



COST is supported by the EU
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Third Workshop of COST Action CM0903

“UBIOCHEM-III: SUSTAINABLE PRODUCTION OF FUELS/ENERGY, MATERIALS & CHEMICALS FROM BIOMASS”

Centre for Research & Technology Hellas (CERTH)
Thessaloniki, Greece, November 1st – 3rd, 2012

FIRST CIRCULAR AND CALL FOR PAPERS

Dear colleagues,

You are cordially invited to participate in “UBIOCHEM-III: Sustainable production of fuels/energy, materials & chemicals from biomass”, the third International Workshop of COST Action CM0903, which will take place in Thessaloniki, Greece on 1-3 November 2012, and is organized jointly by the Chemical Process Engineering Research Institute of the Centre for Research & Technology Hellas (CPERI/CERTH) and the Departments of Chemical Engineering (Biomass Group) and Chemistry of Aristotle University of Thessaloniki (AUTH). The previous two workshops were held with great success in Cordoba, Spain (UBIOCHEM-I, May 2010) and in Tallinn, Estonia (UBIOCHEM-II jointly with the International Conference on Materials & Technologies for Green Chemistry, September 2011).

UBIOCHEM-III is addressed to scientists and experts from industry and academia who are active in the area of biomass valorization via thermo-chemical and biological processes. Emphasis will be placed on the utilization of lignocellulosic biomass, algae and non-edible crops or low quality oils, which do not compete with food. In terms of conversion processes, the use of green catalytic methodologies (homogeneous, heterogeneous, enzymatic and photocatalysis) and novel reaction media will be presented. Moreover, alternative biomass-based products that are safer and have a reduced environmental footprint (e.g. biodegradable polymers) will be discussed, along with the concepts of biorefining and energy conservation. The issue of “metrics” in assessing the economical and environmental impact of biomass conversion to various products will also be considered. Invited lectures by renowned experts in the field and high quality oral and poster presentations from the COST Action UBIOCHEM as well as external research groups worldwide will constitute the scientific programme of the workshop.

Scientific Scope

The scientific scope of the Workshop is in accordance with the objectives of COST Action UBIOCHEM which aims to coordinate scientific innovations within Europe in order to improve existing methods or develop new ones for the sustainable conversion (based on “metrics” and LCA analysis) of biomass to fuels and energy in general, materials, platform and specialty chemicals in accordance with the safety and environmental requirements that apply in EU and worldwide.

The workshop will cover the following four general topics:

- **Topic 1:** *Primary conversion/pre-treatment of lignocellulosic feedstocks:* traditional thermo-chemical (pyrolysis, gasification, liquefaction) or hydrolytic (acid/base or enzymatic) treatments and further development through the use of microwaves, ultrasounds and alternative reaction media such as supercritical CO₂ and ionic liquids.
- **Topic 2:** *Biomass to fuels & energy:* biodiesel production using vegetable oils of different origin and quality; non-oxygenated fuels via hydroprocessing of oils; synthetic fuels production via the

BtL (Biomass-to-Liquids) process; bio-oil upgrading to transportation fuels and H₂; fermentation of biomass-derived sugars to bioethanol; energy production via biomass combustion and gasification.

- **Topic 3:** *Biomass to materials:* production of biodegradable films, adhesives and plastics from biomass; new materials produced via biomass-derived platform chemicals and new materials produced directly from biopolymers such as cellulose, lignin, chitin, etc; carbonization of biomass to micro/mesoporous carbons, etc.
- **Topic 4:** *Biomass to platform chemicals:* production and further valorisation of platform chemicals that can be produced by biological or chemical processes from lignocellulose and used as building blocks for the formation of new product families; upgrading of glycerol as by-product in bio-diesel production.

Call for papers

All participants wishing to present a contribution are requested to submit by e-mail to the Conference Secretariat a one-page abstract including figures and/or tables in an MS Word format according to the Template provided (also available through the Workshop website). Selection of oral and poster presentations will be based on the evaluation of abstracts by typical review process. Please, indicate the topic area and oral or poster preference when submitting the abstract.

Proceedings

The authors of all accepted contributions (either oral or poster presentations) will be invited to submit a manuscript for publication to **Catalysis Today (Elsevier)**, following the standard peer-review process of the journal. A CD of abstracts with all accepted contributions will be also produced.

Registration & fees

Early registration (before August 31st, 2012) is recommended while reduced fees will be offered to postgraduate and PhD students, as well as members of the team of the MC members/substitutes.

	Early Bird (until August 31, 2012)	Late & On-site (after August 31, 2012)
MC members and substitutes *	80	80
Teams of MC members/substitutes	150	200
Non-COST members	250	350
Students	150	200
Accompanying persons	100	120

* MC members/substitutes are kindly requested to deposit via bank transfer the amount of 80 euros per person, as part of COST reimbursement for meals (20 euros/meal, 2 meals per day), for better organization of the lunches on November 1st and 2nd, and the Gala dinner on November 1st.

The registration fees for all the categories will cover the welcome reception (October 31st), coffee breaks during the Workshop, lunches (November, 1st and 2nd), Gala dinner (November, 1st), entrance to museums, transportation from the hotels to the Workshop venue and backwards, and the Workshop package with the book or CD of abstracts. Students are requested to send a certificate from their supervisor to the secretariat along with their registration form. Instructions for payment will be soon available via the Workshop website.

NOTE: The registration fees MUST be paid before any abstract will be considered for an oral or poster presentation.

