



Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau

sponsors

**A** APOTEX FERMENTATION INC

**AMGEN**

  
**ADM**

**Lonza**

  
**novozymes**  
Rethink Tomorrow

*Waksman Foundation for Microbiology*

  
**Alberta  
Innovates  
Technology  
Futures**

**CUBIST**  
PHARMACEUTICALS

*Pfizer*

*Sapphire Energy*

*Dow AgroSciences*

*Marcor Development Corporation*

*Monserate Biotechnology*



# SIM Job Fair

*Monday, July 25, 2011*

Time: 8 AM – 4 PM

Location: Grand Ballroom Foyer, 5th Fl

Onsite Scheduling Contact: Bob Berger,  
BB & Associates

*Job Seekers:*

*Bring your resume for posting/uploading and meet one-on-one with company representatives.*

*Private interview room available all week during the meeting.*



Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau

## support & thanks

*The Society for Industrial Microbiology sincerely appreciates the support of the 2011 Annual Meeting by the following contributors:*

ADM

Alberta Innovates

Amgen

Apotex Fermentation

Cubist Pharmaceuticals

Dow AgroSciences

Lonza

Marcor

Monserate Biotechnology

Novozymes

Pfizer

Sapphire Energy

Waksman Foundation for Microbiology

*Special thanks to our advertisers for their support of our annual meeting*

ADM/Traders

Friesland Campina Domo

Marcor



## letter from the president

French Quarter Architecture, Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau.

Dear Meeting Attendee:

It is a pleasure for me to welcome you to the 2011 Annual Meeting of the Society for Industrial Microbiology (SIM). On behalf of the SIM Board, I would like to extend to you heartfelt thanks for participating in this annual event. I am confident that all of you will have a wonderful time at the meeting and will enjoy the uniqueness of New Orleans.

This year's scientific program will continue to reflect the fact that industrial microbiology and biotechnology as a discipline is progressing well. With over 35 technical sessions and over 150 posters, you will have ample opportunity to select the topics that are most relevant to your current work and interest. SIM has always provided a unique setting for combining science and socializing. This meeting should also give you the opportunity to see old friends and make new friends. It should serve as a platform for getting acquainted with researchers from all over the world. I extend a special welcome to participants who have traveled from abroad. This year's meeting will also give students a lot of visibility. There is one session that will have presentations given exclusively by students. We will be giving one award for a student oral presentation and five awards for student poster presentations (one in each core area of Biocatalysis, Environmental Microbiology, Fermentation and Cell Culture, Metabolic Engineering and Natural Products). A student luncheon/speed mentoring event will be held on Wednesday afternoon.

The meeting will follow a traditional pattern. Thanks to Dr. Janet Westpheling and her Education Committee, there will be three workshops given on Sunday. These workshops are: (1) Fermentation Basics, (2) Unification of gene expression data by standard mRNA quantification references for comparable analyses using qRT-PCR array assay and (3) So you're a microbiologist – now what?

The meeting will officially start on Sunday evening with the Amgen keynote lecture on "Systems Microbial Engineering for Production of Chemicals and Materials" given by Dr. Sang Yup Lee, KAIST, an internationally recognized expert in microbial metabolic engineering. Following the lecture, the opening reception and the first of our two poster sessions will take place in the exhibit hall. Oral sessions will begin on Monday morning and continue through Thursday afternoon. Our second poster session will be held on Monday afternoon. Dr. Donald Hahn, Dow Agrosciences is Guest Speaker at Monday night's Alma Dietz Actinomycete Dinner and Lecture will talk on "Actinomycetes-Always Something Unexpected." Join us for the annual 5K Fun Run/Walk on Tuesday morning sponsored by Alberta Innovates. This year's Marcel Faber Roundtable on Tuesday afternoon will be on 'Taxes, Budget Cuts, Deficit Reduction and Science Policy.' The Tuesday evening banquet speaker, Dr. Douglas Eveleigh, Rutgers University, will be presenting a fascinating talk on "CELLULASE "A TO Z" (Armada to *Zhigongosaurus*): A Discourse of Philosophical Questions intermixed with Chortles, Wit and Mirth" On Thursday, Dr. Herb Ward, Rice University, will give the Charles Thom Award Lecture on "Deep Down and Dirty: Microbial Processes for Subsurface Remediation" We have a large number of exhibitors who are very worthy of your time and support. The exhibits will be open from Sunday evening through Tuesday evening. In addition, exhibitor showcases will be held early on Monday morning. Please be sure to visit the exhibitors. The SIM annual business meeting will be held on Wednesday at 11:30 AM and is open to all SIM members. You are urged to attend to help with the business of SIM and to become more familiar with your Society.

Additional award winners this year are: Dr. Vincent Gullo, Drew University (Charles Porter); Dr. Donald Ahearn, Georgia State University (Waksman Outstanding Teaching), and Dr. Goutham Vemuri, Chalmers University (Young Investigator). Drs. Stephen Picataggio and Hideaki Yukawa have been elected new Fellows of the Society. Congratulations!

On behalf of the SIM board and membership, I would like to take this opportunity to thank all our meeting sponsors, advertisers and exhibitors for generous and continued support of the annual meeting.

The successful outcome of any meeting is the result of the dedication and hard work of many individuals. The outstanding meeting program could not be achieved without the commitment and devotion of our energetic and competent program chair Dr. Ramon Gonzalez, Rice University, all co-chairs of the five core areas, session conveners and speakers. I would like to thank everyone who has worked so diligently to be a part of a great program.

Special thanks go to Ms. Christine Lowe, Executive Director, and the entire staff at the SIM office (Suzannah Eller, Nancy Gorell, Jennifer Johnson and Esperanza Montesa) for their dedication and hard work.

Finally, thank you again for attending and making the SIM annual meeting in New Orleans a success.

*Badal Saha, Ph.D.*

*SIM President, 2010-2011*

# 2011 SIM Annual Meeting Organizers

## *2011 Program Chair*

Ramon Gonzalez, Rice University

## *2011 Program Committee*

### *Biocatalysis Co-chairs*

Chair: *Carlos Martinez*, Pfizer  
*Patrick Cirino*, University of Houston  
*Shelley Copley*, CIRES  
*Kristala Jones Prather*, MIT

### *Environmental Microbiology Co-chairs*

Chair: *Ann Keeley*, Environmental Protection Agency  
*Radhakrishnan Mahadevan*, University of Toronto  
*Wilfred Chen*, Bourns College of Engineering

### *Fermentation and Cell Culture Co-chairs*

Chair: *Vasanthanagarajan*, DuPont  
*Helia Radianingtyas*  
*Michael Betenbaugh*, John Hopkins University

### *Metabolic Engineering Co-chairs*

Chair: *Jim Liao*, University of California, Los Angeles  
*Janice Pero*, Bioenergy LLC  
*William E. Bentley*, University of Maryland

### *Natural Products Co-chairs*

Chair: *Huimin Zhao*, University of Illinois  
*Alexander Steinbüchel*, Universität Münster  
*Paul Jensen*, University of California, San Diego

### *Poster and Student Presentations Co-Chairs*

*Robert Donofrio*, NSF International  
*Laura Jarboe*, Iowa State University

## *2010 Program Chair*

*Adam Burja*, BP

## *Workshop organizers*

Mark Berge, Medimmune  
Bob Berger, BB & Associates  
Z. Lewis Liu, USDA

## *SIM Education Committee*

Janet Westpheling, University of Georgia  
Z. Lewis Liu, USDA  
Thomas Burkett, Baltimore County Community College

## *Awards and Honors Committee*

Chair, Paul Cino, Fermentation Consultants  
Debra Chadick

Kevin Reynolds, Portland State University  
Reinhardt Rosson, BTR

## *Placement Committee*

Bob Berger, BB & Associates  
Sara Dorman, Marcor

## *Archives*

Joan W. Bennett, Rutgers Univ.  
Debra Chadick  
Ann Kulback

## *Registration, Meeting Coordination & Local Arrangements*

Suzannah Eller  
Nancy Gorell  
Jennifer Johnson  
Elisabeth Elder

Special thanks go to the program committee and session conveners for their efforts during the past year.

