

EuroBioRef

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SP10 – Exploitation, dissemination, communication, standardisation and training activities WP10.3 – Training activities

Deliverable report

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Deliverable Identification

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General report for the 5 following items
 1- Training course plan and seminars (CERTH)
 2- Evaluation forms for the training sessions, forms consolidation and assessment (ALMA)
 3- Report on the training events occurred (UWM)
 4- Report on the summer courses (CIRCC/CERTH)
Deliverable Title:
Responsible Beneficiary: CERTH (for Training course plan and seminars)
Contributing Beneficiaries: CNRS-UCCS, CRES, HTAS, PDC-GMBH, ECOINT, EUBIA, TUDO, FEUP, RWTH, CIRCC, SOABE, ALMA, UWM
To be Submitted to the EC: Yes

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Approval

	Name	Organization	Date	Visa
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Dissemination level

PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)*	
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 Non applicable

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Executive summary

Description of the deliverable objective and content

- Training course plan and seminars

The main objective of the training activities is to promote Sustainable Biorefinery Sciences and Technologies through Training, Education, and Mobility.

The specific objectives are:

- To instruct and train all the people involved with production and usage of biorefineries including industrials, students or research people;
- To organize staff training in order to transfer the necessary technological knowledge;
- To spread specific knowledge from experts in EUROBIOREF to young scientists and exchange of good practice among the high level partners involved in different domains;
- To provide personal and distance-learning training to extend Science & Technology understanding of the Biorefinery concept, and in parallel, promote S&T cohesion within the European Research Area and so increase skills across Europe.

Training activities

The organization of training will consist of the following activities:

1. Lectures and training needs;
2. Creating lectures for Universities courses and training material for the various types of users. This material will be updated for each new product;
3. Organizations of workshops and training schools;
4. Implementing at the users site;
5. Evaluation of the training.

Profiles, which need to be trained

1. End-users (staff from petro-chemical, chemistry industries, energy producers...);
2. Researchers interested to pursue research work on biomass and its applications;
3. Undergraduate and post graduate students in the fields of agronomy, (bio)chemistry and process engineering.

A list of training events/seminars/courses scheduled to take place during the course of EuroBioRef has been drafted and is shown in Table 1. In Annex 1, the objectives/content/topics etc of the training events/seminars/courses summarized in Table 1 are presented in detail. Information such as the objectives of each course, targeted participants, content, possible date and location of course have been filled in by each of the responsible partners.

- Evaluation forms for the training sessions, forms consolidation and assessment

The training sessions will be evaluated to obtain valuable feedback for future sessions. ALMA will contribute in this task by providing in due course a model of evaluation form and by participating in forms consolidation and assessment.

Additionally, some training events for students have already been accomplished, while the EuroBioRef summer school is well under way to be held in September 18-25th 2011 in Italy.

- Training events already completed

During the first year of the project, 2 training events have been organized for the students:

- A Master course to M2 students and PhD students on 'La catalyse au cœur des bioraffineries du futur' 20 h of lecture in the master 'CEE' (Chemistry Energy Environment). 16 h by Prof Franck Dumeignil/CNRS-UCCS, 4 h by Dr. Andréi Khodakov.
- A Master course to M2 students and PhD students on 'Impact des carburants Bilan environnemental des différentes filières énergétiques pour les applications mobiles,

amélioration des carburants et biocarburants 'CEE' (Chemistry Energy Environment). 16 h by Prof Franck Dumeignil/CNRS-UCCS.

- Summer courses

The EuroBioRef Summer School aims in the effective training of young researchers from Academia and Staff from Industry on most up-to-date scientific and technological aspects of Biorefinery. The summer school has been organized for the 18-25th September 2011, to be held in Castro-Apulia in Italy.

The target group comprises of academia and stuff from industry, for a number of participants in the order of 50-60. The Summer school is a five and a half-day event, encompassing invited lectures from distinguished speakers, poster presentations by young researchers and interactive workshops on case studies. The lecturers consist of scientists from within EuroBioRef and sister projects, as well as external ones.

The first circular of the school has already been prepared and is currently being distributed to interested parties inside and outside EuroBioRef. The first circular is included in Annex II.

