

28th Annual Regional Phosphate Conference

October 9 & 10, 2013
Lakeland Center
Lakeland, FL

Mining for a Growing World

As the world's population expands, it is imperative to educate people regarding the need for phosphate mining and new technologies that help us increase productivity while using sound environmental strategies. To stay competitive and be successful in world markets, we must clearly communicate and "call-to-action" those involved with this much needed commodity.

This year's conference will focus with a more global approach while continuing to address Florida phosphate improvements, performances and issues. Some sessions will be updates on on-going discussions along with new ideas such as oceanic mineral exploration.

The key topics that will be discussed during the opening session, keynote address, and six technical sessions are:

- Uses of GPS technology in earthmoving and construction; control of natalgrass in natural and disturbed areas and sustainability of reclaimed lands beyond functioning as successful ecological support structures.
- Emerging processes and technologies that address future challenges, maximizing the yield from existing reserves.
- A look at past and current environmental program issues along with resolving unguarded safety hazards, mine-related health and safety training requirements.
- Numeric Nutrient Criteria update, natural distribution of phosphorous concentration in Florida lakes and lab waste handling procedures and regulations.
- Mining operations and current status of the Bayovar deposit in Peru and an offshore survey system and methodology for seabed mineral exploration.
- Innovative processes for acid manufacturing and water treatment. A look at process-competitive perspective considering the economics of fertilizer manufacturing.

For the 28th year, this unique conference will be the place for mining, chemical processing, reclamation and environmental experts, locally and internationally, to exchange technical information and ideas. Sponsors are the Society for Mining Metallurgy and Exploration (SME); the American Institute of Chemical Engineers (AIChE); the American Institute of Professional Geologists (AIPG); Association of Fertilizer and Phosphate Chemists (AFPC); and the Florida Industrial and Phosphate Research Institute (FIPR Institute).

Typically, this conference is attended by 500-600 people. Most attend the opening session and keynote luncheon, which will be on October 9, 2013 at 9:00 a.m. and 12:00 noon, respectively.

Sponsored by SME—AIChE—FAPG—AIPG—AFPC—FIPR Institute



28th Annual Regional Phosphate Conference

October 9 & 10, 2013

Lakeland Center

701 W Lime Street

Lakeland, FL 33815

Register Online at: www.fipr.state.fl.us

Conference Fee Includes:

- General Session
- Keynote Session
- All Concurrent Sessions
- Continental Breakfast on Wednesday and Thursday
- Lunch on Wednesday and Thursday
- Social on Wednesday Evening
- Exhibit Hall Entry

PRE-REGISTER
ONLINE BEFORE
OCTOBER 9
TO RECEIVE
THE EARLY
REGISTRATION
RATE

<u>Conference Fee:</u>	<u>Pre-registration</u>	<u>On-Site**</u>
General	\$100	\$125
Retiree	\$50	\$75
Student*	\$50	\$75
Speakers Only	\$100/\$50/\$0	\$100/\$50/\$0

***Must show Student ID at Registration**

****On-Site registrations are payable by cash or check only**

Payment Options

Credit Cards:

Payable through PayPal before October 9 only. (Visa, MasterCard, American Express, and Discover accepted)

On-Site registration is payable by cash or check only

Checks:

Make checks payable to:
SME Florida Section (FEID# 74-2338444).
Mail completed online registration form and payment to:

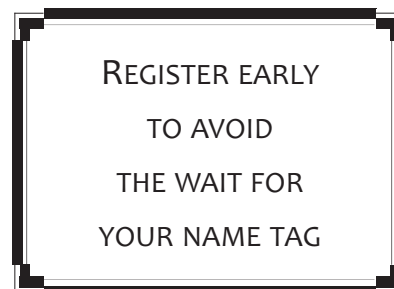
SME Florida Section
C/O FIPR Institute
1855 W. Main Street
Bartow, FL 33830

Click [Here](#) to Register Online

Refund / Substitution Policy

Requests for refunds must be made in writing via email to adunn@admin.usf.edu and received by September 27, 2013. Refund requests will be subject to a \$10 administrative fee.

Substitutions only, after September 27, 2013.



