

Next Generation BIO-BASED CHEMICALS SUMMIT

Bringing Together the Value Chain for Drop-In Chemicals
Derived from Cellulosics, Algae, Waste Streams & CO₂

February 8-10, 2010 | San Diego, CA



florida biofuels association, inc.



Final Agenda

February 8th
February 9th & 10th

Pre-Summit Symposium: Innovative Platforms for Biomass-to-Chemicals Conversion
Next Generation Bio-Based Chemicals Summit

ADVISORY BOARD

Cynthia Bryant, Marketing Manager - Global Fuels, NOVOZYMES NORTH AMERICA INC.
Steve W. Burton, Biorefinery Technology Leader, The Center for Packaging Innovation, MEADWESTVACO
John Ellersick, Succinic Acids Program Manager, MYRIANT TECHNOLOGIES
Keith Gillard, Principal, BASF VENTURE CAPITAL AMERICA, INC.
Jonathon Gorham, Manager Business Development, QTEROS
Douglas Hawkins, Program Manager, Emerging Technologies, DOW CHEMICAL COMPANY
Michael Manella, Scientist II, ARCHER DANIELS MIDLAND COMPANY
Steve Meller, Chief Innovation Catalyst, PROCTER & GAMBLE
Jonathan Wolfson, Chief Executive Officer, SOLAZYME

Tuesday, February 9th, 2010

7 – 8:00am **BREAKFAST & REGISTRATION (SIGN IN)**

8-8:15 **Summit Chair: David Quinby**, Partner, STOEL RIVES LLP

Session I: Enabling the Growth of a Bio-Based Chemicals Industry

8:15-9:15 **Partnering for the Growth of a Bio-Based Chemicals Industry**

- What do collaborative arrangements in this emerging segment look like (government with private, corporate with start-up)?
- What does government expect from industry and what can it offer?
- What do corporations, government and start-ups expect from each other and offer in return?

- What are some of the bigger points of contention between partners?

Moderator:

Jennifer Hanneschlager, *Partner*, TIBER CREEK PARTNERS

Panelists:

Mark Bunger, *Research Director*, LUX RESEARCH INC

Roger Conway, *Director, Office of Energy Policy and New Uses*, USDA

Douglas Faulkner, *President & CoFounder*, CHRYSALIS ENERGY PARTNERS

Leslie Pezzullo, *Biochemical Conversion Technology Manager, Biomass Program*, US DOE*

Rina Singh, *Director, Policy*, BIOTECHNOLOGY INDUSTRIAL ORGANIZATION (BIO)

Session II: Market-Makers Assess the Emerging Bio-Based Chemicals Value Chain

9:15-9:45 **The Oil Price Horizon**

- What are some of the scenarios market makers are looking at in terms of oil price behavior on the “bumpy plateau”?
- How much volatility do they expect, and what are the more probable price ranges, given the general consensus that oil is upward bound long-term?
- How do these market leaders think about the underlying price drivers and feedback loops, and what was behind the price spike of 2008?
- Will BRIC consumption help keep oil prices high?
- What kinds of carbon prices are envisioned as feeding into oil price, given some future US carbon legislation?

Panelists:

Daniel Derr, *Lead Scientist, Sustainable Energy*, GENERAL ELECTRIC

Robert Starkey, *Vice President Fuels*, JIM JORDAN & ASSOCIATES

9:45-10:30 **Perspectives of Petrochem Refiners and Major Bio-Processors on the Bio-Based Chemicals Value Chain and Market**

- The drivers for bio-based chemicals adoption: oil/gas prices, carbon cost, water footprint, demand for more sustainable consumer products
- How do bio-based products stack up against coal syngas-derived chemicals (polygen gasification model)?
- Status of existing commitments in bio-based chemicals, if any
- What is their balance of in-house R&D/development vs. outside licensing/partnering?
- What are they looking for in acquisition/licensing/joint venture?

Moderator:

Morten Lund, *Partner*, STOEL RIVES LLP

Panelists:

Joe Fox, *Director of Emerging and External Technologies*, ASHLAND, INC
James Iademarco, *Vice President of Bio-Based Chemicals and Biofuels*,
DSM WHITE BIOTECHNOLOGY
Steve Meller, *Chief Innovation Catalyst*, PROCTER & GAMBLE
Bob Maughon, *Senior Research & Development Director, Hydrocarbons and
Energy*, DOW CHEMICAL CORPORATION
Mark Posey, *Technology Manager, Business Development Unit*,
HUNTSMAN CORPORATION

10:30-10:45 **Networking Break**

Session III: Demand Side Perspectives on Bio-Based Chemicals

This session aims to shine a light on the end-use market drivers for bio-based chemical products and applications. Presenters will address the existing commercial success of bioplastics, the role of sustainability factors with consumers and big box retailers, and competitive advantages to be gained—or not—by switching to biomass-derived chemicals.

10:45-11:15 **Overview of Retailer Scorecards, End-of-Life Infrastructure Issues and Environmental Regulations that Impact Biopolymer Packaging**

Presenter:

Marci Recher, *Project Manager*, ENVIRONMENTAL PACKAGING
INTERNATIONAL

11:15-11:45 **A Consumer Language for Bioproducts: The Quest of a Designer and a Marketer to Understand How to Effectively Connect the Value of Sustainable Products to the End Market**

Joint Presenters:

Eric Pfeiffer, *President*, PFEIFFER LAB
Umberto Torresan, *Global Marketing Manager, Polyurethanes*, DOW
CHEMICAL COMPANY

11:45-12:00 Luncheon Address: **Karl Sanford**, *Vice President Technology Development*,
GENENCOR, A DIVISION OF DANISCO

12:00-1:15 **GROUP LUNCHEON** (Sponsored by GENENCOR)