The topics of the school are:

- *Terrestrial and aquatic biomass: production and properties;*
- *Biomass pre-treatment technologies;*
- *Chemical/biotechnological routes for biomass constituents conversion into platform molecules;*
- *Homogeneous and heterogeneous catalytic conversion of bio-sourced raw materials;*
- *Catalytic conversion of oils extracted from seeds and algae;*
- *Conversion of biomass into fuels and chemicals via thermochemical processes;*
- *Conversion of syngas into fuels and chemicals;*
- *Life cycle analysis of fuels and chemicals production from biomass;*
- *Policy aspects of biomass product chains.*

Deviation from objectives and corrective actions

Although all the activities in WP10.3 were scheduled to begin after M12 in the official DoW, it was proposed by the SP10 leader and agreed by the participating partners during the kick-off meeting to start Task 10.3.1 (Scheduling, preparation and implementation of training events) and Task 10.3.4 (Summer Course) already in M1 so to organize the School in Y2, first semester. This would have helped to better organise all other training events in the remaining time of the Project. Therefore, there are no negative deviations from the planned work and the tasks are running ahead of schedule.

Summary of training course plan and seminars

The following table summarizes the training events/seminars/courses foreseen to take place during the course of EuroBioRef:

Table 1. List of training events/seminars/courses foreseen to take place during the course of EuroBioRef:

Type	Title	Organizing Partner	Location /date	Duration	Target Group	No of participants	
Task 10.3.1 Scheduling, preparation and implementation of training events (M12-M48) (CERTH, TUDO, ALMA)							
1	Short course	Reactive Molecular Separations	TUDO	Dortmund/Germany/M25-36	2,5 days	Graduate master and PhD students	30
2	Training on-site	Gasification of Biomass	CERTH	Greece-Athens/M42-43	4 days	Students performing their postgraduate masters or PhDs at their early stages	35
Task 10.3.2. Training for professionals (M30-M45) (UWM, ECOINT, HTAS, PDC-GMBH, CRES, EUBIA, SOABE)							
3	Workshop	Management and LCA methodology	ECOINT+ PDC	TBD/M36?	TBD	Professionals in sustainable development	TBD
4	Workshop	Rules and techniques in cultivating energy crops	CRES	Greece/M41	TBD	Farmers & farmer cooperatives, local planners	50
5	Demonstration course	Demonstration days on Plants cultivation	CRES +SOABE + UWM	UWM/M44-45	1 day	For farmers and entrepreneurs (public/private)	40
Task 10.3.3 Training for students (M24- M45) (CIRCC, FEUP, HTAS, RWTH, PDC-GMBH, CNRS-UCCS)							
6	Internships	Internships and diploma thesis in industry	Industrial project partners	Throughout the project	4-6 months	Graduate master and PhD students	TBD
7	Short training visits	Short training in new techniques and use of facilities among partners (University and industry)	All partners	Throughout the project	5-10 days	Students and young scientists/ professionals working within the project	TBD
8	Lectures	Series of lectures in Universities and/or industries in biorefinery-related subjects	All partners	Throughout the project	TBD	Ph.D. students, young researchers, professionals from both academia and industry	TBD
Task 10.3.4 Summer course (M24-36) (CIRCC, CERTH, CNRS-UCCS, ALMA)							
9	Summer school	Properties of Biomass and its Conversion Technologies <i>The concept of Biorefinery comes into operation</i>	CIRCC, CERTH	Castro, Italy/18-25 Sep 2011 (M18)	6 days	Ph.D. students, young researchers, professionals from both academia and industry in the disciplines of chemistry, biology, engineering	50-70

Impact of the results

It is expected that by the completion of the training plans/courses/workshops and other events that are foreseen to take place in the frame of EuroBioRef, the objectives of the workpackage will have been achieved. The training activities will promote Sustainable Biorefinery Sciences and technologies through training, education, and mobility. Academia and industry inside and outside the project will be trained and educated on cutting edge technologies on aspects of biorefinery chains investigated within the project. The training events will also serve as dissemination activity for the EuroBioRef activities.

Publishable information

The launch of the EuroBioRef school has been announced on the EuroBioRef official website, along with the first circular of the school. The flyer has also been distributed by e-mail to all project partners, as well as interested parties from sister projects and outside. The first circular is included in Annex II.