## SIM 2010-2011 officers

### *President*

Badal Saha  
USDA-ARS-NCAUR

### *Past President*

Susan T. Bagley  
Michigan Technological University

### *President-Elect*

Neal Connors  
Phoenix BioConsulting LLC

### *Secretary*

Elisabeth Elder  
Louisiana State University

### *Treasurer*

Valerie Benning  
In-Pipe Technology Co.

### *Directors*

Scott Baker, Pacific National Laboratory  
E. Timothy Davies, Green Biologics  
Kevin Reynolds, Portland State University  
Russell Vreeland, West Chester University

### *Executive Director, SIM*

Christine Lowe

## SIM Headquarters

3929 Old Lee Highway  
Suite 92A  
Fairfax, VA 22030  
T: 703-691-3357  
F: 703-691-7991  
E: [meetings@simhq.org](mailto:meetings@simhq.org)  
[www.simhq.org](http://www.simhq.org)

# Topics include:

- Biochemical engineering: Advances at the intersection of bug and reactor
- Developing a process - where to start: screening and scouting
- New strategies for process development
- New reactor design: advances in fermentor technology in the commercial sector
- Downstream processing and integration with fermentation processes
- Challenges and solutions in large scale manufacture

[www.simhq.org/sim-meetings/raft2011](http://www.simhq.org/sim-meetings/raft2011)



Recent Advances in Fermentation Technology

**RAFT IX**

Marriott Marco Island  
Marco Island, FL  
November 6 - 9, 2011

From Concept to Commercialization

# SIM Career Center

<http://careers.simhq.org>

SIM has launched a new and improved career center.

With the new career center job seekers, in addition to searching for jobs, can now post their resumes as well as set-up automated alerts as new jobs become available.

Employers can now post a job opening instantly, and are able to search through resumes to find qualified employees.





# General information

Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau

All meeting sessions will be held at the Sheraton New Orleans Hotel, New Orleans, LA

## Registration

*Grand Ballroom Foyer*

On-site registration, exhibitor registration, and distribution of meeting packets to preregistrants will take place during the following hours:

Sunday, July 24	11:00am – 7:00 pm
Monday, July 25	7:30 am – 5:00 pm
Tuesday, July 26	7:30 am – 5:00 pm
Wednesday, July 27	7:30 am – 12:00 noon
Thursday, July 28	7:30 am – 5:00 pm

Name badges must be worn for admittance to the scientific sessions, exhibits and meals/special functions.

*Smoking is not permitted in the hotel.*

Programs will be distributed at the meeting to all attendees. *Extra copies of the meeting program at the meeting site are \$50.*

## SIM Headquarters

*Rampart, 5th Fl*

The SIM Headquarters Office will be open during registration hours.

## Information and Message Center

*Grand Ballroom Foyer, 5th Fl*

Messages and announcements will be posted on the bulletin board in the **Registration Area**. In case of emergency, registrants may be contacted through the Sheraton New Orleans Hotel, 500 Canal St., New Orleans, LA 70130; 504-525-2500

## Internet Lounge

*Evergreen, 4th Fl*

Sunday, July 24	11:00 am – 9:00 pm
Monday-Wednesday, July 25-27	7:30 am – 9:00 pm
Thursday, July 28	7:30 am – 5:00 pm

## Placement service

*Grand Ballroom Foyer*

Registration for Placement Service and posting of positions will take place during the following hours. A bulletin board with employment notices and a placement desk to sign up for interviews will be available.

Sunday, July 24	4:00 pm – 8:00 pm
Monday-Tuesday, July 25-26	8:00 am – 5:00 pm
Wednesday, July 27	8:00 am – 12:00 noon
Thursday, July 28	8:00 am – 3:00 pm

## Speaker Ready Room

*Estherwood, 4th Fl*

Speakers may review their presentations the following hours:

Sunday, July 24	1:00 pm – 9:00 pm
Monday-Wednesday, July 25-27	7:30 am – 9:00 pm
Thursday, July 28	7:30 am – 5:00 pm

