

February / March 2007

## Chapter "Immersed" In Latest Design Technology

# **SALA Building Immersive Construction Lab Setting for January**



Members sit in darkened lab to observe 3-Dimensional design

The room was dark! People gathered there spoke in hushed tones. Amazing images appeared before them! What is this place? Where are we — a movie premier, opening night at the opera — no, we're at the Penn State University's SALA Building and we're in the Immersive Construction Lab!

Faculty members John I. Messner, Ph.D., Loukas Kalisperis, and George Otto were the hosts for our group and presented one of the latest technological tools available to our industry. No longer do we have to wait until the bricks and mortar are on the ground to catch a 3-

D glimpse of what our building design will offer to its inhabitants. This versa-

tile software allows the architect to look "into" his design from every angle, including around corners.

Another attribute of this program permits viewing elements of the design in context — adjusting heights of permanent fixtures, partitions, windows, etc. — avoiding problems before they happen. An interesting sidelight to our immersion was an incredible look at Google Earth. As we zeroed in on various cities around the world, we were actually able to see their buildings in 3-D relief. Almost like being right there in Paris!!



Some of the equipment required to produce 3-D view of building designs

Although the equipment and software for these system required a sizable investment for the Department, the impact of this type of exposure for the students will help them hone their design skills. Being able to "view" their solutions to particular design problems certainly provides another "dimension" to their education.

# AIAS Gives a Look at Forum 2006 in Boston, MA



AIAS members' presesntation of AIAS Forum 2006, Boston, MA

Following our presentation, Lauren Radvansky, President of Penn State's Chapter of AIAS, and several other members gave a very informative photo look at their trip to Boston, Massachusetts and Forum 2006 held at the Prudential Center. Ten students were able to attend and these students presented an interesting overview of the workshops and tours they participated in, and the speakers invited to enlighten these future professionals. Thanks to Lauren and all the students for sharing their great experience with us.



## **Chapter Officers**

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## From the President's Desk

The Chapter Vice-President and I attended the Grassroots Conference last month in Washington, DC. It was the first time either one of us attended the event, so we didn't know what to expect. I had an image of a crowd of architects gathered on the steps of Capitol Hill shouting out to put an end to global warming, acting like Bill O'Reilly's description of Kool-Aid drinkers. Of course, that isn't what happens. The conference is a very well-organized and busy event. It doesn't take long after you arrive to witness how much goes on at the AIA state and national level. It was a fitting occasion to hear the AIA leaders speak of its new mission: "The American Institute of Architects is the voice of the architectural profession and the resource for its members in service to society."

AIA President, R.K. Stewart testified before congress on behalf of AIA members with the following statement. "The building sector alone accounts for 39 percent of total U.S. energy consumption, more than either the transportation or industry sectors. Buildings consume 71 percent of the U.S. electricity production, and buildings in the United States account for 9.8 percent of the carbon dioxide production emissions worldwide." So understandably, the Grassroots lobbying effort focused on asking the government to lead the way in constructing more energy efficient buildings and support sustainable practices that the private sector will eventually follow. To quote Yogi again, "the future ain't what it used to be."

One morning at Grassroots began with a peer breakfast where architects from similar-sized chapters from around the country were grouped together to discuss openly about various challenges and successes. AIA Middle PA was in a group with other chapters who has less than 100 members. AIA Northern Minnesota works with the local CSI organization to plan programs. AIA Staten Island has trouble drawing attendance to programs. AIA Mid-Michigan seems to rotate the same members to serve on the Board and AIA Staten Island has trouble finding new members to lead the component. I thought these notes sounded rather familiar. These same chapters are also serving their members and communities very well. They are offering student scholarships, holding golf outings, sponsoring ARE programs, educating children, and working with municipalities.

Continued . . . See President's Desk, Page 3

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## Energy Independence Goal For State's Leadership

As you are well aware by now the 2030 Climate Challenge is steering our efforts toward carbon neutral energy within the next twenty-three years. The AIA has wholeheartedly accepted this challenge by its adoption. By 2010 new construction and major renovations should reduce fossil fuel use by 60%. That means us!

Along with this challenge I am encouraged by the Leadership of our present Governor, Edward G. Rendell, who has released his <u>Energy Independence Strategy</u>. This plan is initiated to "push Pennsylvania into the top tier of states taking steps to cut customer energy costs, and significantly expand the alternative fuel, clean energy, and conservation sectors".