Conclusion

WP10.3 proceeds ahead of schedule. Training events have already been accomplished and several of them have been planned. The summer school of EuroBioRef is also well under way and it is expected to be a very successful training and dissemination event. Based on the above, the progress of this WP is very satisfactory.

ANNEX I – Training course plan and seminars

The objectives/content/topics etc of the training events/seminars/courses summarized in Table 1 are presented here in details.

Event number	1	Date and location of event	
Event title	REACTIVE MOLECULAR SEPARATIONS		
Event type	SHORT COURSE		
Organizing Partners	TUDO		
Objectives (1/2 page)	<p>Reactive separation processes combine the reaction and separation steps in one unit operation and thus help to simplify complex production processes. In this way, investment and operation costs can be substantially reduced. In particular, because of versatile couplings and restricted operating windows in such processes, it is necessary to develop appropriate modelling approaches.</p> <p>This course aims to convey current state of the art in the area of reactive separation processes. First, the students will be confronted with theoretical fundamentals. Based on this, the development of various modelling approaches will be presented. Last but not least, selected reactive separation processes will be treated in view of their modelling aspects in the practical applications.</p> <p>In the frame of a computer exercise, modelling a simulation of reactive separation processes will be treated based on some typical practical examples.</p>		
Targeted participants	Graduate master and PhD students working in the project and associated in a group defined by the Consortium.		
Participants number	20 - 30		
Content of event/preliminary schedule	<p>Day 1 Fundamentals (Introduction, VLE) - lecture Modelling (EQ and NEQ model) - lecture</p> <p>Day 2 VLE, design of deproponiser (introduction of ASPEN PLUS) - tutorial Comparison of EQ and NEQ model - tutorial</p> <p>Day 3 Reactive distillation - lecture Design of a vacuum column - tutorial</p>		

Event number	2	Date and location of event	M42-43/Athens, Greece
Event title	GASIFICATION OF BIOMASS		
Event type	TRAINING ON SITE		
Organizing Partners	CERTH		
Objectives (1/2 page)	<p>The basic objectives of the course is to provide basic starting knowledge starting with the the theory of gasification and how to determine gasification parameters based on thermodynamics, energy and mass balances. Furthermore the course will focus on an introduction to fluidization engineering, where basic equations and advanced techniques will be presented. This will create a knowledge frame for the modeling fluidized bed gasification. The required data to be collected prior to designing an experiment will also be discussed.</p> <p>The course will also present the basic calculations for predicting gas quality based on thermodynamic equilibrium and kinetics of species.</p> <p>Significant issues will be cover on the safety issues while working with gasification.</p> <p>On the practical side the course will give information and a chance for acquaintance with the measurement of gas quality: an Introduction to techniques as tar protocol, continuous major species measurement, other species and more specifically H₂S measurement.</p> <p>The participants will have a chance to see how the gasification operation is monitored and the ways of evaluating results.</p>		
Targeted participants	<p>Students performing their postgraduate masters or PhDs at their early stages who wish to get a fast training /introduction to gasification.</p> <p>The course will also prove helpful for engineers and technicians who are working with small scale gasification of biomass and want to have a complete set of starts training.</p>		
Participants number	Participants can be up to 35 persons		
Content of event/preliminary schedule	<p>The basic objectives of the courses is to provide basic knowledge on :</p> <ul style="list-style-type: none"> • DAY 1 - Theoretics of gasification (Basic information before testing) <ul style="list-style-type: none"> - How to determine gasification parameters based on thermodynamics , energy and mass balances. - Introduction to Fluidization engineering. Presentation of basic equations and advanced techniques. - Introduction to modeling fluidized bed gasification - Basic set of data prior to designing an experiment • DAY 2 - Basic calculations for predicting gas quality <ul style="list-style-type: none"> - Evaluations based on thermodynamic equilibrium - Evaluations based on kinetics of species • Safety issues • DAY 3 - Measurement of gas quality (on site) <ul style="list-style-type: none"> Introduction to techniques as tar protocol, continuous major species measurement, other species, h₂S measurement. • Monitoring of gasification operation • DAY 4 - Evaluation of results from gasification experiments 		

