

Algae World Summit 2010

May 18, 2010 (Tuesday)

7:00 – 8:00 *Breakfast and Registration*

8:00 – 8:15 **Welcome and Introduction by Chairman**
Brad Bartilson, *President & CEO*, PHOTON8, INC.

8:15 – 9:15 **Algae Commercialization and the Building of an Industry**

As the emerging algae industry continues its march toward commercialization, it faces a number of vital decisions about the right path forward: what markets to serve, what commercialization strategies to follow, what business models to adopt, what scale up approaches to implement, what infrastructure to put in place and what collaborative relationships to establish. The panel will address these and other issues currently dominating the industry's discussions revolving around commercialization and industry building.

Moderator:

Brad Bartilson, *President & CEO*, PHOTON8, INC.

Panelists:

Ben Cloud, *President & COO*, XL RENEWABLES

Riggs Eckelberry, *President & CEO*, ORIGIN OIL, INC.

Mark Edwards, *Professor*, ARIZONA STATE UNIVERSITY

John J. McKenna, *Managing Director*, HAMILTON CLARK & CO.

Bryan Yeh, *Assistant Vice President*, SAIC

9:15 – 10:15 **Government Support for Building an Algae Industry**

The government has cranked up its support and once again given a “thumbs up” on algae with additional stimulus funds earmarked for the development of algae-based biofuels and advanced, infrastructure-compatible biofuels. This panel of government representatives will discuss the government's algae goals and the sources of federal grants and other public funding for algae-based projects that span the continuum from laboratory to construction of large-scale plants.

Moderator:

Tim Zenk, *Vice President, Corporate Affairs*, SAPPHIRE ENERGY

Panelists:

Al Darzins, *Applied Science Principal Group Manager*, NREL

William Hagy, *Assistant Secretary, Alternative Energy Policy*, US DEPARTMENT OF AGRICULTURE

Joanne Morello, *AAAS Science and Technology Policy Fellow*, US DEPARTMENT OF ENERGY

10:15 – 10:45 *Networking Break*

10:45 – 11:15 Advanced Biofuels and Bioproducts (NAABB)

In January, the Department of Energy announced the investment of \$78 million in two biofuels consortia. The NAABB was awarded \$44 million to develop a systems approach for sustainable commercialization of algal biofuel. Ms. Ogden will provide a briefing on the goals and intended outcomes of the NAABB's work.

Kimberly Ogden, *Professor, Department of Chemical & Environmental Engineering,*
UNIVERSITY OF ARIZONA

11:15 – 12:00 Oil Companies' Perspectives on their Role in the Algae Value Chain

Commercializing algae biofuels—progressing from lab to large-scale production and distribution—will certainly involve the oil industry as a major player in the algae value chain. To date, the oil industry has been closely following algae developments and making strategic investments where it seems promising. What is driving their thought process and decision-making? During this panel, oil company executives will share their perspectives on how algae fits into their long-term strategies, how they see the algae commercialization process playing out, where they believe they can add the most value to this process and what criteria they use when making the ultimate decision to become involved in the process.

Co-Presenters:

Martin Lambert, *Commercial Manager Alternative Energies,* SHELL INTERNATIONAL
Nigel E. Snelling, *Business Development Manager,* MARATHON OIL CORP.

12:15 – 1:45 Group Luncheon

1:45 – 2:30 Algae and the Chemical Industry: The Market for Bio-Based Chemicals

The growing worldwide demand for bio-based chemical products offers algae developers an attractive market-entry point. Economic and scale barriers for chemical feedstock are not as daunting as biofuels and the “high value, low volume” value proposition is more attractive. The panel will discuss what types of opportunities exist for algae in the bio-based chemicals market, what paths are available for entry, what challenges need to be overcome to be successful, and what sorts of relationships chemical companies are looking to forge within the algae community.

Moderator:

Matt Carr Ph.D., *Director, Policy, Industrial and Environmental Section,*
BIOTECHNOLOGY INDUSTRY ORGANIZATION (BIO)

Panelists:

Kim C. Kristoff, *President,* GEMTEK PRODUCTS, LLC
Daniel Monticello, Ph.D., *Vice President, R & D,* GLYCOS BIOTECHNOLOGIES
Walter Rakitsky, *Vice President of Chemicals and Strategy,* SOLAZYME

2:30 – 3:15 Algae and the Consumer Products & Animal Feed Markets

A major focus on the emerging algae industry is to build a bridge to biofuels commercialization. In the interim, developing high-value co-products to generate alternative revenue streams earlier in the process has become a value-added enterprise. This panel will explore the opportunities to develop algae-based products for such markets as food, animal feed and pharmaceuticals and discuss what it truly takes to serve these markets and overcome real challenges, such as regulatory approval hurdles, to be successful.

Moderator:

Mark Edwards, *Professor*, ARIZONA STATE UNIVERSITY

Panelists:

Greg Bulgia, *Director of Research*, FMC BIOPOLYMER

Leland Lai, *Executive Director*, AQUAFAUNA BIOMARINE

Elizabeth Willett, *Commercial & Business Development Manager*, MARS SYMBIOSCIENCE

3:15 – 3:45 Networking Break

3:45 – 5:15 Algae Technology Developers' Progress Report

Algae technology developers are leading the charge in creating a new algae industry. In their efforts to move from lab to scale-up, they are in the all-important process of getting pilot and demonstration projects underway. In this progress report, developers will report on their activities, share their experiences, highlight the significant developments taking place, and discuss the key challenges that still need to be tackled to move algae development to the next step.