Several highlights of the program include:

- Save consumers \$10 billion in energy costs over the next 10 years;
- Reduce Pennsylvania's reliance on foreign fuels and increase Pennsylvania's clean energy production capacity; and
- Expand Pennsylvania's energy production and energy technology sectors to create more jobs.

Governor Rendell intends to present a comprehensive strategy to make Pennsylvania a leader in addressing climate change in the next ninety days. Stay tuned!

You may contact the Governor's website at www.governor.state.pa.us for more information.

Also contact your State Representatives and let them know what you think. This is a great time for the AIA to assume leadership in this effort as part of our AIA 150 celebration.

Frederick J. Fernsler Past President

## Presidents Desk (Continued from Page 2)

The month of March holds two chapter events. The first event is a tour of the Bedford Spring Hotel on March 15 at 2:30pm. This is a joint event with the CSI PA Railroad Chapter. The second event is a regular chapter dinner meeting on Friday, March 23, 2007 at Penn College in Williamsport. Mr. Benedict Dubbs from Murray Associates Architects, P.C. will present the design of the new Penn College Madigan Library. Please RSVP bhayes@keller.nb.net by March 16, 2007 for the chapter dinner meeting. A promotional insert is included in this newsletter for more information.

Brian W. Hayes, AIA President, AIA Middle PA Chapter



# Symposium — Full Speed Ahead !!

By now you have been informed of the date for the PA Middle Chapter's Bi-Annual Symposium — which, for those of you who do not read the Newsletter [perish the thought] — is October 25, 2007, at the Johnstown Pasquerilla Conference Center.

Our theme of "Facts You Should Know About Green Buildings and the IBC 2006 Code" will be well emphasized by qualified GBA and IBC personnel. Our vendors are beginnijng to line up to impress and inform

us with the latest building component information.

Finally, the day will be capped off with a ride on the steepest vehicular incline in the world to dinner and our final dual presentation by a highly qualified member of our legal community AND the Penn State Architecture students who will dazzle us with "wearable building" costumes of their own design.

We look forward to seeing you all there!!!

What: AIA-MPC Bi-Annual Symposium

When: Thursday, October 25, 2007

Where: Frank J. Pasquerilla Conference Center Downtown Johnstown

**Ouestions or vendor leads?** 

Contact Anne McGrath at 814.539.1317 or annefmcgrath@aol.com.

AIA and CSI Join Together For Event

## HISTORIC BEDFORD SPRINGS HOTEL TOUR

Mineral Springs, U. S. Presidents, first indoor swimming pool in the Nation — these are the hallmarks of the Bedford Springs Resort. Opened in 1804 by Dr. John Anderson, seven mineral springs located on the 2,200 acre property drew people to Bedford and increased the popularity of the resort. People from around the world flocked to this nineteenth century spa to "take the waters". Visitors included 10 U. S. Presidents including 7 who were in office at the time of their visits.

A myriad of interesting historical facts have led to the mystique of the Hotel, including the revamp of the resorts' 18-hole golf course in 1923 by renowned golf course architect, Donald Ross; and the housing of Japanese diplomats captured during World War II. In 1984 the Bedford Springs Hotel was named a National Historic Landmark.

Now, after a \$120 million restoration and expansion project, the world-class spa will once again greet guests from around the world. Be among the first visitors to tour this facility as we join the Pennsylvania Railroad Chapter of the Construction Specifications Institute on Thursday, March 15, 2007, at 2:30 p.m. There is no cost for the tour and a pay-for-yourself social at Ed's Steak House will follow the tour. *Hard Hat and Boots Are Mandatory!!!* 

Please RSVP to Mike Lechleitner at mikelechleitner@lrkimball.com or 814.472.7700, ext. 252 by Tuesday, March 13.

## **CONTINUING EDUCATION CREDITS**

Remember —Brian L. Mayko, Associate AIA, is the Continuing Education Registrar for the Middle Chapter. Don't forget to get your information to Brian to make sure that all of your credits are counted.

