmental Center for Industrial Research – Energy Environment (CIRI-EA) will host a seminar in Ravenna on April 3rd 2014.

This research to business seminar will present the industrial research activities of the participating institutes and will focus on the following topics:

- thermal and chemical energy storage
- production of energy from biomass and waste
- resource management and recycling
- development of surfaces and materials for innovative energy technologies

An exposition of selected technologies is organized in the congress venue.

The official seminar language will be English, however, all documents (slides, information material, etc.) will be provided in Italian.

## PARTICIPATION FEE

Participation in the event is free of charge. The number of participants is limited.

## APPLICATION

For registration please use the following webpage.

[www.emrg.it/FhG\\_UNIBO\\_2014](http://www.emrg.it/FhG_UNIBO_2014)

## TRAVEL TO RAVENNA

By air: to the airports of Bologna or Rimini. Take the bus to the railway station. Ravenna can be reached in 1 hour.

By train: 1 hour train from Bologna or Rimini

By car: from highway A14, follow the indication to Ravenna (80 km from Bologna).

## CONGRESS VENUE

Laboratori "R. Sartori", Via S. Alberto 163, Ravenna (Italy)

A list of hotels is available on the web site.

## ORGANIZING COMMITTEE

Prof. Andrea Contin (Director CIRSA, University of Bologna, email: [andrea.contin@unibo.it](mailto:andrea.contin@unibo.it))

Prof. Andreas Hornung (Director, Institute Branch Fraunhofer UMSICHT)

Dipl.-Ing. Gerold Dimaczek (Deputy Director, Institute Branch Fraunhofer UMSICHT)

## ORGANIZING SECRETARIAT

Fondazione Flaminia

Via Baccarini 27

48100 Ravenna, Italy

Tel. +39054434345

Fax +39054435650

e-mail: [crossi@fondazioneflaminia.it](mailto:crossi@fondazioneflaminia.it)

## ORGANIZED BY:



CENTRO  
INTERDIPARTIMENTALE  
PER LA RICERCA  
NELLE SCIENZE AMBIENTALI



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INTERDIPARTIMENTALE  
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per l'Università in Romagna



## REGISTRATION ON THE WEB SITE

[www.emrg.it/FhG\\_UNIBO\\_2014](http://www.emrg.it/FhG_UNIBO_2014)

 **Fraunhofer**  
UMSICHT



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LABORATORI "R. SARTORI", VIA S. ALBERTO 163, RAVENNA, ITALY

Innovative products

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**MEET FRAUNHOFER UMSICHT**



**3<sup>RD</sup> APRIL 2014**



## AGENDA

### FRAUNHOFER UMSICHT

The Fraunhofer-Gesellschaft is Europe's largest research and development organization with a total of 22.000 employees. 66 individually operating Fraunhofer institutes are spread throughout Germany. Further representations are also found in Europe and the USA. With a total research budget of 1.9 billion, the Fraunhofer-Gesellschaft is actively researching and developing innovative solutions in the topic areas: health, environment, safety, information technology, energy and mobility. By continuously working closely together with both large and small industrial partners the Fraunhofer-Gesellschaft is renowned to bring innovative products successfully to market.

The Fraunhofer Institute UMSICHT's proven track record as a pioneer for technical innovations in the fields of energy, processes and products makes UMSICHT a unique and reliable partner for national and international industries. The UMSICHT Institute branch in Sulzbach-Rosenberg and the newly established Center for Energy Storage are dedicated to the development of new environmentally friendly, sustainable technologies and their smart integration to support the German energy turnaround (»Energiewende«). With its emphasis on the following topics, UMSICHT seeks to aid industry to benefit from renewable energy opportunities by developing new technologies, concepts, and conducting trials for customers in the institutes own pilot and demonstration facilities:

- thermal and chemical storage systems
- energy from biomass and waste
- resource management and recycling
- development of surfaces and materials for innovative energy technologies

### RAVENNA TECHNOPOLE

The Emilia-Romagna Region Operative Plan (POR) 2007-2013, founded by the European Structural Funds, has been dedicated to the development of a High Technology Regional Network of Technopoles to support Industrial Research.

Within the Ravenna Technopole, researchers from the Interdepartmental Center for Research in Environmental Sciences (CIRSA) and the Interdepartmental Center for Industrial Research – Energy Environment (CIRI-EA) of the University of Bologna operate to develop new technologies and applications.

The Analytical Pyrolysis Research Group is active in the fields of:

- analytical chemistry
- analytical pyrolysis
- biofuels and biochemicals
- biochar
- anaerobic digestion
- hybrid thermo-bio conversion processes

The Environmental Management Research Group is active in the fields of:

- sustainability
- legislative compliancy
- risk analysis and assessment
- evaluation of value chains
- innovation and technology diffusion

09:00 - 10:00 Registration  
10:00 - 10:20 Welcome addresses and introduction

10:20 - 13:00 **Portfolio presentations**

- Fraunhofer Gesellschaft
- Fraunhofer Institute UMSICHT
  - Center for Energy Storage
  - Biobattery
  - Thermal Storages
  - Recycling and Resource Management
  - New Materials
- CIRSA/CIRI-EA

14:00 - 16:00 **Showcase of past & present projects**

- Cooperation with FhG
- FhG-IEC/Bolzano
- Industry Project with UNIBO
- Opportunities of cooperation - Italy
- Added value gained by cooperation with FhG - Technology examples
- Business Case Biobattery / Italy
- International network / EU / ICATESS

16:00 - 16:15 **Summary and Closure**

16:15 - 18:30 **Get-together and discussions at stands**