## Job Fair

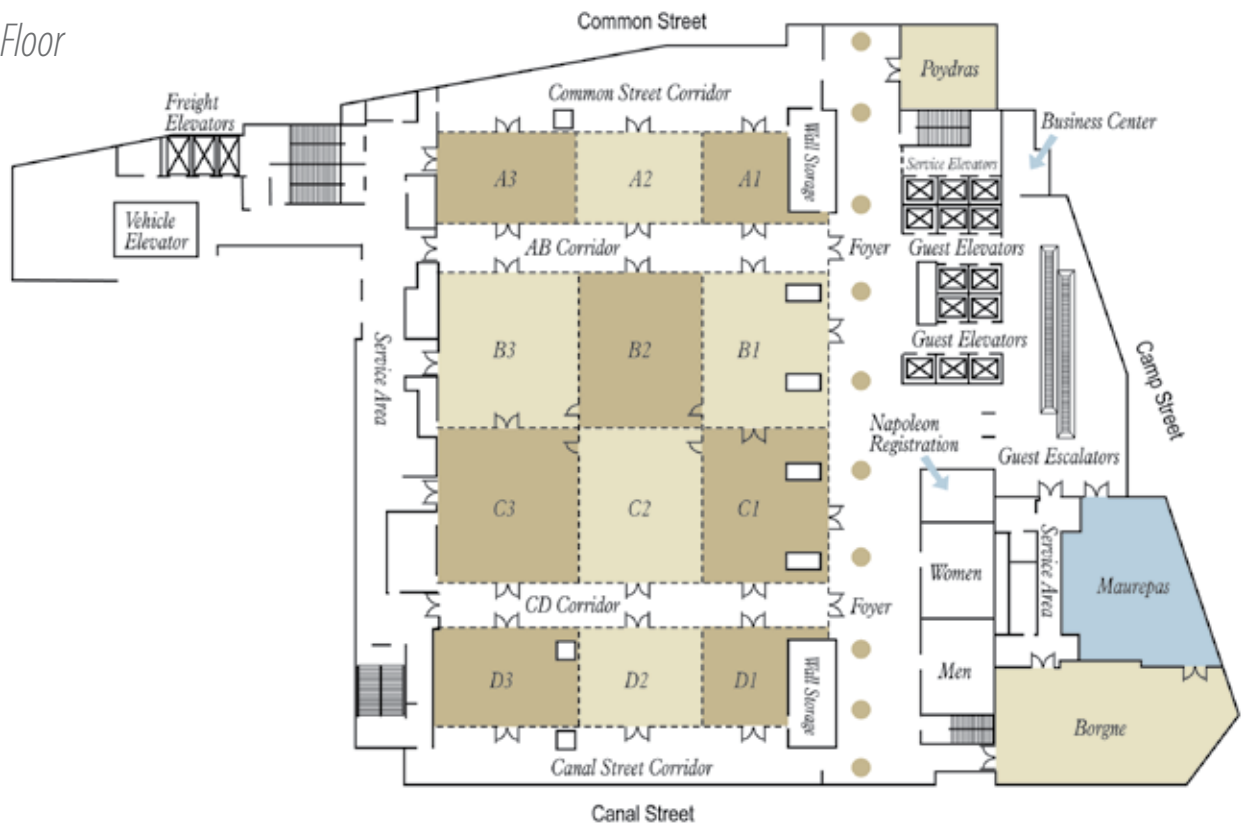
*Grand Ballroom Foyer, 5th Fl*

Monday, July 25	8:00 am – 4:00 pm
-----------------	-------------------

2nd Floor



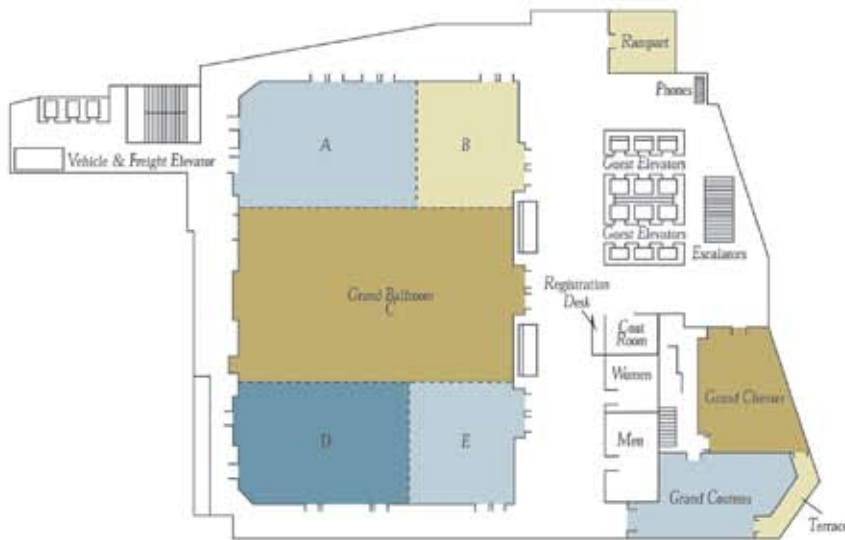
3rd Floor



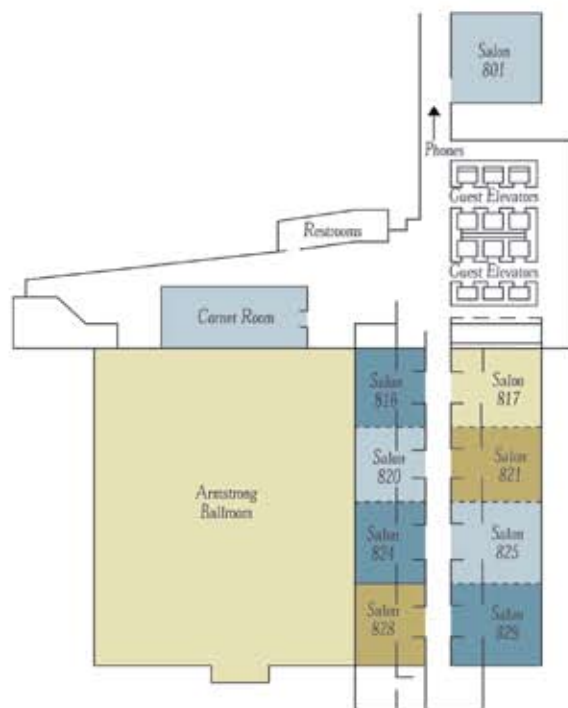
4th Floor



5th Floor



8th Floor





Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau

## special events

### Sunday evening, July 24

6:00 PM

#### *Opening Remarks and Amgen Keynote Address*

Opening Remarks

Badal Saha, SIM President; Ramon Gonzalez, 2011 Program Chair

Amgen Keynote Address

*Sponsored by Amgen*

Sang Yup Lee, Distinguished Professor, D. Chemical and Biomolecular Engineering; Dean, College of Life Science and Bioengineering, Korea Advanced Institute of Science and Technology

“Systems metabolic engineering of microorganisms for the production of chemicals and materials”

#### **Rhythms Ballroom, 2nd FI**

7:00 PM – 9:30 PM

#### *Poster Session 1*

7:00 PM – 9:30 PM

#### *Opening Reception/Exhibits*

#### **Grand Ballroom, 5th FI**

### Monday morning, July 25

7:00 AM – 8:00 AM

#### *Exhibitor Showcases*

#### **Oakley, 4th FI**

8:00 AM – 4:00 PM

#### *SIM Job Fair*

#### **Grand Ballroom Foyer, 5th FI**

11:30 AM – 1:00 PM

**Quarter Century Club Luncheon** (members only) honors those who have been members of the Society for 25 or more consecutive years.

#### **Gallery, 1st FI**

## Monday afternoon, July 25

4:30 PM – 6:30 PM

### *Poster Session II*

**Grand Ballroom, 5th Fl**

## Monday evening, July 25

*Alma Dietz Actinomycete Lecture and Dinner*

Note: Separate registration fee is required - Student discount available.

*Sponsored by Apotex Fermentation and Pfizer BioProcess Development*

7:00 PM

Reception

7:30 PM

Dinner

**Gallery, 1st Fl**

Featured Speaker:

Donald Hahn, Dow AgroSciences

“Actinomycetes – Always Something Unexpected”

## Tuesday morning, July 26

6:15 AM

### *Annual 5K Fun Run/Walk*

*Sponsored by Alberta Innovates*

There is no charge to enter. T shirts and refreshments will be provided to finishers. All runners must complete the “hold harmless” form prior to participating. Please meet in the **Sheraton Lobby, Front Entrance** at 6:15 am. Run commences at 6:30 am.

11:30 AM – 1:00 PM

### *JIMB Senior Editors’ Luncheon Meeting*

**Jackson Suite, 4908**

## Tuesday evening, July 26

6:00 PM

### *Banquet Reception/Exhibits open*

**Grand Ballroom, 5th Fl**

7:00 PM

### *Annual Banquet*

*Sponsored by Apotex Fermentation*

The annual banquet is included for all attendees who registered for the full week student who selected the banquet option registration fee and emeritus. Individual banquet tickets are available for purchase at the registration desk.

### *Banquet Speech and Society Award Presentations*

Banquet Speaker: Douglas Eveleigh, Fenton Professor of Applied Microbiology, Rutgers University

“Cellulase “A TO Z” (Armada to *Zhigongosaurus*): A Discourse of Philosophical Questions intermixed with Chortles, Wit and Mirth”

**Armstrong Ballroom, 8th Fl**

## Wednesday morning, July 27

11:30 AM – 12:30 PM

*SIM Annual Business Meeting* (all SIM members are encouraged to attend to vote on the Society name change)

**Bayside B - C, 4th Fl**

## Wednesday afternoon, July 27

12:30 PM – 1:30 PM

### *Student Luncheon/Speed Mentoring*

**Gallery, 1st Fl**

*FREE Afternoon & Evening*

## Thursday afternoon, July 28

1:00 PM

### *Charles Thom Award Lecture*

2011 Charles Thom awardee: C. Herb Ward, PhD, MPH, PE, BCEE, Foyt Family Chair of Engineering; Professor, Civil and Environmental Engineering and Ecology and Evolutionary Biology, Rice University

“Deep Down and Dirty: Microbial Processes for Subsurface Remediation”

**Waterbury Ballroom, 2nd Fl**



## hotel & local sights

Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau

### Sheraton New Orleans Hotel

*500 Canal St.  
New Orleans, LA 70130*

**NOTE: Attendees booking through the SIM link will receive complimentary internet in sleeping rooms and complimentary access to the fitness center.**

### In the Heart of New Orleans

Welcome to the Sheraton New Orleans Hotel, in the heart of the Big Easy. Work, play or simply relax within an atmosphere of endless excitement from the heart of one of the world's greatest cities. Arise to a breakfast of beignets and café au lait. Lounge in our lobby with the new Link @ Sheraton powered by Microsoft. Spend an afternoon shopping Royal Street and the French Market. Relax in Jackson Square or dine at a world famous restaurant in the French Quarter. Hear the sultry tones of a late night jazz show. Place yourself in the middle of it all right here.