Venue

The “UBIOCHEM-III: Sustainable production of fuels/energy, materials & chemicals from biomass” Workshop will be held at the **Centre for Research & Technology Hellas (CERTH)**, which is located on the 6th km. Charilaou-Thermi road, in Thermi, Thessaloniki. Lunches and coffee breaks will be served at the foyer of “Vergina” amphitheatre where the workshop will take place. Daily buses will transfer the participants from and to the hotels in the city centre.



Thessaloniki – the city

Thessaloniki is the Capital city of Macedonia region in Northern Greece and the second largest city after Athens, being also an important commercial and cultural centre of South East Europe and the Balkans. Thessaloniki was selected as the European Capital of Culture for the year 1997 and will be the European Youth Capital in 2014. Thessaloniki was founded in 315 B.C. by



the Macedonian king Cassander who named the new city in honour of his wife, Thessaloniki, the sister of Alexander the Great. The city has known significant development during the Hellenistic period and the Roman and Byzantine times, and has been a crossroads of civilizations, ethnicities and religions for the 2300 years of its history. Thessaloniki is well-known for its numerous historical sites and monuments including the Ancient Greek Market, Rotunda with the Roman architecture, the Byzantine Walls at the north part of the city and the White Tower on the waterfront, several Ottoman monuments, and numerous Orthodox Greek churches. The Archaeological museum and the museum of Byzantine culture host unique findings from these periods which are usually combined with special themed exhibitions. Shopping in the dynamic and active city centre, enjoying of the local gastronomy reflecting the ethnic mixtures over the years along with the excellent region wine, or just walking around the Ladadika district near the port or across the waterfront, will offer visitors a relaxing and pleasant stay in Thessaloniki.



Accommodation and Transportation

Although November is not a high tourist season in Greece, Thessaloniki is still a very popular destination due to the organization of many conferences, forums and other events. We have reserved rooms at favourable prices for the Workshop participants in some of the best hotels located in the city centre. As stated in the Table below, hotel quotas are valid until a specific date. After that, the offered rates and availability of rooms cannot be guaranteed. Since the Workshop venue, CERTH, is located in Thermi (about 10 km. from the centre of Thessaloniki), daily buses will transfer the participants from and to the hotels listed in the table below. Alternatively, more hotel choices can be found at: www.booking.com/thessaloniki

HOTEL NAME	PRICE		Available nights	Guaranteed prices until :	Contact person
	Double room/ single use	Double room (2 persons)			
Makedonia Palace *****	85 € BB (VAT included)	105 € BB (VAT included)	31/10, 1/11, 2/11, 3/11, 4/11	11/10/2012	Periklis Magoulas reserv2_mkp@classicalhotels.com TEL: 0030-2310-897222
Mediterranean Palace *****	100 € BB (VAT included)	115 € BB (VAT included)	31/10, 1/11, 2/11, 3/11, 4/11	28/09/2012	Chrisanthi Tsountali reservations@mediterranean-palace.gr TEL: 0030-2310-552554
Excelsior Hotel *****	120 € BB (VAT included)	135 € BB (VAT included)	31/10, 1/11, 2/11, 3/11, 4/11	31/08/2012	Irini Koukesi & Emi Vouza reservations@macedonianhotels.gr TEL: 0030-2310-021002
City Hotel & Central Park ****	80 € BB (VAT included)	90 € BB (VAT included)	31/10, 1/11, 2/11, 3/11, 4/11	31/08/2012	Irini Koukesi & Emi Vouza reservations@macedonianhotels.gr TEL: 0030-2310-021002
Egnatia Hotel ***	45 € BB (single room, VAT included)	56 € BB (VAT included)	31/10, 1/11, 2/11, 3/11, 4/11	30/9/2012	Maria Ori reservation@egnatia-hotel.gr TEL: 0030-2310-530-675

NOTES

Please, contact the hotel directly using the **Booking Identifier: UBIOCHEM-III**.

Send copy of all your e-mails to UBIOCHEM3@cperi.certh.gr

Hotel room booking and rates are guaranteed only until the above specified date for each hotel.

How to reach Thessaloniki

Thessaloniki's International airport "Macedonia" is directly connected to many European cities or via airports in Germany, Switzerland, Austria, Italy, etc. There are also more than 6 flights per day from Athens International Airport "Eleftherios Venizelos".

Important dates

June 30 th , 2012	Abstract submission deadline
July 31 st , 2012	Notification of reviewers' decision (oral or panel presentation)
August 31 st , 2012	Early registration deadline
November 1 st , 2012	Beginning of Workshop and submission of full manuscripts

Updated information will be also available on-line through the website of the Workshop: www.ubiochem3.certh.gr

Conference Secretariat

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Organizing Committee

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Prof. Anastasia Zabaniotou (Co-chair, Biomass Group, Dept. of Chemical Engineering/AUTH, GR)
Prof. Alberto Marinas (Dept. of Organic Chemistry/University of Cordoba, ES)
Prof. Angeliki Lemonidou (Dept. of Chemical Engineering/AUTH, GR)
Prof. Zisis Samaras (Dept. of Mechanical Engineering/AUTH, GR)
Dr. Angelos Lappas (CPERI/CERTH, GR)
Dr. Eleni Iliopoulou (CPERI/CERTH, GR)
Dr. Panagiotis Grammelis (ISFTA/CERTH, GR)
Prof. Zoi Koukoura (School of Forestry & Natural Environment/AUTH, GR)

International Scientific Committee

Prof. Roger A. Sheldon (Delft University of Technology, NL)
Prof. Vasile Parvulescu (University of Bucharest, RO)
Dr. Catherine Pinel (CNRS-IRCELYON, FR)
Dr. Pieter C.A. Bruijninx (Utrecht University, NL)
Dr. Marcelo Eduardo Domine (ITQ/CSIC-UPV, ES)
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