

IDROBIO
Biological processes as a possible source for renewable energy
2-3 NOVEMBRE 2009



PROGRAMMA INVITO

Lunedì 2 novembre

- 8.30 Registrazione
9.20 Indirizzi di saluto

I Sessione - THE IDROBIO PROJECT

Presiede R. BASSI

- 9.30 G.M. GIACOMETTI: *The IDROBIO projects: summary of activities and results*
10.00 P. GARIBALDI: *"Il piano mondiale del clima al 2050"*

10.30 Intervallo

- 11.00 V. BALZANI: *Energy for a Sustainable World*
11.30 Tavola Rotonda sul tema: *Renewable Energies* Presiede S. CARRÀ
13.30 Intervallo

II Sessione - HYDROGEN PRODUCTION FROM PHOTOSYNTHESIS

Presiede G.M. GIACOMETTI

- 15.00 T. HAPPE: *How algae produce hydrogen - News from the photosynthetic hydrogenase*
15.30 J.D. ROCHAIX: *Inducible chloroplast gene expression system in Chlamydomonas: prospects for understanding chloroplast function and improving hydrogen production*
16.00 R. BASSI: *The light harvesting system of Chlamydomonas reinhardtii and its modification for improving the efficiency of sun energy conversion in photobioreactors*

16.30 Intervallo

Presiede A. FONTANA

- 17.00 G. GIULIANO: *Inducible gene expression/silencing in Chlamydomonas reinhardtii*
17.30 P. COSTANTINI: *Structural and functional analysis of Chlamydomonas reinhardtii [Fe-Fe] hydrogenase and its maturation proteins*
18.00 Sessione Posters

Martedì 3 novembre

III Sessione - HYDROGEN PRODUCTION FROM FERMENTATION

Presiede R. DE PHILIPPIS

- 9.30 A. TSYGANKOV: *Hydrogen production by suspension and immobilized photosynthetic microorganisms in photobioreactors*
10.00 A. FONTANA: *The combined and economically profitable use of marine microalgae and marine bacteria for the production of energetic vectors*

10.30 Intervallo

Presiede P. GARIBALDI

- 11.00 G. IZZO: *Exploring bacterial biodiversity for hydrogen production*
11.30 R. DE PHILIPPIS: *Combining dark- and photo-fermentation: theoretical promises and practical problems*
12.00 M. MALINCONICO: *Development of novel polymer matrices for biotechnological hydrogen production*
12.30 G. TORZILLO: *Hydrogen production with sulfur-deprived Chlamydomonas Reinhardtii cultures: from laboratory to outdoor photobioreactors*

13.00 Intervallo

IV Sessione - HYDROGEN PRODUCTION AND BIOFUELS FROM MICROALGAE

Presiede G. IZZO

- 15.00 M.C. POSEWITZ: *Hydrogen, carbohydrates and lipids: the metabolic interplay of bioenergy carriers in algae*
15.30 M. TREDICI: *Marine microalgae: an emerging technology for the production of second generation biofuels*
16.00 Intervallo

Presiede G. TORZILLO

- 16.30 A. BERTUCCO: *Vegetal oil from microalgae: species selection and optimization of growth parameters*
17.00 E. CARPINELLI CORTEGGIANI: *Genomic and transcripto-mic investigation of an oil rich microalga*
17.30 Posters discussion
18.30 Chiusura dei lavori