## **HEY!! LET'S STAY CONNECTED**

Please remember to make sure that Dave Reasinger receives any changes and/or additions in your mailing address and contact information including email addresses. Also, please make sure that Dave receives information for new members in the Middle Chapter. *Thanks!* 





## FORENSIC ARCHITECTURE

## ZINC-RICH PAINT AS A REPAIR METHOD FOR HOT-DIP GALVANIZING

Hot-dip galvanizing is a long-lasting and cost effective corrosion protection system. Hot-dip galvanized coatings are highly abrasion resistant, however coating damage may occur due to extremely rough handling, installation techniques, or in-service conditions, and is required for in field cutting. Small scratches in the galvanized surface present little or no problem as the zinc will allow itself to be preferentially consumed, keeping the underlying steel rust free. However, where large portions of

the zinc coating have been damaged it is important to repair these areas.

Typically zinc-rich paint is the easiest and least expensive method of touch-up detailed in ASTM A 780, *Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings*. The paint needs to contain at least 65% zinc; higher concentrations of zinc may provide increased cathodic protection, in addition to barrier protection. Zinc-rich paints are classified as organic or inorganic, depending on the binder. Inorganic zinc-rich paints are more effective for corrosion protection and do not shrink after drying/curing as organic coatings do. This is a major advantage when the coating is applied to corners, edges, and rough surfaces.

For zinc-rich paint to be effective, proper surface preparation is critical. In order to ensure proper application, the surface needs to be blasted to bare metal. When blasting is not practical, hand tools may be used to clean areas. Regardless of the method used, the area to be repaired should be clean, dry, and free of oil, grease, and corrosion byproducts. Painting should take place as soon as possible after preparation and prior to development of visible deterioration.

Zinc-rich paints can be applied by brush or spray. In both instances it should be done as a single application of multiple passes and according to the paint manufacturer's written instructions. The finished surface of the painted coating should be free of lumps, coarse areas and loose particles. Zinc-rich paint is formulated to deliver color matches for a variety of galvanized surfaces.

Zinc-rich paint does have its advantages and disadvantages. In addition to not requiring special equipment for application, zinc-rich paints provide some cathodic protection in addition to barrier protection. On the downside, zinc-rich paint has only minimal abrasion protection and will not weather the same as the surrounding galvanized coating.

Regardless of the repair method selected, all materials and workmanship should conform to ASTM A 780. Properly repairing areas of damage on a hot-dipped galvanized coating is the best way to ensure the coating provides the highest level of corrosion protection possible. For additional information and alternative methods of repairing hot-dipped galvanized steel consult ASTM A 780, or visit the American Galvanizers Association (AGA) website at www.galvnanizeit.org.

Founded in 1935, the AGA is a nonprofit trade association dedicated to serving the needs of fabricators, architects, specifiers, and engineers, providing technical support on today's innovative applications and state-of-the-art technological developments in hot-dip galvanizing for corrosion control.

The above article is by, The American Galvanizers Assn. Denver, CO. The closest member of the AGA is Korns Galvanizing Co. Inc. in Johnstown, PA. Call 814 535- 3293

Respectfully Submitted.

Albert S. "Toby" Roberts, Jr. AIA CCS

The Middle Pa. Chapter AIA welcomes comments and questions regarding this and future "Forensic Architecture" articles. Please direct your thoughts to Toby at L. Robert Kimball and Associates, Ph. 814 472-7700 Ext. 342. Better yet, email Toby at tobyroberts@lrkimball.com.



# SAVE

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## **Technical Workshop:**

## LEED for New Construction & Major Renovations Technical Review

This workshop created by the US Green Building Council is geared toward building owners, facility managers, design teams, and other building industry stakeholders interested in new construction and major renovation projects that feature high performance "green" techniques in an economical and environmentally sensitive package.

#### Instructors:

• Marcus Sheffer, 7group & Energy Opportunities, Inc.