Located on the historic Canal Street streetcar line adjacent to the French Quarter, the Sheraton New Orleans Hotel is a short walk to Bourbon Street, Mardi Gras parades, Jazz Fest activities, Harrah's Casino, the Ernest N. Morial Convention Center, the Aquarium of the Americas, Riverwalk Marketplace, the city's most renowned restaurants and legendary nightlife.

### Attractions

In addition to these attractions, the hotel concierge can advise you about tours and additional attractions in the city. Approximate distance from the Sheraton:

- Harrah's Casino - 2 blocks
- Audubon Insectarium - 2 blocks
- Bourbon Street - 3 blocks
- Aquarium of the Americas - 3 blocks
- Mississippi River - 3 blocks
- The Shops at Canal Place - 3 blocks
- Riverwalk Marketplace - 4 blocks
- Louisiana State Museum - 0.4 miles
- Ernest N. Morial Convention Center - 0.5 miles
- The National D-Day Museum - 0.6 miles
- Louisiana Children's Museum - 1.0 miles
- Louisiana Superdome - 1.0 miles
- New Orleans Arena - 1.0 miles

- Mardi Gras World - 1.3 miles
- New Orleans Museum of Art - 3.0 miles
- City Park Golf Course - 3.0 miles
- Ogden Museum of Southern Art - 4.0 miles

## Green Meetings at Sheraton

- Using paper with 50% post-consumer recycled content
- Providing 30% recycled paper content for flipcharts and whiteboards upon guest request
- Linen-free Meeting Tables
- Using sterno that is bio-degradable, non-toxic and the cans are recyclable
- Using bottles made of reduced content plastic of at least 15% in comparison to conventional plastic bottles
- Offering Sustainable Banquet and Catering menu options on electronic menus
- Implementing back of house composting of organic waste
- Implementing food donation programs in partnership with philanthropic organizations

## Transportation

### *Shuttle Service*

*Airport Shuttle, Inc.* is the Official Ground Transportation Provider for the Louis Armstrong New Orleans International Airport, offering transportation to and from Downtown, the French Quarter and the New Orleans Morial Convention Center.

- **Approximate Fares:** \$20 one-way; \$38 round-trip
- **Reservations:** Call 1-866-596-2699 or (504) 522-3500, or *reserve online*. Reservations are not required for airport to hotel service; however, advance reservations are required for hotel to airport service.
- **Location at Airport:** Ticket desks are located across from baggage claim areas 3, 6 and 12. These desks are staffed for sales by cash or credit card daily from 8:00 AM to 11:00 PM. Following 11:00 PM daily, you can purchase a one-way cash ticket from any driver on the loading dock outside of baggage claim area 6 and the driver will provide you with a cash receipt, if needed.

### *Public Transportation*

Once you make it to your hotel, travel across the city in one of New Orleans most treasured landmarks, the Streetcar named Desire. For just \$1.25, you can venture out and enjoy a wonderful ride down St. Charles Avenue, including Canal Street and through the neighborhoods of South Carrollton to Claiborne Avenue. Exact change is required. Cars operate every 10 minutes on weekdays and every 15 minutes on weekends during daytime hours. Click [here](#) for more information about the "Jazzy Pass" and [here](#) to see where you can purchase one-day and three-day "Jazzy Passes."

New Orleans Regional Transit Authority also provides public buses throughout the New Orleans community. The standard fare on RTA buses is \$1.25 one-way, with an additional \$0.25 for a transfer. Click [here](#) for more information on routes and schedules.

The RideLine - (504) 248-3900 is available for schedule information on all routes.

New Orleans Paratransit & Dial-a-Ride Service - Transit service for the disabled is available seven days per week. Call (504) 827-7433 for more information and reservations.

The hotel bell stand will arrange taxis.



Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau

## special lecturers & awardees

### Amgen Keynote Speaker

*Sang Yup Lee, PhD*

Dr. Sang Yup Lee is Distinguished Professor at the Department of Chemical and Biomolecular Engineering, Korea Advanced Institute of Science and Technology (known as KAIST). He is currently the Dean of College of Life Science and Bioengineering, Director of Center for Systems and Synthetic Biotechnology, Director of BioProcess Engineering Research Center, and Director of Bioinformatics Research Center. He has published 330 journal papers, 50 books/book chapters, and more than 450 patents either registered or applied. He has received numerous awards including National Order of Merit, Merck Metabolic Engineering Award from Merck, and Elmer Gaden Award from Biotechnology and Bioengineering. He is currently Foreign Associate of National Academy of Engineering USA, Fellow of AAAS, Fellow of American Academy of Microbiology, Fellow of Korean Academy of Science and Technology, Editor-in-Chief of Biotechnology Journal, and Associate Editor and board member of numerous journals. His research interests are metabolic engineering, systems biology and biotechnology, industrial biotechnology, and nanobiotechnology.



### Charles Thom Award

*The Charles Thom Award recognizes those individuals who have made one or more outstanding research contributions of significant merit in industrial microbiology, reflecting independence of thought and advancing either basic or applied scientific knowledge.*

*C. Herb Ward, PhD*

Dr. C. Herb Ward holds the A. J. Foyt Family Chair of Engineering in the George R. Brown School of Engineering at Rice University. He is also Professor of Civil and Environmental Engineering and Ecology and Evolutionary Biology.

Herb Ward has undergraduate (BS) and graduate (MS, PhD, MPH) degrees from New Mexico State University, Cornell University, and the University of Texas School of Public Health, respectively. He is a registered professional engineer in the State of Texas and a Board Certified Environmental Engineer in hazardous wastes management by the American Academy of Environmental Engineers.

During his 46-year tenure at Rice University he has served as Chair of the Departments of Environmental Science and Engineering and Civil and Environmental Engineering and he is the founding Director of the University's Energy and Environmental Systems Institute. He has also served as Director of the US EPA-sponsored National Center for Ground Water Research and the US DoD-sponsored Advanced Applied (Environmental) Technology Development Facility (AATDF).

Dr. Ward has been a science advisor to the US EPA, DOE, DoD and the Departments of the Army and Air Force, and was Chair of the DoD Strategic Environmental Research and Develop Program (SERDP) Scientific Advisory Board for seven years. Professor Ward is the founding and current Editor-in-Chief of the international scientific journal *Environmental Toxicology and Chemistry*.

Ward's research and publications mostly focus on hazardous wastes, water quality, groundwater bioremediation, and microbial processes in the environment. He is co-author of the 2011 American Academy of Microbiology (AAM) report on "Microbes and Oil Spills" written to help the public and the press better understand the fate and effects of oil spills in marine systems. Herb is a Fellow of AAM and SIM and served as SIM President in 1983-84.

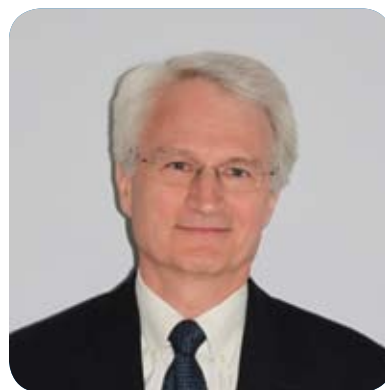


## Charles Porter Award

*The Charles Porter Award recognizes those individuals who have an outstanding record of sustained service to the Society for a period of seven or more years and have been an active member of SIM for ten or more years.*

