









UNIVERSITÀ DEGLI STUDI DI MILANO

Dottorato di Ricerca in Agricoltura, Ambiente
e Bioenergia





The course takes part in the plan for the continuous professional training of Doctors of Agronomy and Doctors of Forestry with the attribution of 1.812 CFP, with reference to the Regulations for Continuing Education CONAF

INTERNATIONAL AUTUMN SCHOOL 22ND – 23RD OCTOBER 2018

From waste to microalgae: an example of circular economy UNIVERSITY OF MILAN, PALAZZO FELTRINELLI GARGNANO (BRESCIA), ITALY

Venue

University of Milan, Palazzo Feltrinelli, Via XXIV Maggio, 18 25084 Gargnano (Brescia), Italy

Introduction

The school will investigate the core theme of the circular economy: the recovery of CO2 and nutrients to produce valuable products and feedstocks. In particular, the discussion will focus on the context of one of the main biorefinery in Lombardy and Europe, biogas, combined with one of the most promising biotechnologies: the cultivation of microalgae.

The speakers will present the state of the art of biogas upgrading technologies and CO2 recovery and will give a taste of the latest research developments on selective CO2 absorption with nanoporous materials.

The researchers involved in the challenge of large-scale cultivation of microalgae will share their experience, highlighting problems and advantages related to the recovery of wastes (slurry, wastewater, digestate) to make this technology competitive in Europe. The business world will present microalgae-based products that can be sold on the market and successful case history, in which

innovative products with high added value (biostimulants) have brought value to the traditional agricultural sectors.

Who can attend the school?

The school is designed for PhD students and post-doctoral researchers, working in universities, public and private research centres. Applications are welcome from all countries. The participation is free of charge. In order to attend the autumn school, CV, motivation letter and Application Module (available at https://www.italbiotec.it/index.php/it/news/522-balance- autumn-school) should be sent to: verdepertutti@gmail.com

Please note the following key dates:

Deadline for submission of application

20th September 2018

Up to 20 Participants will be selected.

Successful applicants informed 30th September 2018

PROGRAM

ONAOI

MONDAY 22ND OCTOBER 2018

- 9.00 Registration and welcome coffee
- 9.30 Opening address
- 10.00 Climate Change, Bioeconomy and Circular Economy Fabrizio Adani - Università degli Studi di MilanoGruppo Ricida Labs
- 11.00 Algae cultivation and full-scale approach (including CO2 recovery), SABANA project Gabriel Acien Fernández - Universidad de Almería, Spain
- 12.00 Microalgae in acquaculture. State of the art and future trends
 Andrea di Riase AlA sna
- 12.00 | |

- 14.00 Microalgae products: biostimulants and biofertilizers.
 - The history and experience of Biorizon Biotech
 Joaquín Pozo Dengra Biorizon Spain
- 14.45 **Microalgae and wastes**Gabriel Acien Fernández **Universidad de Almería**,
 Snain
- 15.30 Microalgae and organic wastes: mixotrophic way
 Giuliana D'Imporzano Università degli Studi di
 Milano Gruppo Ricida Labs, Consorzio Italbiotec
- 16.15 Microalgae and waste recovery: genomics and metagenomics
 Katia Parati Istituto Sperimentale Italiano
 Lazzaro Spallanzani
- 17.00 Speed sparring and Studies presentations
- 20.00 Social dinner

TUESDAY 23RD OCTOBER 2018

- 9.00 Speed sparring and Studies presentations
- 10.00 Biogas upgrading and CO2 recovery: State 13.00 of the art and perspective
 Lorenzo Maggioni Consorzio Italiano Biogas 14.00
- 10.45 Innovative methods for CO2 recovery:
 nanoporous materials
 Angiolina Comotti Università degli Studi di
 Milano Bicocca
- 11.30 Coffee Break
- 11.45 Strategy 2025 The sustainability of the biogas chain beyond the incentives:
 exploitation of the downstream
 Andrea Chiabrando Consorzio Monviso
 Agroenergia

- 13.00 Lunc
- 14.00 Biogas as a source of energy & nutrients
 Erik Meers Gent University-Belgium
- 15.00 The agro-food wastes: production and use as renewable feedstock
 Barbara Scaglia Università degli Studi di Milano Gruppo Ricicla Labs
- 15.30 Carbon and nutrients recovery for microalgae growth: Life Cycle Analysis
 Giuliana D'Imporzano Università degli Studi di Milano Gruppo Ricida Labs, Consorzio Italbiotec

Further information

Further information can also be obtained by contacting verdepertutti@gmail.com

Organizing committee

Prof. Fabrizio Adani, University of Milan Ilaria Re, Consorzio Italbiotec Silvia Salati, Consorzio Italbiotec

Scientific committee

Prof. Fabrizio Adani University of Milan Prof.ssa Angiolina Comotti University of Milano Bicocca Prof. Gabriel Acien University of Almeria





https://autumnschoolofmicroalgae.eventbrite.it