• Marc Mondor, evolve Environment::Architecture

WHERE: DEP Cambria Office

286 Industrial Park Rd Ebensburg, PA 15931

WHEN: Thursday, March 29, 2007

Registration: 8:00 AM Program: 8:30 AM - 5:30 PM

**TO REGISTER:** Go To: http://www.usgbc.org/Workshops/Workshoplist.aspx **MORE INFO:** Ryan Snow, Director of Education and Special Projects

Green Building Alliance

64 S. 14th St

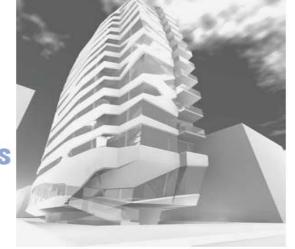
Pittsburgh, PA 15203

Phone: 412.431.0709 Fax: 412.431.1432

## MARCH 21, 2007 5:30PM ARCHITECTURE LECTURE SERIES FROM HARDWARE TO SOFTFORM

## WINKA DUBBELDAM

ARCHI-TECHTONICS. NYC





Archi-Techtonics is a a team of 12 highly qualified architects. The studio operates like a laboratory: a philosophy based upon combining the theoretical with the pragmatic, research with construction. The team spirit expresses itself in an aim to re-think, re-investigate and re-interpret all project details. The firm analyzes and researches programmatic efficiencies, urban specificities, and material innovations, and is interested in the use of hybrid materials and smart building systems. Founded in 1994, Archi-Techtonics' work ranges from residential to commercial, from real to virtual and is recognized in urban designs, architectures and installations. Archi-Techtonics has been featured in a multiplicity of journals, books and exhibitions.

Winka Dubbeldam is the principal of Archi-Techtonics, NYC. She is currently Director of the Post-Professional Program at the University of Pennsylvania in Philadelphia.

101 SALA Stuckeman Family Building Refreshments provided AIA/CEU credits available



# ESE

# **DATES**

# AIA MIDDLE PACHAPTER MEETING 3/23/07:





ARCHITECTURAL
DESIGN OF THE NEW

MADIGAN

LIBRARY

PRESENTATION BY BENEDICT H DUBBS AIA, LEED AP MURRAY ASSOCIATES ARCHITECTS, PC

# PENNSYLVANIA COLLEGE OF TECHNOLOGY PROFESSIONAL DEVELOPMENT CENTER WILLIAMSPORT, PA

AGENDA:

4:00-5:00 EXECUTIVE COMMITTEE MEETING | 5:00-6:00 GATHERING SOCIAL | 6:00-8:00 PRESENTATION & DINNER DINNER CATERED BY LE JEUNE CHEE. COST \$25.00 PER PERSON.

PLEASE RSVP BY MARCH 16, 2007 BY CALLING 814-695-3216 OR SENDING AN EMAIL TO: bhayes@kellecinb.det

PLEASE RSVP BY MARCH 10, 2007 BY CALLING 014-095-3210 OR SENDING AN EMAIL 10: Bhayes@iketeenb.net

# PENN COLLEGE

# Calendar

## 2007 Tentative Calendar

#### March

- 15 Bedford Springs Hotel Tour: Bedford, PA; Joint CSI/AIA Meeting
- 23 Chapter Meeting: Penn College, William sport, PA; Outreach to Williamsport Area Firms
- 29 LEED for New Construction & Major Renova tions Technical Review, DEP Ebensburg Office

## April

18 Joint ASHREA/AIA Meeting, Altoona, PA

3-5 AIA National Convention: San Antonio, TX; Growing Beyond Green

#### June

TBA Web Site and/or Newsletter Committee July

TBA Annual Picnic: Loretto, PA, Klein Immergrun

### Sept

TBA Chapter Meeting: Flight 93 Memorial, Somerset, PA (Seven Springs) or Carpenters Union, Gallitzin, PA Insulated Concrete Structures

#### Oct

25 2007 Symposium: Green Building Alliance, Pasquerilla Conference Center, Johnstown, PA

# TBA PA Builds: Project Submissions Nov

13-14 AIA PA: Leadership Conference & Architect's Day, Harrisburg, PA

#### Nov/Dec

TBA PSU/AIAS – Lecture & Election of Officers, Penn State University, SALA Building

## Dec

TBA Retreat: 2008 Planning Session

## AIA Associates Corner Here are your links in 2006

## Denise E. Thompson, Assoc. AIA

AIA PA Regional Associate Director Francis Cauffman Foley Hoffmann Architects Ltd dthompson@fcfh-did.com

#### Michael P. Warren, Assoc. AIA

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### David E. Reasinger Assoc. AIA

PA Associate Committee Member der19@psu.edu

#### **Arthur Sheffield**

PA Coordinator, Intern Development Program (IDP) idp@aia.org

DON'T FORGET!!!

Deadline for articles for the next newsletter is April 27, 2007

Be careful what you draw . . . .