Event number	3	Date and location of event	M36/
Event title	LIFE CYCLE MANAGEMENT AND LCA METHODOLOGY for professionals in sustainable development		
Event type	WORKSHOP		
Organizing Partners	QUANTIS & PDC		
Objectives (1/2 page)	<p>The aim of this workshop about Life Cycle Assessment (LCA) is to introduce this internationally recognized approach that evaluates the potential environmental and human health impact associated with products and services throughout their life cycle, beginning with raw material extraction and including transportation, production, use, and end-of-life treatment.</p> <p>Among other uses, LCA can identify opportunities to improve the environmental performance of products at various points in their life cycle, inform decision-making, and support marketing and communication efforts.</p> <p>Some methodological LCA issues specific to biorefinery as allocations, land use change, biogenic carbon emissions and N, P, K fertilizers balances will be treated.</p> <p>The last objective is to introduce the LCA web tool which will be developed during EuroBioRef project (WP 9.1 - Task 9.1.4).</p>		
Targeted participants	Professionals in sustainable development		
Participants number	To define		
Content of event/preliminary schedule	<p>LCA introduction (following ISO structure)</p> <ul style="list-style-type: none"> • Goal and scope definition (functional unit, boundaries and assumptions) • Life Cycle Inventory • Life Cycle Impact Assessment (IMPACT 2002+ and ReCiPe) • Interpretation <p>Biorefinery and LCA: some methodological specificities</p> <ul style="list-style-type: none"> • Allocations (physical, economic) • Land use change • Biogenic carbon emissions • Process optimisation as part of life cycle management of biorefineries <p>EuroBioRef LCA web tool</p> <ul style="list-style-type: none"> • LCA modelling • Data collection • Results : Life Cycle Impact Assessment • Interpretation : online simulation/demonstration 		

Event number	4	Date and location of event	M41/Komotini/Xanthi
Event title	RULES AND TECHNIQUES IN CULTIVATING ENERGY CROPS		
Event type	WORKSHOP		
Organizing Partners	CRES		
Objectives (1/2 page)	To promote the potential of non-food cropping systems in rural areas with respect to the alternative land use, biodiversity appeal, 'green' economy, alternative farming income, CAP reform, sustainable agriculture, etc		
Targeted participants	<ul style="list-style-type: none"> • farmers/agricultural cooperatives • agricultural equipment manufacturers • scientists • end-product processors or potential processors • end-product users or potential users • environmental groups • local authorities representatives 		
Participants number	50		
Content of event/preliminary schedule	<p>The workshop will address issues, like:</p> <ul style="list-style-type: none"> • The necessity to grow energy crops and the potential of the country, in terms of land and variety of crops • Growing techniques • Crop harvesting • Logistics • Final products/potential uses • Sustainability of the cropping systems, in technical, economic and environmental terms 		

Event number	5	Date and location of event	
Event title	DEMONSTRATION DAYS ON PLANT CULTIVATION		
Event type	DEMONSTRATION COURSE		
Organizing Partners	GRES & SOABE & UWM		
Objectives (1/2 page)	The objective of demonstration day organized by UWM is to educate farmers and policy makers about new techniques in SRC, especially in willow cultivation. Training will include lectures about high yielding species and varieties, planting protocols (cultivation technology), economics, harvesting equipment and provision and logistics. After theory – participants will be taken to a EuroBioRef plantation where SRC plants harvesting will be presented.		
Targeted participants	Farmers, local businessmen, local policy makers, specialist from agricultural extension centres, students		
Participants number	Approx. 40		
Content of event/preliminary schedule	<p>8.00-8.30. Guest arrival to UWM in Olsztyn 8.30. Welcome by the host, agenda presentation 8.45. EuroBioRef project presentation 9.15. Biomass as a renewable energy source in Poland and UE 9.35. Examples and characteristics of perennial energy crops 10.05. Coffee Break 10.15. Willow cultivation technology 10.45. Provision and storage of biomass 11.05. Economics and energy efficiency of SRC. 11.30. Coffee Break 11.45. Departure to willow plantation 13.00. Demonstration of the EuroBioRef plantation and willow crop harvesting 15.00. Coffee Break 15.30. Departure to UWM in Olsztyn 16.45. End of workshop</p> <p>Persons responsible for the workshop: Mariusz Stolarski, Michał Krzyżaniak (UWM)</p>		