Name Badges

Badges for the conference will be printed and available for pickup at the registration table upon your arrival.

If you need to make a correction or substitution, please email your request to adunn@admin.usf.edu prior to October 8, 2013. After that date, all substitutions and corrections will need to be made on-site at the registration desk.

Professional Development Hours

The Florida Administrative Code (FAC) section 61G15-22.001 requires that each professional engineer registered in Florida shall complete four professional development hours related to the licensee's area(s) of practice. The Florida Section of SME will be offering sessions to satisfy this requirement at the 2013 Phosphate Conference. Registration to the conference and full attendance at the session for which you need credit will be required for certification. You must supply your P.E. number, completed attendance form, and have your attendance verified by George McQuien (proctor). Attendance forms will be available at the registration table at check-in. george.mcquien@mosaicco.com

* Attendance forms must be submitted at the end of each day in which the hours are requested— No Exceptions. There will be a separate attendance form for each day of the conference.

Conference Chairman:

Jama Abbott

jabbott@phoschem.net

(863) 781-3671

Technical Session Chairman:

Mike Chanen

mike.chanen@mosaicco.com

(863) 944-7609

Registration:

Anna Dunn

adunn@admin.usf.edu

(863) 534-7160

Exhibits/Sponsorship/Advertising:

Shannon Medley

smedley@admin.usf.edu

(863) 534-7160

Preliminary Program—Wednesday, October 9

8:00am-9:00am Registration and Exhibits Open
Continental Breakfast served in Exhibit Hall

9:00am-11:30am Opening Panel
Debbie Waters, Manager-Regulatory Policy-Environmental Health and Safety, Mosaic
Randy Bushey, Senior Civil Engineer, CH2MHill
Karen Swager, VP Operations-Mining, Mosaic
Russ Frydenborg, Program Administrator, DEP Water Quality Assurance and Water Quality Standards Program
John Thorington, Vice President of Government Affairs and Board Coordination, Tampa Port Authority

Noon-1:30pm Lunch
Keynote Speaker
Steven J. Van Kauwenbergh, Principal Scientist, Leader—Phosphate Resources and Research Initiative, International Fertilizer Development Center

1:30pm-4:30pm Concurrent Panel Sessions

GEOLOGY AND MINE PLANNING

The Geology and Mine Planning Session reflects a variety of topics including the practical implications of a calcarenite zone in the phosphate matrix and the resulting significant geological and hydrological impacts on mining, BMP design and construction, and settling area dam design and construction. This broad-ranging topic is discussed in two presentations. After decades of exploration, analysis, and false starts, the Bayovar deposit in Peru is producing phosphate rock. The mining operation and current status will be discussed. An additional topic discusses an offshore survey system and methodology for seabed mineral exploration.

ANALYTICAL/REGULATORY

The Analytical/Regulatory Session will introduce to the attendees various topics of interest regarding analytical and regulatory issues and research. Numeric Nutrient Criteria and how it will affect the phosphate industry in Florida will also be discussed along with the natural distribution of phosphorus concentrations across the Florida lakes. Lab waste is another concern whether or not the waste was inherited or produced and the regulations regarding the waste will be presented. The ever-changing technology and data-handling procedures for laboratories will be a topic that labs and their clients are interested in hearing about and will be discussed during this session.

4:30pm-6:30pm Social
(Included in Registration and Exhibitor fees)

Click on the 28th Annual Regional Phosphate Conference link below for an updated Preliminary Program that includes speakers, titles and abstracts.

[28th Annual Regional Phosphate Conference](#)

Preliminary Program—Thursday, October 10

8:00am-9:00am **Registration and Exhibits Open**
Continental Breakfast served in Exhibit Hall

9:00am-Noon **Concurrent Panel Sessions**

MINING AND MINERAL PROCESSING

The Mining and Mineral Session will explore emerging processes and technologies that address future challenges to phosphate mining, and maximizing the yield from existing reserves. Florida phosphate ore-body characteristics are trending toward increasingly high amounts of carbonate minerals. The sizing and flotation methods needed to process this high-carbonate phosphate rock efficiently will be explored. The future of Florida phosphate mining will be addressed from a strategic perspective. Another topic will explore the mining, milling, and applications of zirconium oxychloride (ZOC).

