Call For Abstracts & Exhibits Information

**Deadline: 11/17/2013**

The 36th Symposium program chairs invite you to submit abstracts for the posters or oral presentations in the technical program.

All submissions must be submitted electronically. You will receive automatic confirmation of receipt of your abstract.

Hilton Clearwater Beach
Clearwater Beach, FL
April 28–May 1, 2014

[www.simbhq.org/sbfc](http://www.simbhq.org/sbfc)
Welcome!

The call for papers for the Thirty-Sixth Symposium on Biotechnology for Fuels and Chemicals (36th SBFC) has opened and the conference organizers invite you to submit abstracts for oral and poster presentations. The deadline for abstract submissions is November 17, 2013.

Interest in producing greater amounts and a wider array of bio-based fuels and chemicals products from non-traditional renewable feedstocks such as algal and terrestrial biomass continues to surge, driven by higher prices for traditional commodity feedstocks such as petroleum and sugar coupled with increasing recognition of the threat rising atmospheric greenhouse gas levels pose to global climate stability. The number of scientific journals covering the renewable fuels and chemicals field has expanded significantly over the past decade and public and private investment in research and development and commercialization of bio-based technologies continues to accelerate. Biotechnologies offer to provide solutions that can help society move towards a more sustainable fuels and chemicals resource base.

There is also increasing interest in and ability to couple biotechnologies with traditional thermochemical and chemical conversion technologies. This year’s Symposium will provide an exceptional forum for practitioners and experts from companies, universities, and governments around the world to learn about, discuss, and exchange information on the latest progress and breakthroughs being made in the dynamic and growing field of bio-based fuels and chemicals research, development, and deployment.

This year’s 36th Symposium will be held April 28 – May 1, 2014 in Clearwater Beach, Florida, hosted by Oak Ridge National Laboratory. The venue will be the same excellent and popular Hilton beach hotel location as we enjoyed for the 32nd SBFC.

The meeting format for the 36th SBFC will be similar to the 35th SBFC format, with 7 talks per oral session (rather than the historical 6) and a free afternoon midway through meeting to provide an extended period for meeting and networking with professional colleagues. We listened to input gathered through post meeting surveys and this format reflects the preference of the vast majority of past attendees. A total of 18 oral presentation sessions, 2 evening poster sessions as well as 2 special topics sessions will be convened over three and a half days, with technical topics spanning feedstocks, biocatalysts and conversion sciences to separations, process development, biorefinery commercialization, and economic and sustainability assessment. The program is designed to provide ample opportunities for those attending to engage in informal discussions and exchanges with their international colleagues.

Deadline for Abstract Submission

November 17, 2013

Please note: In order to provide timely acceptances to submitters, the abstract deadline will not be extended.

Submit abstracts for posters and oral presentations at: http://sim.confex.com/sim/36th/cfp.cgi

Meeting Pattern

Please note our meeting pattern: Monday-Thursday.

Clearwater Beach, FL

Clearwater Beach’s community on the white sandy shores of the Gulf of Mexico welcomes you to their sunny beaches, one of the top ten beaches in the nation. The three mile stretch of beach is home to Pier 60, deep sea fishing charters, dinner and adventure cruises, luxury hotels, condominiums, local restaurants, attractions; and of course the main attraction, Clearwater Beach. Several restaurants on Clearwater Beach offer casual dining inside or at outside seating areas.
All beaches are public, and accessible from convenient points, as well as the municipal beach adjacent to Pier 60. Every evening, enjoy sunsets at Pier 60 and experience live free entertainment, artisans and street performers. Early evening, as the sun begins to set, is the perfect time for a walk along the shoreline in the cool evening gulf breezes.

Meeting Venue

Hilton Clearwater Beach
400 Mandalay Avenue • Clearwater Beach, FL 33767
727-461-3222

Hilton Clearwater Beach is a captivating getaway spanning 10 acres along the sparkling Gulf of Mexico. Guests enjoy the unparalleled benefits of the Hilton Family Brands, including the Hilton HHonors program.