### *Vincent P. Gullo, PhD*

Vincent Gullo received his B.S. in Chemistry from the City College of New York in 1971 and his Ph. D. in Organic Chemistry from Columbia University in 1975 under the guidance of Professor Koji Nakanishi. With a strong background in natural products chemistry, Vince joined the Natural Products group at Merck Research Laboratories. There he worked on the isolation and structural elucidation of compounds from microbial sources found active in a variety of therapeutic areas, including anti-infectives, anti-inflammatories, antiparasitic agents and cholesterol lowering drugs. Vince was fortunate in working on the team that discovered Primaxin, a broad spectrum antibiotic, Mevacor, the first cholesterol lowering agent (statin) and the anthelmintic, Ivermectin. In 1983, Vince moved to Schering Plough where he led the Natural Products Research group as an Assistant Director. The natural products group at Schering Plough developed new therapeutic assays, isolated and fermented microorganisms, screened extracts for bioactivity and through bioassay guided fractionation, isolated and identified bioactive compounds. With the advent of high throughput screening and combinatorial chemistry, the natural product group was ideally suited to expand their role and became the department of New Lead Discovery at Schering Plough Research Institute (SPRI). Many compounds were progressed from drug discovery to the clinic at SPRI. In 2003 Vince moved from his Senior Director position at SPRI to become Vice President of Drug Discovery at Cetek Corporation. At Cetek the research team discovered two exciting compounds, an anticancer compound and an antiviral compound. The anticancer compound was licensed to a large pharmaceutical company for further development. In 2007 Vince joined Drew University as a Research Fellow in the Research Institute for Scientists Emeriti (RISE). At Drew Vince enjoys working with students to discover novel antibacterial compounds.



Vince has been a member of the SIM since 1985 and has held numerous positions of leadership within the Society. In 1986, at SIM's launch of the Journal of Industrial Microbiology, Vince became a Senior Editor for this new journal. He held this position for 13 years. From 1992-1997 he served as Special Conference Chair. Vince is very proud of the role he has played in the SIM's special conferences. These special conferences have grown in importance both scientifically and financially for the SIM. In 1995 Vince was elected to the Board of Directors and in 1999 became President of the Society. In addition, to these major leadership roles, Vince has organized symposia for the annual meeting and published in the society's journals in the fields of new technologies for drug discovery and natural products. Vince has always enjoyed the welcoming atmosphere in the SIM and hopes to continue this relationship for many years to come.

## SIM Fellow

### *Stephen Picataggio, Ph.D.*

Stephen Picataggio, Ph.D. is a microbiologist with over 25 years experience engineering industrial microorganisms and developing fermentation processes for the production of renewable fuels and chemicals. He is currently the Chief Scientific Officer at Verdezyne, Inc. where he established and leads research programs on the metabolic engineering of industrial yeast strains for the production of ethanol and adipic acid, the precursor for renewable BioNylon. Prior to joining Verdezyne, he was Vice President of Metabolic Engineering at Synthetic Genomics where he established and led research programs on conversion of sugars and CO<sub>2</sub> to advanced biofuels. At DuPont Central Research and Development, he formed and led a team that metabolically engineered the non-conventional yeast *Yarrowia lipolytica* and developed a fermentation process for the production of polyunsaturated omega-3 fatty acids, now sold as a nutraceutical under the name Natural Harvest. Prior to that, he was one of the founding members of the team that engineered *E. coli* to produce 100MM PPY of 1,3-propanediol. At the National Renewable Energy Laboratory, he led the team that engineered a pentose metabolism pathway into *Zymomonas mobilis* and developed an improved process for the conversion of cellulosic biomass to ethanol, now being further developed and commercialized in a joint venture between DuPont and Danisco. At Henkel Research Corporation/Cognis, he established a metabolic engineering program and led a team that engineered the non-conventional yeast *Candida tropicalis* and developed a fermentation process used for the



commercial production of long-chain dicarboxylic acids as precursors for renewable polyesters and polyamides. Steve earned his B.S. in Bacteriology and Public Health from Wagner College (1975) and his Ph.D. in Microbiology from Rutgers University (1983). As a Postdoctoral Research Associate at the Massachusetts Institute of Technology, he characterized the *E. coli* xylose operon and expressed the xylose isomerase gene in yeast. He is a recipient of NREL's Staff Award for Outstanding Team Performance, DuPont's Sustainable Growth Award, the Environmental Protection Agency's Presidential Green Chemistry Challenge Award, and R&D Magazine's annual R&D 100 Award. He is an author of several peer-reviewed scientific publications, book chapters, an inventor on more than 50 issued and pending patents, and has served on the Editorial Boards of *Metabolic Engineering*, the *Journal of Industrial Microbiology and Biotechnology*, *Biotechnology Letters* and the *Journal of Microbial & Biochemical Technology*.

## SIM Fellow

### *Hideaki Yukawa*

Hideaki Yukawa, PhD is currently director and chief researcher of the Molecular Microbiology and Biotechnology Group at the Research Institute of Innovative Technology for the Earth (RITE). Dr. Yukawa's background is in molecular microbiology, applied microbiology, and enzymatic chemistry. He leads RITE's Molecular Microbiology and Biotechnology Group in solving environmental problems using bioconversion. Based on novel technology, known as the "RITE Bioprocess," the group researches valuable chemicals from biomass, detoxification of harmful substances, and functional analysis of the microorganisms involved in these processes. Dr. Yukawa has recently published much research on metabolic engineering of bacteria for lignocellulose biomass-based production of chemicals and fuels, specifically on *Corynebacterium glutamicum* and its close relatives (e.g, examining translation efficiency of antiterminator proteins, gene expression profiling, transcriptional regulation of multiple genes, glucose repression, and diversity of metabolic shift). Dr. Yukawa earned both his undergraduate degree and his PhD in Agricultural Chemistry from Tokyo University, Japan, in 1971 and 1983 respectively. He is a visiting professor at the Nara Institute of Science and Technology (NAIST), Japan, and has been honored with many awards including: the Nikkei Global Environment Technology Prize (2008); the Japan Bioscience, Biotechnology and Agrochemistry Society Award for Achievement in Technological Research (1997); the Tsukuba Award for Chemistry and Biology (1992); and the Japan Bioindustry Association Prof. K. Arima Memorial Award (1991). He has authored or co-authored nearly 150 articles and 13 book chapters.



## Waksman Outstanding Teaching Award

### *Donald G. Ahearn, Ph.D.*

Donald G. Ahearn PhD is currently a research professor (Emeritus) of microbiology at Georgia State University, Atlanta, Georgia. He is the author or co-author of over 200 research reports on medically important yeasts and on bacterial and fungal colonization of indoor surfaces and industrial products, including cosmetics, catheters and contact lens materials. He has been mentor to over 60 MS and PhD students, most of whom are in industry. He is an adjunct faculty member and co-investigator of product-related adverse eye reactions at the Department of Ophthalmology, Emory University. He is a past-president of the Society for Industrial Microbiology and has served as a member of the Board of Governors of the American Academy of Microbiology and as a Division Officer for the American Society for Microbiology. He maintains membership in these and other professional societies including the Mycological Society of America, the Contact Lens Association of Ophthalmologists, the Parenteral Drug Association and the International Society for Human and Animal Mycology. He has served as a public service consultant to the Centers For Disease Control and as a consultant microbiologist for various pharmaceutical and industrial microbiological laboratories with particular emphasis on mould contamination. He and Ellen, his wife of 52 years, are the parents of three sons with 7 grandchildren.



## Young Investigator Award

*Goutham Vemuri, PhD*

Goutham Vemuri is an Assistant Professor in the Chemical and Biological Engineering Department at Chalmers University, Sweden. He graduated from the Indian Institute of Technology, Kharagpur in Biochemical Engineering and Biotechnology. He continued for his MS and PhD from the University of Georgia, Athens, GA in Biological Engineering.

Goutham advocates use-inspired basic research – advancing our fundamental scientific understanding in a way that benefits the society. His primary area of research is to understand the regulation of metabolism. His work integrates traditional biochemical engineering with high throughput biology to discover regulatory mechanisms, primarily in bacteria and yeast for applications in industrial biotechnology. Using this approach, he made significant progress in understanding the regulation of aerobic fermentation in industrially relevant microorganisms such as *Escherichia coli* and *Saccharomyces cerevisiae*. He also studies the dynamics of signal transduction that enables cells to adapt their metabolism to the presence/absence of nutrients.