ENVIRONMENTAL, HEALTH AND SAFETY

The Environmental, Health & Safety Session includes a review of environmental program issues that have occurred over the past twenty years and the challenges facing government regulatory agencies today, resolving unguarded safety hazards for potential future land users, current mine-related health and safety training requirements and the impacts and safety hazards of an aging work force.

Noon-1:30pm **Lunch**
Hero of the Industry Awards

1:30pm-4:30pm **Concurrent Panel Sessions**

CHEMICAL PROCESSING

The Chemical Processing Session will have four presentations addressing current and future phosphate operations. The ever-changing nature of the industry requires innovative thinking with regards to virtually every aspect of the manufacturing process including safety, operability and environmental concerns. Presentation topics will address several of these fundamental issues and will include novel processes for acid manufacture and water treatment. This session will provide a process-competitive perspective, considering the economics of fertilizer manufacture will likely be of paramount concern to all engineers, managers and other professionals associated with the industry in the future.

RECLAMATION

Reclamation of mined lands requires contributions from many different professional categories. It is when all of these categories come together to provide a desirable and sustainable finished product that we have achieved our goal. This year's Reclamation Session will include discussions on several different areas of the reclamation process, ranging from early construction practices to the potential uses of mined lands after their permit obligations have been met. Topics will include the advancement and advantages of using GPS technology in earthmoving and construction; research pertaining to the biological make-up and control of natalgrass in natural and disturbed areas; and the sustainability of reclaimed lands in regards to their other potential uses beyond functioning as successful ecological support structures.

4:30pm-5:00pm **Grand Prize Drawings**
(must be present to win)

Exhibiting at the Conference

[SOLD OUT] Premium Booths	'A' - 'CC'	\$700
[SOLD OUT] Exhibit Hall Booths	1 - 52	\$560

Exhibitor Fee Includes:

- 10' x 10' Space with an 8' covered table, 2 chairs, electricity and WiFi
- Mailing list of all registered participants
- 2 registrations (per booth)
- Continental Breakfast Wednesday and Thursday
- Lunch Wednesday and Thursday
- Social Wednesday Evening

**PLEASE CONTACT
SHANNON MEDLEY**

smedley@admin.usf.edu

**IF YOU SHOULD HAVE
ANY QUESTIONS
REGARDING YOUR
EXHIBITOR BOOTH.**

Booth set-up:

Set up on Tuesday, October 8, from 8:00am– Noon and 2:00pm-7:00 pm.

Booth break-down:

Please do not dismantle booths until after 3:30 pm on Thursday. Forklifts will not be allowed in the Exhibit Hall before 4:30pm. (Forklift max weight—5,000 lbs.)

Shipping Information:

The Lakeland Center
701 W. Lime Street
Lakeland, FL 33815
863-834-8100

Shipping to Lakeland Center: The Lakeland Center charges \$20 per day, per box (less than 100lbs), to store your display packages if they arrive prior to Tuesday, October 8, 2013. Please make sure all packages are clearly labeled—2013 SME Phosphate Conference.

Shipping Department is open
8:30am—5:00pm
Monday-Friday

Shipping from Lakeland Center: If you wish for the Shipping Department to assist you in having your display shipped home, please bring your completed FedEx, UPS, etc. forms with you prior to departure. Packages must be picked up by 5:00pm.

Advertising

Advertisements must be sent in electronic format by **Friday, September 6** to Aaron Medley at FIPR Institute amedley@admin.usf.edu

Half Page \$200
4.5" wide x 3.5" tall
Black/White

Full Page \$300
4.5" wide x 7.5" tall
Black/White

All advertisements must be provided in PDF or TIFF format only, created at 100% of actual ad size, at a resolution of no less than 600 dpi (300 dpi for photos at actual ad size is acceptable), with grayscale setting for black and white ads, or CMYK color profile for full color ads. Please name your advertisement file to include the name of your company, using no spaces in the file name.

NOTE: Your advertisement gets your message to the more than 500 participants and others who receive the printed program. Your name will also be included as part of the preliminary program that will be posted on the Phosphate Conference 2013 section of the FIPR Institute website.