Please reserve early!

A block of rooms has been reserved at the conference hotel for the conference dates, April 28–May 1. The conference rate is $179 plus tax including guest room internet. This rate may be offered three days before and three days after the conference dates if the rooms are available. To book rooms, visit www.simhq.org/sbfc.

Attendees booking through the SIMB block will receive complimentary wireless internet in sleeping rooms.

Housing is only available at the conference rate through the conference link.

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Important Dates

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<td>Abstract Deadline</td>
<td>November 17, 2013</td>
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<td>Registration and Housing Begins</td>
<td>January 7, 2014</td>
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<td>Registration Deadline for Poster Presenters (To be assured of publication and poster space)</td>
<td>February 14, 2014</td>
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<td>Advanced Registration Ends</td>
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Photos courtesy of Visit St Petersburg/Clearwater
Symposium Registration

Full conference, Postdoctoral Fellow, and Emeritus registrations include continental breakfasts Tuesday-Thursday, daily refreshments, poster receptions, conference banquet, conference program and abstracts, and access to uploads of presentations.

One day registration does not include the conference banquet. Separate banquet ticket may be purchased. Banquet is optional at a reduced price for student registrants.

Guest fee includes participation in all social events including banquet without attending scientific sessions and lectures.

**Wire Transfer:** If paying by wire transfer, contact jennifer.johnson@simhq.org for further information. A $40.00 USD fee will apply to all wire transfers.

**Cancellations:** Requests for refunds must be submitted in writing to the SIMB office on or before March 28, 2014 to jennifer.johnson@simhq.org and must be received by 5pm EST close of business. Cancellation may be made on or before March 28, 2014, less a $75.00 USD fee.

No refunds will be issued after March 28, 2014. 
*Personnel substitutions may be made in lieu of cancellation.*

Advertising opportunities are available in the meeting program. Deadlines for submitting insertion forms and artwork are listed on rate sheets available online. Contact Katie Devins (katie.devins@simhq.org).
Session Topics

**Feedstock I – Plant Genetics and Recalcitrance**

Research aimed at producing improved plant cultivars is underway worldwide with the goal of developing biomass sources with improved cell wall structure, growth and composition characteristics beneficial to bioconversion. This session will highlight research on breeding to improve plant yield, advances in domestication of promising biomass species, in planta expression of enzymes, fundamental understanding of biophysical origin of biomass recalcitrance, developments in crops with reduced recalcitrance for better processing characteristics, and advances in plant systems biology research.

**Feedstock II – Biomass Physicochemical Analysis**

Physicochemical properties of biomass often dictate its suitability as a feedstock for biological or thermal conversion. Improved methods for characterization, such as physical or composition analysis, and how this translates to biomass "quality" will be discussed. Advances in rapid analysis technologies for high throughput analysis and screening will be part of this session.

**Feedstock III – Biomass Supply, Integrated Biorefineries, and Sustainability**

Existing and newly developed plant biomass types will be favored that can be produced and delivered to integrated biorefineries at the lowest possible cost. Biomass production also has to be environmentally sustainable. This session will discuss studies and demonstrations of advances in biomass production technology, improved agronomic practices, harvesting technologies and sustainability issues such as land and water use, economics, and supply chain logistics critical to dramatically reducing biomass feedstock cost. Progress on life-cycle analysis and related energy efficiency and sustainability analyses and their validation for integrated biorefinery applications will also be part of this session.

**Enzyme Science and Technology I – Assays and Biochemical Characterization**

Enzyme expression and function requires advanced tools such as sophisticated enzyme assays and characterization techniques. New and improved assay methods and techniques for characterizing biomass depolymerizing and debranching enzymes will be included in this session. Progress in understanding and applying oxidative enzymes, expansins, swollenins, and other types of cell wall disrupting enzymes to improve plant cell wall deconstruction and in understanding and improving enzyme synergy in biomass hydrolysis will also be included.