Event number	6	Date and location of event	
Event title	INTERNSHIPS & DIPLOMA THESIS IN INDUSTRY		
Event type	TRAINING OF STUDENTS		
Organizing Partners	ALL INTERESTED INDUSTRIAL PROJECT PARTNERS		
Objectives (1/2 page)	The objective of this event is to allow students from EuroBioRef partners to conduct their research within their diploma thesis in the facilities of industrial partners on cutting edge biorefinery technologies. The students will also be given the opportunity to experience work and research in industry through 4-6 months internships.		
Targeted participants	Graduate, master and PhD students from EuroBioRef partners		
Participants number	To be defined		
Content of event/preliminary schedule	The content of work during diploma thesis/internships will be defined between the interested parties – the students and the industrial partners.		

Event number	7	Date and location of event	
Event title	SHORT TRAINING IN NEW TECHNIQUES AND USE OF FACILITIES AMONG PARTNERS (ACADEMIC AND INDUSTRIAL)		
Event type	SHORT TRAINING VISITS		
Organizing Partners	ALL PARTNERS		
Objectives (1/2 page)			
Targeted participants	Students and young scientists/professional working within the project		
Participants number	To be defined		
Content of event/preliminary schedule	The training events will have an approximate duration of 5-10 days and will involve short training on new techniques and use of facilities among both academic and industrial partners		

Event number	8	Date and location of event	
Event title	SERIES OF LECTURES IN UNIVERSITIES AND/OR INDUSTRIES IN BIOREFINERY-RELATED SUBJECTS		
Event type	LECTURES		
Organizing Partners	ALL PARTNERS		
Objectives (1/2 page)	The objective is to both train young scientists in biorefinery cutting edge technologies and additionally help in the dissemination of the project goals and results.		
Targeted participants	Ph.D. students, young researchers, professionals from both academia and industry		
Participants number	To be defined		
Content of event/preliminary schedule	The content of the lectures will fall into the scope of the EuroBioRef project. The detailed content will be agreed between lecturer and University.		

Event number	9	Date and location of event	
Event title	PROPERTIES OF BIOMASS AND ITS CONVERSION TECHNOLOGIES - "THE CONCEPT OF BIOREFINERY COMES INTO OPERATION"		
Event type	SUMMER SCHOOL		
Organizing Partners	CIRCC & CERTH		
Objectives (1/2 page)	<p>The EurobioRef Summer School aims in the effective training of young researchers from Academia and Staff from Industry on most up-to-date scientific and technological aspects of Biorefinery</p> <p>The Summer school is a five and a half-day event, encompassing invited lectures from distinguished speakers, poster presentations by young researchers and interactive workshops on case studies.</p> <p>The topics of the school are:</p> <ul style="list-style-type: none"> • <i>Terrestrial and aquatic biomass: production and properties</i> • <i>Biomass pre-treatment technologies</i> 		