Sponsorships

Deadline for inclusion in the program is **Friday, September 6, 2013**.

Company logos and PowerPoint slides must be received in electronic format by September 20.

Send to Aaron Medley at FIPR Institute amedley@admin.usf.edu

Core Level of Sponsorship:

- company name listed in conference program
- on sponsor signs at Breakfast areas
- logo on banner displayed at General Session and Lunches
- PowerPoint slides displayed prior to General Session, during Lunches and Technical Sessions
- and website link on Phosphate Conference website

Platinum \$1000—

Core level of sponsorship benefits, plus

6 PowerPoint slides

Logo on Conference lanyard (Deadline for inclusion on lanyard is August 30)

Special recognition at Social Event on Wednesday

\$100 off advertising in program

Gold \$400—

Core level of sponsorship benefits, plus

4 PowerPoint slides

\$50 off advertising in program

Silver \$300—

Core level of sponsorship benefits, plus

2 PowerPoint slides

\$25 off advertising in program

Bronze \$200—

Core level of sponsorship benefits, plus

1 PowerPoint slide

\$15 off advertising in program

SME Golf Tournament—Tuesday, October 8, 2013



The Club at Eaglebrooke
1300 Eaglebrooke Blvd.
Lakeland, FL 33812



**Cost: \$600 per team (4 players)
4 Person Scramble/32 Team Limit**

**Check In & Lunch @ 11:30 am
Shotgun Start @ 1:00 pm**

The registration fee includes:

- Entry Fee
- Cart Fee
- Range Balls
- Box Lunch
- Dinner
- Door Prize Ticket

Awards include:

- 3 Places in 2 Flights
- Long Drive and Proximity Contests
- "Wacky Putting" Contest
- Door Prizes

**Click the SME link to Register Online:
www.fl sme.org**

For more information contact:

Chaucer Hwang **Ron Hartung**
chwang@cfindustries.com rhartung@gte.net
(863) 375-4321 ext. 309 **(863) 640-2869**

Sponsorship Levels

Corporate Sponsor \$2,500

- Recognition at the 28th Annual Phosphate Conference
- Plaque
- FL SME Web Site
- Golf Event and One Team Entry in Tournament

Platinum Sponsor \$1,500

- Recognition at the 28th Annual Phosphate Conference
- FL SME Web Site
- Golf Event and One Team Entry in Tournament

Business Sponsor \$1,000

- Recognition at the 28th Annual Phosphate Conference
- Golf Event and One Team Entry in Tournament

Hole / "Other" Sponsor \$250

- Longest Drive
- Trophies
- Meals
- Closest to the Pin
- Door Prizes

**Deadline for Registration & Payment
Tuesday, October 1st**

We are excitedly anticipating the 2013 SME Golf Extravaganza and look forward to seeing you at the tournament. The funds raised from this tournament will help further educate students, communities and elected officials about the roles of the aggregates and phosphate industries. We are working hard to make this happen. Below are some of the contributions made by SME and MEC in the past year.

- Awarded five mini-grants to K-12 schools in our mining area to support education projects.
- Attended and supported the Florida Association of Science Teachers (FAST) Conference in St. Petersburg where 300 mineral kits, pro-mining literature and lesson materials were distributed to educators from across Florida.
- *Teacher of the Year* and two *Mining Ambassador of the Year* awards made to key mining-supportive educators in DeSoto, Hardee, Hillsborough, and Polk counties.
- 15 awards presented to Regional Science Fair winners from Hardee, Hillsborough, and Polk counties with an additional three awards to top mining related projects.
- Special Awards of Florida Section of SME were presented to six students at the Florida State Science Fair.
- 8 Scholarships awarded to college-bound seniors planning to study engineering, science or mathematics.
- Supplied backboards and display materials for DeSoto and Hardee Counties junior high and senior high school science fair participants.