**Enzyme Science and Technology II – Modeling and Structure/Function Relationships**

Advanced knowledge obtained by modeling enzyme structure and function is being used to guide metabolic engineering and rational selection of targets for site-directed changes to improve enzyme performance. The development and verification of such models are crucial to these efforts. This session will highlight case studies advancing molecular-level modeling and structure-function studies to increase understanding of enzyme functionality and catalytic mechanisms.

**Enzyme Science and Technology III – Enzyme Discovery and Engineering**

Naturally occurring enzymes can be powerful tools for bioprocessing but often their characteristics must be improved to their use to be economically viable. Papers in this session will describe novel newly discovered enzymes as well as advances being made in enzyme engineering to improve enzyme activity, thermostability, substrate range, or tolerance to other process conditions. Improvements in enzymatic lignin deconstruction and progress in reducing the cost of enzymes for biomass refining applications will also be part of this session.

**Pretreatment and Fractionation Technology I, II and III (three sessions, with subtitles to be defined)**

Lignocellulosic biomass is difficult to economically disassemble at high yield due to the presence of highly modified structural carbohydrates and aromatic (lignin) polymers. These sessions will discuss recent developments and scale-up in mechanical, chemical, and biochemical pretreatment and fractionation processes – both existing and new approaches (e.g., ionic liquids). Improved measurement and control of pretreatment and fractionation processes will also be described. The three sessions on this topic will be broadly differentiated by the type of deconstruction process chemistry being discussed.
Microbial Science and Technology I, II – Yeast and Fungi

Yeast and fungi are powerful biocatalysts, however an ideal microorganism capable of complete and rapid conversion of multiple or mixed substrates does not yet exist. This session will emphasize recent progress in improving yeast and fungi to overcome fundamental limitations to rapid conversion of biomass-derived (renewable) carbon sources. Research topics within scope include new microbial strain discovery and testing, advances in genetic and pathway engineering for microbial strain evolution, as well as evaluation of natural or constructed consortia for bioconversion. There will be two sessions on yeast and fungi.

Microbial Science and Technology III – Bacteria

Application of newly developed bacteria for ethanol and other fuels and chemicals production will be presented in this session. Research topics to be highlighted include new bacterial strain discovery and testing, advances using genetic and pathway engineering for strain evolution, as well as studies of natural or constructed bacterial consortia for improved conversion processes.

Microbial Science and Technology IV – Algae

Algal cultures are increasingly becoming a microbial platform recognized to have high potential for production of lipids, chemicals and fuels using both photosynthetic and heterotrophic approaches. This session will focus on discovery and characterization of new algae strains and progress to improve growth, product formation and harvesting efficiencies. It will also cover innovations in the use of open and closed production systems and improvements in understanding and demonstrating the practicality and economic viability of such systems.

Bioprocessing, Reactor Design, and Separations Technology I, II

Economically viable bioprocesses require definitive substrate characterization, effective material handling and robust conversion technologies in combination with efficient downstream or in situ product separation and recovery. Papers in this session will describe advances in the development, testing and demonstration of bioconversion processes spanning early to late stages of process development and integration. Topics to be emphasized include biocatalyst recycle, integrated production and recovery, overcoming material handling bottleneck and advances in hybrid thermochemical/biological (or biological/thermochemical) conversion process development. There will be two sessions covering these topics.

Advanced Biofuels, Chemicals, and Co-Products I, II

Chemicals and advanced biofuels (such as bio-based gasoline, diesel, jet fuel, higher alcohols, fatty acids, biogas, etc.) can be produced from biomass-derived sugars, synthesis gases, or other sustainable carbon sources. This session will highlight advances in biological and combined thermochemical-biological (or biological- thermochemical) production routes. Production of bio-based intermediates suitable as feedstocks for petroleum refineries as well as the development of new products from lignin or other potential biorefining side streams will also be described. There will be two session covering these topics.