	<ul style="list-style-type: none"> • <i>Chemical/biotechnological routes for biomass constituents conversion into platform molecules</i> • <i>Homogeneous and heterogeneous catalytic conversion of bio-sourced raw materials</i> • <i>Catalytic conversion of oils extracted from seeds and algae</i> • <i>Conversion of biomass into fuels and chemicals via thermochemical processes</i> • <i>Conversion of syngas into fuels and chemicals</i> • <i>Policy aspects of biomass product chains</i> • <i>Life cycle analysis of fuels and chemicals production from biomass</i>
Targeted participants	Academia and Staff from Industry
Participants number	50-60 students plus 20 teachers
Content of event/preliminary schedule	<p>September 18-24, 2011</p> <p>Working Programme</p> <p>Day 1, Monday</p> <p>09.00-10.15 Refinery of the future: feedstock, processes, products Jean-Luc Dubois, Arkema</p> <p>10.15-11.30 The terrestrial Biomass: formation and properties (crops and residual biomass) M. Christou, CRES</p> <p>12.00-13.15 Aquatic biomass: production technologies and isolation A. Dibenedetto, CIRCC</p> <p>13.30 Lunch and break</p> <p>18.00-20.00 Oral flash presentation of posters (5 min, 3-4 slides max.)</p> <p>20.30 Dinner</p> <p>21.30-22.30 Poster session and Informal meeting and questions to the teachers (wine will be served)</p> <p>Day 2, Tuesday</p> <p>09.00-10.15 Biomass pre-treatment: separation of cellulose, hemicellulose and lignine. Existing technologies and perspectives. A. Raspolli, CIRCC</p> <p>10.15-11.30 Conversion of cellulose and hemicellulose into platform molecules: chemical routes D. Serrano, IMDEA-ES</p> <p>11.30-12.00 Break</p> <p>12.00-13.15 Conversion of cellulose and hemicellulose into platform molecules: biotechnological approach Klaus Newman, Borregard</p> <p>13.30 Lunch and break</p> <p>18.00-20.00 Oral flash presentation of posters (5 min each, max 3-4 slides)</p> <p>21.30-22.30 Poster session and Informal meeting and questions to teachers (wine will be served)</p> <p>Day 3, Wednesday</p> <p>09.00-10.15 Conversion of lignine: chemical technologies and biotechnologies C. Crestini, CIRCC</p> <p>10.15-11.30 Fermentation of C6- and C5-sugars: mature and new biotechnologies Philippe Soucaille, METEX</p> <p>11.30-12.00 Break</p> <p>12.00-13.15 Anaerobic fermentation: biogas from waste. The basic science and technological applications M. Aresta, CIRCC</p>

	<p>13.30 Lunch and break</p> <p>16.00 Departure for the visit to Lecce and Otranto. Dinner will be served nearby Otranto.</p> <p>Day 4, Thursday</p> <p>09.00-10.15 Catalytic conversion of biosourced raw materials: Homogeneous catalysis. Francois Jerome, Poitiers-FR</p> <p>10.15-11.30 Catalytic conversion of biosourced raw materials: Heterogeneous catalysis W. Hoelderich, RWTH</p> <p>11.30-12.00 Break</p> <p>12.00-13.15 Catalytic conversion of oils extracted from seeds and algae: from polyunsaturated long chains to functional molecules Matthieu Chatillon,, NOVANCE</p> <p>13.30 Lunch and break</p> <p>18.00-20.00 Case study: Biogas from residual fresh organic matter and sludge from process waste waters. Dr. R. Farina, ENEA</p> <p>20.30 Dinner</p> <p>21.30-22.30 Meet the teacher: informal discussion (wine will be available)</p> <p>Day 5, Friday</p> <p>09.00-10.15 Biomass gasification: production of Syngas or Heat & Electricity K. Panopoulos, CERTH</p> <p>10.15-11.30 Conversion of biomass to fuels and chemicals via thermochemical processes A. Lappas, CERTH</p> <p>11.30-12.00 Break</p> <p>12.00-13.15 From Syngas to fuels and chemicals: Chemical and Biotechnological routes C.Perego , M. Ricci, ENI</p> <p>13.30 Lunch and free time</p> <p>18.00-20.00 Biopolymers from biomass C. Bastioli, NOVAMONT</p> <p>20.30 Social Dinner and Show</p> <p>Day 6, Saturday</p> <p>09. 00-10.00 LCA applied to the energetic, economic and environmental evaluation of the production of fuels from biomass: ethanol, biooil and biodiesel, biogas, biohydrogen, A. Bauen IC</p> <p>10.00-11.00 Application of LCA: a Case study, A. Bauen IC</p> <p>11.00-12.15 Policy aspects of biomass product chains To be defined, IEA or EC</p> <p>12.15-12.30 Closing remarks and future activities: A. Lemonidou and M. Aresta</p>
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ANNEX II – Summer School Flyer

Registration

Applicants should apply via the on-line registration form available at the school website. The form should be filled in and sent by fax (+39-080 544 36 06) or by e-mail to Prof. Angela Dibenedetto (circc@circc.uniba.it) by **May 15, 2011**.