## Banquet Speaker

*Douglas Eveleigh, PhD*

Doug Eveleigh holds the Fenton Chair of Applied Microbiology, Rutgers University. Graduating in mycology, University of Exeter, UK, he worked at National Research Council of Canada, University of Wisconsin, and US Army Natick Laboratories. His interests cover industrial fermentation (cellulase-gasohol: *Trichoderma*, *Streptomyces*, *Thermotoga*, *Zymomonas*, & chitosanase) and ecological explorations (endo-mycorrhizae, and nitrogen fixation (*Frankia*). His sabbatical studies include the International Atomic Energy Agency, Vienna; L'Institute Pasteur, Paris; Horticulture International, Littlehampton, UK; the Natural History Museum and the Science Museum, London, and also the Beijerinck Museum, Delft University of Technology, Delft. He received the first SIM "The Waksman Teaching Award" (1989).



## Alma Dietz Actinomycete Lecturer

*Don Hahn, PhD*

Don Hahn is a Senior Research Specialist at Dow AgroSciences in Indianapolis, IN. Don received his PhD in Microbiology from the University of Illinois working on *Salmonella* genetics with Stanley Maloy. During a postdoc with Dick Baltz at Eli Lilly he learned his love for actinomycetes which continues to this day. Don has worked for over 20 years in industrial microbiology research projects ranging from vaccine development and molecular genetics to fermentation. In his current research, Don coordinates collaborative research with industrial and academic labs throughout the world with the goal of discovering novel natural products with agrochemical activity.



## Quarter Century Club 2011 Inductees

Ronald Berg

Nels Cone

Elisabeth Elder

Noel Fong

Marianna Jackson

Herbert Kirst

Mary Meeker

Duen-Gang Mou

Daniel Monticello

Joseph Pope

Jennifer Ton

## Current Quarter Century Club

Robert Acker

Paul Actor

Donald Ahearn

Cavit Akin

Carol Baker

Dwight Baker

Richard Baltz

Stanley Barnett

Joan Bennett

Robert Berger

Ramunas Bigelis

Jerome Birnbaum

LaVerne Boeck

Thomas Borkman

Allen Borowsky

Don Boudreaux

Lew Bowman

Ernest Boyer

Gaylen Bradley

Lewis Brown

William Brown

Carl Bruch

Barbara Butler

Graham Byng

David Carpenter

Christine Case

Debra Chadick

Marvin Charles

Robert Charles

Angelo Chiulli

Paul Cino

A.L. Compere

Robert Coon

Charles Cooney

Arnold Demain

Anne Dombrowski

Alan Eachus

Henry Ehrlich

Rodolfo Ertola

Douglas Eveleigh

Amedeo Fantini

Dennis Fenton

Mark Finkelstein

Cynthia Gant

Charles Garbarini

Louis Goldsmith

Andrew Gould

Nathaniel Grier

William Griffith

Vincent Gullo

Cheryl Hermerath

Donald Hitzman

C. George Hollis

Ann Horan

Robert Huddleston

Jennie Hunter-Cevera

Eugene Iannotti

Lonnie Ingram

David Isaacson

Douglas Jaeger

Howard Jarolmen

Thomas Jeffries

Leonard Katz

Fred Keller

Saul Krell

Ann Kulback

David Labeda

Allen Laskin

Hubert Lechevalier

Carol Litchfield

John Litchfield

Rene Lohser

Gregory Luli

Richard Lutey

Neal Machtiger

Lawrence Magier

Frank Mallak

Stanley Martins

Amanda Meitz

Joseph Mello

Arthur Meyers

Jonathan Mielenz

George Miller

James Miller

Philip Miller

Kristien Mortelmans

Claude Nash

Steve Nelson

David Newman

Peter Nielsen

Frederick Passman

Arthur Peterson

John Peterson

George Pierce

S.N. Rajagopal

Richard Raymond

Samuel Ringel

Morris Rogers

Sima Sariaslani

Robert Schwartz

Stuart Shapiro

Marcia Shearer

Neil Sikora

Morey Slodki

Norman Smith

Lloyd Snoke

George Somkuti

Michael Sprague

Willard Taber

Wilbur Taylor

Susan Truesdell

Erick Vandamme

Lawrence Wackett

C. Herb Ward

Alford Williams

H. Boyd Woodruff



## Future meetings

2011

*Recent Advances in Fermentation Technology  
(RAFT IX)*

**November 6-9**

**Marco Island Marriott • Marco Island, FL**

2012

*34th Symposium on Biotechnology for Fuels and  
Chemicals*

**April 30-May 3**

**Sheraton New Orleans • New Orleans, LA**

*SIM Annual Meeting*

**August 12-16**

**Washington Hilton • Washington, DC**

*Recent Advances in Microbial Control*

**October 28-31**

2013

*35<sup>th</sup> Symposium on Biotechnology for Fuels and  
Chemicals*

**April 29-May 2**

**Hilton Portland • Portland, OR**

*SIM Annual Meeting*

**August 11-15**

**Sheraton San Diego • San Diego, CA**

*Recent Advances in Fermentation Technology  
(RAFT X)*

**November 3-6**



Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau

# exhibitors

## 2011 Exhibitors and Schedule

Please visit our valued exhibitors and show your appreciation for their support of the SIM annual meeting.

Exhibits are located in **Grand Ballroom 5th Fl**, Sunday - Tuesday, July 24 - 26, during the following hours:

Sunday, July 24	7 PM – 9:30 PM
Monday, July 25	9:30 AM – 10:30 AM; 11:30 AM – 1:00 PM; 2:30 PM – 3:30 PM; 4:30 PM – 6:30 PM
Tuesday, July 26	9:30 AM – 10:30 AM; 11:30 AM – 1:00 PM; 2:30 PM – 3:30 PM; 6:00 PM – 7:00 PM

## Events in the Exhibit Hall

Sunday - SIM opening and poster reception

Monday - Coffee breaks, buffet lunch, poster session and reception

Tuesday - Coffee breaks, buffet lunch, afternoon prize drawing, annual Society pre-banquet reception

## Exhibitor Showcases

*Monday, July 25*

Exhibitors will give 10 minute presentations on their products and services. Showcases are open to all registrants. Continental breakfast served

### **Oakley, 4th Fl**

*7:00 AM*

### **Pall Life Sciences**

*7:10 AM*

### **Sheldon Manufacturing, Inc.**

Sheldon Manufacturing will present a brief company overview and highlight the new products that are being released by Shel Lab and Lab Armor.

7:20 AM and 7:30 AM

**Applikon Biotechnology, Inc.**

Applikon Biotechnology develops, manufactures and supplies bioreactor systems for R&D, pilot plant, and manufacturing for cell culture and microbial from 7mm to 5,000L capacities. Recent technology advancement includes Rambio , a floor model biological shaker that utilizes Resonant Acoustic technology that applies low frequency, high-intensity acoustic energy to agitate liquid cultures.

For more information, please visit [www.applikonbio.com](http://www.applikonbio.com)

7:40 AM

**New Brunswick Scientific Company, Inc.**

New Brunswick Scientific will review their single-use stirred-tank bioreactor technology, including providing a sneak peek at new products soon to be released. The talk will concentrate on advantages of single-use technology, product design, and comparative results using the CelliGen® BLU. Currently offered in 5.0 & 14.0 Liter capacities the flexible and compact system has been designed to provide the performance and advanced control capabilities of traditional stirred-tank systems, while providing all the labor and cost-savings of disposable technology.

## Your partner for high-quality peptones



### Introducing the Stedygro® and Proyield® series

FrieslandCampina Domo peptones for optimal growth and production. Trusting Domo as your ingredient supplier assures you of batch-to-batch consistent growth and production.