Moderator:

Mark Bünger, *Research Director*, LUX RESEARCH

Panelists:

Ben Cloud, *President/Chief Operating Officer*, XL RENEWABLES

Harrison Dillon, *Co-founder, President & CTO*, SOLAZYME

Douglas Henston, *CEO*, SOLIX BIOFUELS, INC.

Dave Jones, *Chief Operating Officer*, LIVEFUELS, INC.

Jim Long, *Chairman*, AURORA BIOFUELS; *Partner*, GABRIEL VENTURE PARTNERS

Barry Toyonaga, *CEO*, KENT BIOENERGY CORPORATION

5:15 Summit - Day One Adjourns

May 19, 2010 (Wednesday)

7:00 – 8:00 *Breakfast (No Registration)*

8:00 – 8:45 CO2 Sources' Perspectives on their Role in the Value Chain

For algae projects in need of CO2 as an essential input, finding a location with a suitable CO2 source and establishing a CO2 supply arrangement are critical. Yet, what are the views of prospective companies that will be asked to host a project or enter into a supply agreement? What is the likelihood that they will play ball? This session will address under what conditions it makes sense for CO2 Generators to participate in the algae value chain and what types of relationships they would like to see established.

Moderator:

Todd E. Alexander, *Partner*, CHADBOURNE & PARKE LLP

Panelists:

Walter L. Renz, *Sr. Business Development Manager - Energy & Fuels, North American Industrial Gases*, PRAXAIR, INC.

Martin Sabarsky, *CFO & COO*, HR BIOPETROLEUM

Justin Sobol, *Project Development, Renewable Energy*, FLORIDA POWER & LIGHT

8:45 – 9:30 Wastewater Treatment Operators' Perspective on their Role in the Value Chain

An effort to incorporate algae applications at wastewater treatment facilities is underway. What make-sense strategies and structures do wastewater treatment operators' require from these projects to enable them to push these ventures through their approval process? This panel of wastewater treatment officials will discuss what they are looking for from algae applications and discuss what is needed to make a sound business case for their adoption and approval.

Moderator:

Roger Ruan, Ph.D., *Professor, Department of BioProducts and BioSystems*, UNIVERSITY OF MINNESOTA

Panelists:

Joanna DeSa, *Manager*, CITY OF SUNNYVALE WASTEWATER TREATMENT PLANT

Dennis Plzak, *Project Manager*, GILBERT ARIZONA TREATMENT

9:30 – 10:15 Biorefiners' Perspectives on the Value Chain

Algae producers are looking to the ethanol and biodiesel industries as an opportunity whereby both algae producers and biorefiners can derive benefits by bringing algae into play at biorefineries. How do biorefiners view the potential of algae in their operations? This panel of representatives from biorefineries will share their viewpoints on incorporating algae applications into their operations and under what conditions they would be willing to do so. They will also discuss the type of economic and financial relationships needed to make algae a viable business proposition.

Moderator:

Todd E. Alexander, *Partner*, CHADBOURNE & PARKE LLP

Panelists:

Todd Ellis, *Vice President of Sales and Business Development*, IMPERIUM RENEWABLES

Terry Kulesa, *President*, IR1 GROUP

Tydd Rohrbough, *President*, CORNHUSKER

Dan Simon, *Co-Founder, COO, and Executive Vice President*, BIOFUEL ENERGY CORP.

Russell Teall, *President & Founder*, BIODIESEL INDUSTRIES, INC.

10:15 – 10:45 *Networking Break*

10:45 – 11:45 Transportation Industry Perspectives on the Value Chain

In its quest to move towards commercially viable and sustainable fuel sources, the transportation industry is demonstrating a real interest in the potential of algae fuels. What role is the transportation industry willing to play in the algae industry value chain? Do they see themselves simply as purchasers of algae fuels or are they looking to become more involved in building the algae industry? This panel of transportation leaders will discuss how algae fits into their future plans and what types of relationships they would like to establish with others in the value chain.

Moderator:

Mark Edwards, *Professor*, ARIZONA STATE UNIVERSITY

Panelists:

Lucie Bednarova Duesterhoeft, *Research & Development & Strategic Planning*, GENERAL MOTORS

Renee Martin-Nagle, *Vice President & Head of Environmental Affairs*, AIRBUS AMERICAS

Daniel Oh, *President and COO*, RENEWABLE ENERGY GROUP, INC.

11:45 – 12:45 The Financial Communities' Perspectives on Financing Algae Commercialization

The billion-dollar revenue potential of algae-based biofuels has certainly attracted investor attention. Yet, in the wake of the fiscal crisis, the recent woes troubling the biofuels industry, and the growing realism about development timelines, the financial community is taking a disciplined approach to its investment and lending decisions. What level of investment can the algae industry realistically expect? This panel of representatives from the financial community will discuss the types of opportunities they are looking for in algae, what they will and will not fund, and describe the investment criteria they will be using when making their investment decisions.

Moderator:

Mark Hanson, *Principal*, STOEL RIVES LLP

Panelists:

Sam Kanesh, *Managing Director*, SCOTIA CAPITAL

William Lese, *Managing Director*, BRAEMAR ENERGY VENTURES

Giacomo Marini, *Founder / Managing Director*, NOVENTI VENTURES

Michael Melnick, *Senior Representative*, CMEA CAPITAL

12:45 *Summit Adjourned*