Registration fees

Academia	650 €* half board
	740 €* full board
Industry	820 €* half board
	910 €* full board

*Accommodation in twin bedrooms
Supplement for single room: 15 € per day per person (total: 90 €)

The registration fee includes: breakfast, half or full board with accommodation in a double-bed room from September 18th to September 24th, 2011, teaching material & information package, CD with the lectures, visit to Lecce and Otranto, social dinner, transportation from/and to the airport in Brindisi or the train station in Lecce.

Payment through bank transfer should be made to the following bank account headed to "Nowatech Ass-School EuroBioRef."
IBAN: IT09 2010 1004 0021 0000 0002 83
BIC/SWIFT: IBSPITNA



Scientific Committee

Prof. Franck Dumeignil, CNRS-UCCS, FR, Co-Chair
Prof. Michele Aresta, CIRCC, IT, Co-Chair
Dr. Jean-Luc Dubois, Arkema
Dr. Ivan Andersen, HTAS
Dr. Klaus Neumann, Borregaard
Dr. Karsten Hjort, Novozymes
Dr. Ausilio Bauen, Imperial College

Organizing Committee

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Web site

<http://www.eurobioref.org/>

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Summer School

Utilization of Biomass for the Production of Chemicals or Fuels

"The concept of Biorefinery comes into operation"

FIRST ANNOUNCEMENT



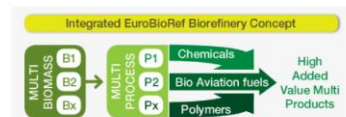
September 18th-24th, 2011



Hotel Orsa Maggiore,
Castro Marina, Lecce, Italy

The Organizing Body

The EuroBioRef project (European Multilevel Integrated Biorefinery Design for Sustainable Biomass Processing) coordinated by CNRS-UCCS, France, is supported by the EU 7th Framework Program for Research and Technological Development. It gathers 28 partners from 14 different countries in a highly collaborative work. EuroBioRef will bridge the gap between agriculture and chemical industry by integrating the whole biomass chain in a Multi-feedstock (non-edible), Multi-process (chemical, bio-chemical, thermo-chemical), Multi-products (aviation fuels and chemicals) commercial viable and adaptable approach for a sustainable bio-economy in Europe.



Join us!

The EuroBioRef team will organize the first Biorefinery Summer School in September 2011 from 18th to 24th.

The EuroBioRef Summer School aims at the effective training of young researchers from academia and staff from industry on the most up-to-date scientific and technological aspects of Biorefinery.



Working Programme

The Summer school is a five and a half day event encompassing invited lectures by distinguished speakers, poster presentations by young researchers and interactive workshops on case studies.

Topics of the School are:

- Terrestrial and aquatic biomass: production and properties
- Biomass pre-treatment technologies
- Chemical/Biotechnological routes for biomass constituents conversion into platform molecules
- Homogeneous and heterogeneous catalytic conversion of bio-sourced raw materials
- Catalytic conversion of oils extracted from seeds and algae
- Conversion of biomass into fuels and chemicals via thermochemical processes
- Conversion of syngas into fuels and chemicals
- Policy aspects of biomass product chains
- Life cycle analysis of fuels and chemicals production from biomass

Abstracts

The Organizing Committee invites young Researchers (PhD-Post Doc) and Industry Staff to submit abstracts for poster presentation. Each author will be invited to present the content of the poster in an "oral flash presentation" (3 slides, 5 min) and will discuss it during the poster session.

Two prizes for the best poster will be presented, one being reserved to PhDs, one to Post Docs. Grants for students can become available.

Abstracts should be submitted electronically using the Poster Application Form available on the school website. Abstracts will be accepted on a first come first served basis.

Important dates

Opening date for abstracts	15/3/2011
Closing date for abstracts	15/5/2011
Acceptation of the abstracts	31/5/2011
Registration-fee payment	30/6/2011

Venue

The EuroBioRef Summer School will be held at the Hotel Orsa Maggiore, Castro Marina, Italy. The Hotel is situated in Castro Marina on the Eastern promontory of the coast of Salento along the Castro – Santa Cesarea Terme Coast, Lecce in South Italy.

The Hotel Orsa Maggiore, Castro Marina is located 85 km far from the Brindisi airport and 45 km from the Lecce railway station. Information about travelling will be sent to the applicants in due time.

Further information about the venue can be found at: <http://www.orsamaggiore.it>