Biofuels and Bioproducts Commercialization, Economics and Sustainability

Advanced biofuels technologies are starting to emerge from laboratories around the world to enter the commercial marketplace. This session will emphasize recent progress in pilot and larger scale biorefinery integration and demonstration to further commercialization of advanced biofuels and bioproducts technologies. It will also describe associated techno-economic evaluations and life cycle and other sustainability assessments of envisioned full scale commercial biorefining processes. Papers are also sought the discuss progress in understanding issues related to large-scale delivery and use of biofuels, including distribution and delivery logistics and engine manufacturer acceptance criteria.

ST1: Synthetic Biology (by invitation only)

New synthetic biology tools can be used to create and improve novel biological systems and the advance of high-speed low-cost sequencing and gene fabrication technologies is leading to increased activity in this field. This session will highlight advances in using this new approach for biocatalyst design and the develop of novel biological systems. Invited speakers will present in this session.

ST2: Bioenergy Science Center Update (by invitation only)

During the last four years, bioenergy research centers and institutes have made tremendous progress in developing and applying new fundamental knowledge to improve technologies for producing biomass-derived fuels and chemicals. Invited speakers from the three United States Department of Energy-funded Bioenergy Research Centers and well as from other US and international bioenergy research institutes will describe their respective research goals and recent progress.
The 36th Symposium program will once again provide an excellent opportunity for experts from around the world to gather and discuss recent progress.

Sponsorship provides financial support for the conference and is an excellent way to provide visibility to your organization, promote your brand, and gain access to over 800 attendees. There are a variety of sponsorship packages and opportunities for organizations of all sizes.

For more information or to customize a package, contact Christine Lowe (chris.lowe@simhq.org).

### Company Information

Company Name ___________________________________________

Company Contact _________________________________________

Address __________________________________________________

Tel _______________________________________________________

Fax ______________________________________________________

Email _____________________________________________________

Website __________________________________________________

Submit company logo (as eps or tif file) to katie.devins@simhq.org.

Submit names of complimentary registrants to meetings@simhq.org.

### Payment Information

(SIMB Fed ID# 35-6026526)

Total sponsorship amount $____________________

________ Invoice my company

________ Check enclosed (payable to SIMB)

________ Charge to: □ Visa □ MC □ AMEX

Card # _____________________________________________

Exp. Date _____________________________________________

Signature _____________________________________________

Name on card: _______________________________________

Send completed form and payment to:

SIMB
3929 Old Lee Hwy, Ste 92A
Fairfax, VA 22030
T: 703.691.3357
F: 703.691.7991
chris.lowe@simhq.org

1,000+ Basic Sponsorship

Company name featured on Symposium website, in conference program, and on signage.

________ General meeting sponsorship

________ Specific session (designate)

1,500+ Company Image Package

Company name and logo featured on Symposium website, in conference program, and on signage.

________ General meeting sponsorship

________ Specific session (designate)

2,500+ Company Image and Meeting Registration Package

Company Image Package plus one (1) complimentary full meeting registration providing full access to all sessions and events.

________ Coffee break(s) (M - PM; T-Th - AM and PM) ($3,000 ea)

________ General meeting sponsorship

________ Specific session (designate)

5,000+ Deluxe Company Image and Meeting Registration Package

Company Image Package plus two (2) complimentary full meeting registrations @ 1 per $2,500.

________ Conference tote bags with company and Symposium logos (Call for pricing)

________ Pre-banquet reception (Th)

________ General meeting sponsorship

________ Specific session (designate)

10,000+ Special Session Package

Company Image Package plus four (4) complimentary full meeting registrations @ 1 per $2,500; one tabletop exhibit booth, and your literature in attendee tote bags.

________ Poster session/reception (M, Tu) ($15,000 ea)

________ Continental breakfast (T, W, Th) ($12,000 ea)

20,000+ Symposium Banquet (Th)

Company Image Package plus eight (8) complimentary full meeting registrations, one tabletop exhibit booth, and your literature in attendee tote bags.

________ Banquet dinner followed by award presentations and banquet speaker.
For Registration Pricing & Updates, please visit http://simbhq.org/sbfc

General Information

Tabletop space is limited and is assigned on a first-come, first-served basis.