Session IV: BioBased Products, Applications and Scaling Hurdles

1:15-3:00 **Bio-Based Products, Applications and Scaling Hurdles, Part I**

This session will consist of short, highly focused presentations from developers of biomass conversion platforms of all types (thermo-chemical, hydrolysis, fermentation, synthetic bio and combinations), describing:

- Their target “intermediate” or “building block” molecules and associated applications and market segments
- Special challenges in conversion process to achieve the bio-based product and getting to a cost-competitive “drop-in” status
- Progress with, and challenges in, scaling production from bench or pilot-scale to commercial level
- Their needs for partnering or investment, or tools/IP available for licensing

Moderator:

Edna Vassilovski, *Partner*, STOEL RIVES LLP

Presenters:

Raw Sewage into Biodegradable Plastic

John Bissell, *Chief Executive Officer*, MICROMIDAS, INC

BioBased Acrylic - Really!

Charles Eggert, *President & Chief Executive Officer*, OPX BIOTECHNOLOGIES

Methyl Ester Ethoxylates - Vegetable Oil Based Surfactants

Nicholas Kob, *Market Development Manager*, HUNTSMAN CORPORATION

Guayule Rubber - the Emergence of a Major New Industrial Crop

Jeff Martin, *President & Chief Executive Officer*, YULEX CORPORATION

3:00-3:30 Networking Break

3:30-5:30 **Bio-Based Products, Applications and Scaling Hurdles, Part II**

Moderator:

Edna Vassilovski, *Partner*, STOEL RIVES LLP

Presenters:

With the Market In Mind: Advancing a Pipeline of Bio-Based Products

Damien Perriman, *Vice President Business Development*, VERDEZYNE

Delivering on the Promise of Itaconic Acid

John Shaw, *Principal*, ITACONIX LLC

L-Ketals – Renewable Platform Chemicals

Olga Selifonova, *Co-Founder*, SEGETIS

Next Generation Green Chemicals from MicroAlgae - Tailored Oils and Chemicals from Renewable Oil Production Platform

Jonathon Wolfson, *Chief Executive Officer*, SOLAZYME

Wednesday, February 10th, 2010

Day Two, Summit

Session V: Project Development and Retooling Existing Biorefineries

8:00-9:30 Perspectives of Biorefinery Owners and Developers on the Bio-Based Chemicals Value Chain

This panel features biofuel plant owners and project developers, seeking to boost their project economics with bio-based co-products

- What is the relationship between biotech product developers and existing facilities that convert large amounts of biomass?
- How do biorefineries realistically see the additional revenue potential of bio-based chemicals alongside their existing product line, whether fuels or paper products? What are the trade-offs between revenue generating potential and the cost of new processes and equipment?
- Status of ethanol projects starting to develop chemical revenue streams
- Need for external technologies

Moderator:

John Ellersick, *Succinic Acids Program Manager*, MYRIANT TECHNOLOGIES LLC

Panelists:

William Baum, *Executive Vice President, Business Development*, VERENIUM

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

John Plaza, *President & Founder*, IMPERIUM RENEWABLES

Chris Ryan, *Vice President, Business Development Downstream*, GEVO

Christophe Schilling, *Chief Executive Officer*, GENOMATICA

Andrew Shafer, *Executive Vice President, Sales and Market Development*, ELEVANCE

Scott Weishaar, *Vice President of Commercial Development*, POET

9:30-10:00 Networking Break

Session VI: Feedstock and Logistics Considerations in the Growth of a Bio-Based Chemicals Industry

10:00-11:30 Perspectives of Feedstock Suppliers on the Bio-based Chemicals Value Chain and Market Prospects

This panel will explore “upstream” considerations around logistics, scale, and economics:

- The “Food vs. Fuel” debate: does it impact bio-based chemicals?

- Lifecycle, carbon and water footprint for feedstocks
- How do feedstock owners/suppliers see bio-based chemicals in terms of expanding their revenue opportunities?

Moderator:

Kevin Laurence, *Partner*, STOEL RIVES LLP

Panelists:

Linda Beltz, *Director, Technology Partnerships*, WEYERHAEUSER

Edward Hennessey, *Chairman & Chief Executive Officer*, CLEANTECH BIOFUELS, INC

Aaron Schuchart, *Vice President, Business Development*, MENDEL BIOTECHNOLOGY INC

Mike Schmidt, *Manager, Forestry Renewables*, JOHN DEERE

Glen Weaver, *Research, Quality, and Innovation*, CONAGRA FOODS

Dubois White, *Vice President of Hull and Fiber and Argentine Operations*, GOLDEN PEANUT COMPANY

11:00 – 11:30 Networking Break

Session VII: Catalyzing the Value Chain with Equity and Government Support

11:30-1:00 Panel Discussion: Venture Investors' Perspectives

- How venture investors see the market – which platform/feedstock chemicals are most attractive targets for entry
- Size of value chain segments
- Exit strategies from biotech developers of bio-based chemicals; any prospect for IPOs improving in the next year or so?
- What kinds of relationships are investors looking for in the university / R&D lab?
- What are the main challenges in bringing bio-based products to market?
- Role of governmental funding (grants, contracts, loan guarantees)

Moderator:

David Quinby, *Partner*, STOEL RIVES LLP

Panelists:

Doug Cameron, *Managing Director and Chief Science Advisor*, PIPER JAFFRAY

Amol Deshpande, *Partner*, KLEINER, PERKINS, CAUFIELD, & BYERS*

William Lese, *Managing Director*, BRAEMAR ENERGY VENTURES LLC

Evan Lovell, *Partner*, VIRGIN GREEN FUND

Erik Rutten, *Senior Investment Partner*, DSM VENTURING

1:00 **Summit Adjourns**

*Invited speakers