Visit us at SIM booth 33.

[www.hydrolysates.com](http://www.hydrolysates.com)

DOMO is a brand of FrieslandCampina



Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau

## exhibitor descriptions

### Alberta Innovates Technology Futures (AITF)

Edmonton AB Canada  
Booth 5

Alberta Innovates Technology Futures (AITF) – formerly Alberta Research Council – is an applied research and development corporation that develops and commercializes technology. Our NuRx Services unit offers proven capability in contract fermentation process development, optimization, scale-up and production from 10 to 10,000 L. We are experienced with many species of micro-organisms including bacterial, fungal, algal, and recombinant expression systems.

### Apotex Fermentation

Winnipeg, MB, Canada  
Booth 18

Apotex Fermentation provides contract services in research, process development, scale-up and cGMP manufacturing of microbial fermentation based pharmaceutical products. We strive to develop robust and cost effective processes to help our customers achieve the production of clinical trial to commercial scale materials and CMC filings on time and on budget.

### Applied Instrument Technologies (AIT)

Upland, CA  
Booth 43

AIT manufactures real time process analytical instrumentation including MGA™ mass Spectrometer, Analect™ FTIR, PIONIR near infrared, RPM™ Raman & FXi™ gas chromatographs. Key applications include fermentation off gas analysis and chemical & physical property analysis of biofuels. AIT designs, manufactures and markets these instruments worldwide from its headquarters in Southern California.

### Applikon Biotechnology, Inc.

Dover, NJ  
Booth 23 and 24

### ATR, Inc.

Laurel, MD  
Booth 25

ATR, known for prompt and efficient customer service provides innovative products for growing bacterial, yeast and mammalian cell cultures. The Multitron stackable incubator shakers can control shaking speed, temperature, humidity, CO<sub>2</sub>, and lighting at an affordable price. The fermenter/bioreactor line provides multiple mini vessels for optimization and screening, bench scale for research and stainless units for larger projects. Flexible modular design provides easy adaptations for a variety of research protocols.

## Bio Springer North America Inc.

Montreal, QC, Canada  
Booth 34

## BioPro International, Inc.

Farmingdale, NY  
Booth 28

Professionals with 40+ years of experience offer the following: KUHNER stackable shakers, incubation shakers, disposable shaking bioreactors, feed beads and non-invasive measuring systems for shakers; BIOENGINEERING Fermenters/bioreactors from laboratory to production; CHRIST freeze dryers and vacuum concentrators; AQUASANT cell density meters; GRABER vibromixers; RAMOS respiration monitors; NEWERA syringe pumps.

## Biolog, Inc.

Hayward, CA  
Booth 16

Biolog is a pioneer in the development of powerful cellular analysis tools for solving critical problems in clinical, pharmaceutical, and biotechnology research and development. In addition to our award winning Microbial Identification Systems, Biolog's unique Phenotype MicroArray technology can be used to assay cells of all types, from microbial to mammalian.

## Bio-Technical Resources

Manitowoc, WI  
Booth 3

BTR provides contract services for development of microbial fermentation processes including recombinant and classical strain improvement, microbial screening, metabolic engineering, bioprocess development and scale-up. Proprietary expression systems offered for industrial protein production: *Hansenula polymorpha* and *Bacillus licheniformis*. Experienced in development of processes for biofuels, enzymes, pharmaceuticals, nutraceuticals, and natural products.

## Blue Sens

Northbrook, IL  
Booth 30

BlueSens gas sensors provide a cost-effective solution to fermentation exhaust gas monitoring in microbial or cell culture fermentation. Gas concentrations can be measured continuously in-line with no requirement for sampling or sample preparation. The sensors are flowrate independent, sensitive, stable, and are easy to use with minimal operator intervention.

## Broadley-James Corporation

Irvine, CA  
Booth 40

Broadley-James is a manufacturer of measurement and control products for science and industry. Our family of products includes the life science industries' first networked bioreactor control system. Our products also include the FermProbe and OxyProbe, leading sensors for pH and dissolved oxygen measurement in bioprocess applications.

## BugLab LLC

Danville, CA  
Booth 27

## Chemglass Life Sciences

Vineland, NJ  
Booth 41

Chemglass Life Sciences: Where Chemistry meets Biology. CGLS offers many solutions to the Life Science market including Spinner Flasks, Magnetic Stirrers, Cell Culture Bags, Shakers, Rollers, Rockers, Vortexers, Incubators, CellTreat Plasticware, Reusable Glassware, Ovens, Refrigerators, Freezers, Polycarbonate Disposable Flasks, Shake Flasks, Fernbach Flasks, Water Baths, Micro Centrifuge Tubes and Vials.

## DASGIP BioTools, LLC

Shrewsbury, MA  
Booth 29

DASGIP has been an industry leading supplier of benchtop bioprocessing solutions since 1996. Our products for the cultivation of microbial, mammalian and human cells include industry standard benchtop autoclavable glass and single-use Bioreactors/Fermentors, best in class configurable Control Systems, and state of the art bioprocess analyzers. We deliver unparalleled functionality coupled with user friendly design for optimal bioprocessing. Our proven solutions for interconnectivity to 3rd party bioprocess analyzers and our best in class Control Systems enable migration strategies for optimization of your existing benchtop equipment. Contact information: 151 Memorial Drive, Suite B Shrewsbury, MA 01545; P: 508-842-6900; F: 508-842-0141

## FrieslandCampina Domo

Paramus, NJ  
Booth 33

Formerly known as DMV International, FrieslandCampina Domo is a specialty peptone and protein hydrolysate manufacturer with over 35 years of experience. To ensure our customers' success we believe in three vital ingredients- high quality products, innovations and services. Trusting Domo as your ingredient supplier assures you of consistent microbial growth whether you are filling a petri dish or a large scale fermentation vessel.

## Global BioIngredients Inc.

Tampa, FL  
Booth 22

Global BioIngredients Inc., a member of SIM since 1990, has been a supplier of agars, peptones, extracts, infusions and agarose since the 1970's. Global supplies several grades of agars as well as a complete list of animal, vegetable and non-animal peptones for industrial applications. Global also supplies downstream agarose based affinity chromatography purification products through its sister company, Agarose Bead Technologies.

## Hamilton Company

Reno, NV  
Booth 44

Hamilton Company manufactures application-oriented pH, ORP, dissolved oxygen, and conductivity sensors distinguished by their high quality, long life, and competitive price. Our intelligent VISIFERM optical dissolved oxygen probe offers technology that sets new standards in DO measurement. The new Hamilton ARC revolutionizes process analytics by replacing the traditional transmitter with a microprocessor within the sensor. ARC sensors measure more reliably as well as save on cost because they communicate directly with the process control system. Stop by our booth to discover more innovations from Hamilton.

## HiMedia Laboratories PVT. LTD.

Mumbai, India  
Booth 19

## Integrated Genomics, Inc.

Chicago, IL  
Booth 15

Integrated Genomics, an I.G. Assets Inc. company and leader in the field of microbial genomics, provides microbiologists with customized bioinformatics solutions powered by the ERGO™ genome analysis suite. Featuring over 2,100 annotated genomes, ERGO™ combines pathway reconstructions with comparative tools to improve commercial production of food, fuel, and fine chemicals.

## Lallemand Inc.

Montreal QC Canada  
Booth 42

Lallemand Inc, a world leader in yeast and bacteria production, offers a line of yeast extracts/ peptones and whole cell yeast to boost your microbial growth and secondary metabolite production.

Our ingredients are tested at our in-house fermentation facilities with lactic acid bacteria and also for *E. coli* and CHO applications. We offer consistent fermentation performance with low lot-to-lot variability and the flexibility to develop new products according to your fermentation needs. Your success is our success.