The cost of a 2 ft. by 6 ft. draped table and a sign is $900 for SIMB Corporate Members and $1100 for non-corporate members.

Exhibitors will be permitted to register two representatives for each tabletop. A meal plan is available at additional cost. Meeting registration is not included in tabletop price.

Electrical order form will be provided with tabletop confirmation. If you are planning on displaying equipment or using a portable table display, it must be no higher than 48 inches above the tabletop and no wider than 6 feet. Please contact meetings@simhq.org if your exhibit does not meet these criteria.

SIMB reserves the right to place oversize exhibits where they will not encroach on neighboring exhibitors. Exhibitors will be notified of any change in location.

Benefits

- Access to over 700 registrants
- Listing and company description on the Symposium meeting website, listing on signage, and in the meeting program.
- A list of conference registrants and a scientific program with abstracts
- Social events in the exhibit area.

Please email a 50-word description of your company for publication in the meeting program to meetings@simhq.org when submitting your booth application. Faxes are not accepted.

2013 Exhibitors

- Andritz Ltd
- Applied Instrument Technology, Inc.
- Applikon Biotechnology, Inc.
- Benz Technology International, Inc.
- Bioengineering, Inc.
- BioMed Central
- Chemglass Life Science
- Eppendorf
- Hamilton Company
- Labman Automation LTD
- M2p-labs, Inc.
- Megazyme International
- Metabolon, Inc.
- National Renewable Energy Laboratory (NREL)
- Pall Life Sciences
- Tecan
- Thermo Fisher Scientific
- U.S. Department of Energy - Biomass Program
Application for Tabletop Exhibit Space

Please Note

Exhibitors will be permitted to register two representatives for each tabletop. Meeting registration is NOT included.

Separate meal plan available at $300 and includes: Monday and Tuesday evening poster receptions, breakfast Tuesday–Thursday, reception and banquet on Thursday, as well as all breaks.

Exhibitors wishing to attend sessions and receive uploads of presentations must register as attendees through the conference website. Full registration includes all meals.

Cancellations

Cancellations must be submitted in writing to the SIMB office on or before 5 PM EST March 28, 2014. No refunds will be issued after March 28, 2014. A $75.00 USD administrative fee will be assessed.

To be included in the meeting program, email your 50-word company description to meetings@simhq.org. Faxes not accepted.

Date: _______________________________________

Company: __________________________________________________________

Address: __________________________________________________________

__________________________________________________________________________

Phone: __________________________ Fax: __________________________

Email: __________________________ URL: __________________________

Contact: __________________________________________________________________

Authorized Signature: _________________________________________________

Booth Choices: ① __________ ② __________ ③ __________

You will be contacted if your choice is unavailable.

I do not wish to be assigned next to: _____________________________________________________________________________

List Representatives (With Full Contact Information): ① _____________________________________________________________________________

② _____________________________________________________________________________

Exhibit Fees

☐ $900 SIMB Corporate Member ☐ $1100 Non-corporate member ____________________

☐ $300 Exhibitor meals and events (per representative) ____________________

Sponsorship

Session or Event: ______________________________

Total Amount Enclosed: $ ____________________

Payment

☐ Credit Card ☐ Visa ☐ MasterCard ☐ AMEX

Card #: __________________________________________ Exp. Date: ____________________

Signature: __________________________ Name on Card: __________________________

☐ Check enclosed, payable to SIMB

☐ Invoice my company - net 30 days

Send application and payment to:

SIMB 3929 Old Lee Highway, Suite 92A • Fairfax VA 22030-2421
T: 703.691.3357 ×24 • F: 703.691.7991 • meetings@simhq.org
PLAN TO ATTEND

Society for Industrial Microbiology and Biotechnology Annual Meeting and Exhibition •
July 20–24, 2014 • Hyatt Regency, St Louis MO

Recent Advances in Microbial Control (RAMC) •
November 9–12, 2014 • Marriott Union Square, San Francisco CA

37th Symposium on Biotechnology for Fuels & Chemicals (SBFC) •
April 27–30, 2015 • Sheraton San Diego, San Diego CA