SME Florida Would Like To Thank The Following Sponsors For Making The 2012 Golf Event A Success

Corporate Sponsors

CF Industries
FED, Inc.
McDonald Construction
Mosaic

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AMEC
American Construction & Engineering
ArrMaz
Georgia Pacific
PennPro

Business Sponsors

COMANCO
ENERCON
Jacobs Engineering Group
James Construction Group
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Hole Sponsors

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Cardno ENTRIX	Ardaman & Associates	GroundLevel	Dennis & Associates
Bay Port Valve & Fitting	Streamline Environmental	I.F. Rooks & Associates	Maclan Corporation
Flatwoods Consulting Group			

Companies Represented at the 2012 Phosphate Conference

A·C·T Environmental & Infrastructure
Abbey Rogers/Foxboro
Abresist Kalenborn Corporation
Advanced Environmental Laboratories
Agilent Technologies
Agrium
Agru America, Inc.
Aleff Group, Inc.
Amazon Hose & Rubber Company
AMEC Environment & Infrastructure
AMJ Equipment Corporation
Andritz (Bird Machine Company)
Applied Environmental Consulting, Inc.
Applied Sciences Consulting, Inc.
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ArrMaz
Arroyo Process Equipment
Associated Industries of Florida
AW Process / IMI
AW Process LLC
AWC, Inc.
Cardno ENTRIX
Cassia Engineered Products Corporation
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Cerlic Environmental Controls, Inc.
CF Industries, Inc.
Chastain-Skillman, Inc.
CiDRA Minerals Processing, Inc.
Clark Environmental, Inc.
COMANCO Environmental Corporation
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DCL / AW Process
DcR Engineering Services, Inc.
DeGrove Consulting & Training, Inc.
Diamond Systems LLC
Dr. Phosphate
ECS Florida
ECT, Inc.
Edgen Murray Corporation
Enercon Services, Inc.
Envirocon, Inc.
ENVIRON International Corporation
Environmental Laboratory & Consulting Technologies, LLC
Environmental Protection Commission
EOG Resources, Inc.
FCC Environmental LLC
FDEP-Bureau of Mining & Minerals Regulation
FIPR Institute
First Stop Sales & Rentals
Flatwoods Consulting Group, Inc.
Florida Department of Agriculture & Consumer Services
Florida Engineering and Design, Inc.
Florida Heat Transfer
Friatec NA, LLC
Gannett Fleming, Inc.
Georgia Pacific Corporation
Georgia-Pacific Chemicals LLC
Geosyntec Consultants
Gerber Pumps International, Inc.
Gilson Engineering Sales
GIW Industries, Inc.
Golder Associates, Inc.
Ground Level Inc.
GSE Environmental
Gundlach Crushers
Gurr Professional Services, Inc.
Hardee County BoCC
Hatch
Hillsborough County
Hillsborough County BoCC
Hopping Green & Sams
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Independent Consultant
Independent Geological Services, Inc.
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Jacobs SA
Jahna Dredging, Inc.
James Construction Group
Jason Industrial, Inc.
JDCPhosphate, Inc.
John Wing, PE, LLC
Keateck Consulting
Kemira
KEMWorks Technology
Kimre, Inc.
Kleinfelder, Inc.
K-Technologies, Inc.
LampI Herbert Consultants
Layne Christensen Company
Lewis, Longman & Walker, P.A.
Madrid Engineering Group, Inc.
Manatee County Government
Maptek North America
McDonald Construction
McLanahan Corporation
MECS DuPont
Mersino Dewatering, Inc.
Metalcraft Services of Tampa
Metso Minerals-Slurry Handling Solutions
Mid-State Machine and Fabricating Corp.
MineWare, Inc.
Mitsubishi Power Systems Americas
Moretrench
Mosaic
MSHA
Mulberry Phosphate Museum
MWI Corporation
Nalco - an Ecolab Company
NMA
Nodarse, A Terracon Company
Nutrients for Life Foundation
Odyssey Marine Exploration, Inc.
Ostara USA, LLC
Oxford Instruments America, Inc.
PCS Phosphates
PENN PRO, Inc.
PerUsa EnviroMet, Inc.
PhosChem Supply Company
Phoslab Environmental Services
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Plattco Corporation
PotashCorp
Prado & Associates
Progression, Inc.
Progressive Water Resources, LLC
Pump Consulting & Training LLC
Quest Ecology
R Squared S, Inc.
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Safety Training & Consulting
Scantech International Pty Ltd
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SNF Environmental
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Solares Controls
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