## Marcor Development Corporation

Carlstadt, NJ  
Booth 11

Marcor Development Corporation is a supplier of fermentation and diagnostic media ingredients and fine chemicals. We sell a variety of products, including Protein hydrolysates and peptones, plant hydrolysates and peptones, yeast and yeast extract powders, fermentation nutrients, meat peptones and extracts, biochemicals and fine chemicals. We also have a variety of highly effective Animal-free products (currently over fifty different types) that are effective in fermentation, fermentation media conversion projects (animal-derived to animal-free media), cell culture, and greatly facilitate regulatory compliance.

## Microbiology International

Frederick, MD  
Booth 6 and 7

Microbiology International will be featuring the Systec range of laboratory autoclaves available in horizontal and vertical configurations-built specifically for laboratory applications, they include advanced features for precise control of complex sterilization processes of biological reactors and other laboratory devices/liquids. Our line of advanced Whately Anaerobic Workstations with gloveless entry will also be displayed.

## New Brunswick Scientific

Edison, NJ  
Booth 12

New Brunswick Scientific manufactures innovative equipment for culture growth, detection and storage, with an ever-growing range of advanced new products. Stop by booth 12 to learn about our bench and pilot-plant fermentors, single-use bioreactors and bioprocessing software. We are presenting a workshop on "Overview and Updates to New Brunswick's Single-Use Bioreactor Technology" on Monday, July 25th.

## North Carolina State University- Biotech Training and Education Center

Raleigh, NC  
Booth 4

## Ocean Optics

Dunedin, FL  
Booth 45

Ocean Optics optical O<sub>2</sub> and pH sensors are designed for real-time, in situ measurements and come in formats such as probes and acrylic or autoclavable glass patches. The company's RedEye oxygen patches and sol-gel coating for pH applications have successfully met the requirements for U. S. Pharmacopeia Class VI certification.

## optek-Danulat, Inc.

Germantown, WI  
Booth 32

Optek UV-VIS-NIR, scattered-light (turbidity), and pH/conductivity sensors and insertion probes provide inline, real-time measurements in ultra-sanitary CIP/SIP applications. Upstream: Cell Culture, Fermentation. Downstream: Centrifuge Optimization, UV for Chromatography, Inline pH/Conductivity, Filter Control, and Verify Liquid Formulations. NIST-traceable, inline validation filters provide fast and repeatable measurement verification without breaching sterility.

## Pall Life Sciences

East Hills, NY  
Booth 35

## Panlabs Biologics Inc.

New Taipei City, Taiwan  
Booth 13

Panlabs Biologics has over 30 years experience and reputation for worldwide contract services on strain improvement, biotransformation, fermentation process development, and microbial natural product library supply. We provide qualified services for all the microbial industries such as pharmaceutical, biotechnology, food, chemical, and bioenergy industry.

<http://www.panlabsbiologics.com>

## Sartorius Stedim Biotech

Bohemia, NY  
Booth 47 and 48

Sartorius Stedim Biotech, the leading supplier of equipment and services for the biopharmaceutical industry, offers Bioreactors, Fermenters, Crossflow, Integrity Test equipment, Housings, Life Science Laboratory Devices, Single-Use Fluid Handling and Mixing Technology. Consumables include crossflow cassettes, membrane adsorbers, depth filters, sterilizing and prefilter cartridges, capsules, mycoplasma and viral filtration. Comprehensive validation and training service support our products.

## Sensient Bio-Ingredients

Indianapolis, IN  
Booth 17

Sensient Bio-Ingredients produces an extensive range of yeast extracts and peptones for use in commercial fermentation, diagnostic media and biopharmaceutical applications. Our products are available worldwide from global manufacturing locations, and are supported by experienced development and service teams familiar with the requirements of our target markets.

## Sheldon Manufacturing, Inc.

Cornelius, OR  
Booth 26

Sheldon manufacturing is a leading manufacturer of SHEL LAB high quality, constant temperature products including incubators, water baths, ovens and anaerobic chambers for the clinical, life science and industrial markets. Now, in alliance with Lab Armor, Sheldon Manufacturing also offers Lab Armor Beads, Bead Baths and ancillary products; [www.labarmor.com](http://www.labarmor.com).

## Springer

New York, NY  
Booth 37

## Teknova

Hollister, CA  
Booth 31

Teknova was established in 1996 to provide complete media kitchen services for small to large sized pharmaceutical and biotech companies. We currently provide over 5000 custom and standard reagents, manufactured to suit the specific needs of our clients. Our manufacturing capabilities allow us to manufacture custom products over a wide range of scales, from one liter to one thousand. In addition to standard plate media and reagents we also prepare assay tubes and plates for large scale screening projects as required. Our internal document control systems allow us to protect intellectual property interests through pass-code protected systems.

## Traders Protein/ADM

Memphis, TN  
Booth 46

The fermentation industry has turned to ADM's PHARMAMEDIA™, PROFLO™, MediaPro™ and soy grits for decades. Our PHARMAMEDIA and PROFLO cottonseed proteins are widely accepted by a variety of microorganisms. MediaPro soy-derived nutrients and soy grits are designed to meet diverse application needs. Contact ADM for your fermentation nutrient needs.

## SIM Archives

Booth 49

## SIM Membership

Booth 50

# ANNOUNCING 62<sup>nd</sup> SIM Annual Meeting

## Industrial Microbiology and Biotechnology

**August 12-16, 2012**  
Washington Hilton, Washington, DC

### Program Chair:

**Dr. Steve Van Dien, Genomatica**  
svandien@genomatica.com

Please contact Steve to participate in the 2012 SIM Annual Meeting scientific program

### For information on:

**Sponsorship:** chris.lowe@simhq.org

**Exhibits:** nancy.gorell@simhq.org

**Advertising/Web:** suzi.eller@simhq.org

**Registration:** registrar@simhq.org

**Membership/Corporate:** Jennifer.Johnson@simhq.org

**[www.simhq.org](http://www.simhq.org)**





Photographer: Richard Nowitz; Photo courtesy of New Orleans Convention and Visitors Bureau

# technical program schedule – papers

## Sunday, July 24

### *SIM Board of Directors*

Location: Grand Couteau, 5th Fl

Time: 8:00 AM – 4:00 PM

### *Registration*

Location: Grand Ballroom Foyer, 5th Fl

Time: 11:00 AM – 7:00 PM

### *Opening remarks and Keynote Address*

**Sponsored by Amgen**

Location: Rhythms Ballroom, 2nd Fl

Time: 6:00 pm – 7:00 pm

### *Keynote Speaker*

Dr. Sang Yup Lee, Korea Advanced Institute of Science and Technology and SIM Fellow

“Systems metabolic engineering of microorganisms for the production of chemicals and materials”

### *Exhibits Open/Opening reception*

Location: Grand Ballroom, 5th Fl

Time: 7:00 PM – 9:30 PM

### *Poster Session 1*

Location: Grand Ballroom, 5th Fl

Time: 7:00 PM – 9:30 PM

## Monday, July 25

### *Exhibitor Showcases*

Location:

Time: 7:00 AM – 7:50 AM

### *Registration*

Location: Grand Ballroom Foyer, 5th Fl

Time: 7:30 AM – 5:00 PM

### *SIM Job Fair*

Location: Grand Ballroom Foyer, 5th Fl

Time: 8:00 AM – 4:00 PM

### **2011 Workshops**

1. Fermentation Basics, 8am - 4pm  
Oak Alley, 4th Fl.
2. Unification of gene expression data, 8am - noon  
Z. Lewis Liu, USDA  
Oakley, 4th Fl.
3. So you're a microbiologist - Jobs workshop, 1pm - 4pm  
B. Berger, BB+Assoc., and S. Dorman, Marcor  
Southdown, 4th Fl.