

WEDNESDAY, OCTOBER 20, 2004

As of 6/04/04. Subject to change.

2:00 PM - 3:30 PM • ASCE Concurrent Professional / Technical Sessions I

WORKFORCE

Course Portfolios & the Scholarship of Teaching

Learn to improve teaching effectiveness and student learning by using course portfolios in the context of teaching scholarship. Presentations explain how course portfolios are used at institutions around the country, can be made public for peer evaluation, and can represent peer-reviewed publications similar to archival journal articles.

MODERATOR:
Gary L. Krause, Ph.D.,
University of Nebraska, Omaha, NE

SPEAKERS:
Eric Pappas, James Madison University
Satisfying the Non-Technical ABET "a-k"
Requirements: Virginia Tech Materials Science and Engineering Communications Portfolio

Wilf Nixon, University of Iowa
Using a Portfolio Approach in Writing Assignments for Civil Engineering Students
Al Estes, United States Military Academy
Course Portfolios: A Tool for Continuity and Assessment

Gary Krause, University of Nebraska
Course Portfolios & Peer Review:
The Scholarship of Teaching

LEADERSHIP & MANAGEMENT

Federal Agency Workforce Trends, Education Policy, and the Civil Engineer

Changing workforce demographics and shifting government roles are changing the ability of federal agencies to fulfill their missions, particularly due to the loss of institutional memory and threats to maintain core technical competencies. This session is based on findings and recommendations of a recent Renewable Natural Resources Foundation Conference on Personnel Trends, Education Policy, and Evolving Roles of Federal and State Agencies. Delegates from across natural resource disciplines (including engineering) examined the impact these changes have on agencies, natural resources, and related professions. Implications for the engineering community, including workforce trends, knowledge management, student recruitment and education, and employee skill sets, will be discussed.

MODERATOR: Albert A. Grant, P.E., Renewable Natural Resources Foundation, Potomac, MD

SPEAKERS:
Robert Robinson, Natural Resources & Environment, US General Accounting Office, Washington, DC • **Trends in Engineering Workforce in Federal Agencies**
Max Stier, Partnership for Public Service, Washington, DC • **Responding to Government Workforce Challenges: Options and Opportunities**

William E. Kelly, Ph.D., P.E., Catholic University of America, Washington, DC • **Role of Educational Institutions in Responding to Changing Demographics and Government Roles**

**When the Enemy Just Might Be Us:
Improving Collaboration and Information-Sharing between Siloed Teams - Part I**

Engineering firms talk a lot about other firms, yet struggle more internally than with the competition. Learn how to improve cross-department productivity through a unique business simulation to develop flexibility, information-sharing, and profit – without the risk and cost of on-the-job trial and error. Like airline pilots fly on simulators before handling the controls of a real plane, this structured, insightful, yet interactive and enjoyable simulation provides a bottom-line focus praised by business, scientific, and technical participants wary of "touchy-feely". Unlike role play, participants do not have to "act." Instead, you apply your own emotions, personalities, ethics, intelligence, skills, experience, and behaviors on a given functional job to improve teamwork and decision-making. Includes discussion and sharing of best practices for immediate application at work. *Limited to the first 50 attendees who arrive at the session.*

MODERATOR: Melissa Prelewicz, P.E., M.ASCE, ASCE, Reston, VA

PRESENTERS: George Smart & Tammie Walrath, Strategic Development, Inc., Research Triangle Park, NC

HISTORY & HERITAGE

Structures

Learn about structural engineering ventures to restore Baltimore's B&O Railroad Museum whose 1884 Baldwin Roundhouse iron roof collapsed in February 2003 under the weight of a snowstorm and Martinsburg, WV's B&O Railroad Roundhouse. The latter was designated an ASCE Historic Civil Engineering Landmark in 2002. Study the intricacies of the Bollman Truss Bridge, ASCE's first Historic Civil Engineering Landmark in 1969, the oldest iron railroad bridge in the US, and only surviving design by Baltimorean Wendell Bollman. Also learn about Philadelphia's Fairmont Suspension Bridge, important for its "firsts" as a public bridge built using academic principles, and so successful that wirecable suspension bridges became the norm and leadership on long-span bridges passed from Europe to America.

MODERATOR: Bernie Dennis

SPEAKERS:
Donald Sayenga, Consultant, Tucson, AZ & Historian/Archivist of the Wire Association, Guilford, CT
Fairmount Suspension Bridge over the Schuylkill River at Fairmount in Philadelphia, by Ellet

William Rockery, B&O Railroad Museum, Baltimore, MD & Bill Rockery, Century Engineering, Baltimore, MD
B&O Railroad Museum

James Cagley, Cagley Associates, Structural Engineers, Rockville, MD
Martinsburg Roundhouse

Liakos Ariston, Thomas Lydigsen & Sanjay Arwade, Johns Hopkins University, Baltimore, MD
Structural Performance of the Bollman Truss Bridge at Savage, Maryland

4:00 PM - 5:30 PM • ASCE Concurrent Professional / Technical Sessions II

WORKFORCE

How Your ASCE Student Chapter Can Benefit Your CE Program

A successful partnership between ASCE Student Chapters and Civil Engineering Programs can be developed so that both groups benefit. In most cases, goals of the Student Chapter can easily be integrated into goals of the Program to increase exposure for the profession. Presentations highlight how Student Chapters complement the engineering curricula and explicitly support the stated ABET outcomes to help students become the type of contributing professional valued by the profession.

MODERATOR: Heather Scranton, P.E., Boston, MA

SPEAKERS: T. Bartlett "Bart" Quimby, Ph.D., P.E., University of Alaska Anchorage, Anchorage, AK
ASCE Student Chapters: The Professional Component of Civil Engineering Education
Col. Allen C. Estes, United States Military Academy, West Point, NY
The Role of Student Chapters in Improving Civil Engineering Programs

Alan J. Lutenegger, University of Massachusetts, Amherst, MA
Successful Partnership Between ASCE Student Chapters and Civil Engineering Programs

LEADERSHIP & MANAGEMENT

Chicago Union Issues

This session will be a panel discussion about the impacts of trade union oversight of on-site testing technicians. The panel will be made up of two practitioners from the Chicago area and an attorney. In this case, the Operator Engineers Union responsible for construction improvements also wants responsibility for the technicians whose job it is to evaluate that the work is properly constructed. We will discuss ASCE Resolution 502 which looks at professional ethics and conflicts of interest, do's and don'ts of dealing with unionization, and the impacts of unionization to a company's operations.

MODERATOR: Eric Flavell, Flowers & Associates, Santa Barbara, CA

SPEAKERS: Bill Kwasny, GME Consultants, Minneapolis, MN
Allan DuBose, Testing Services Corporation, DeKalb, IL
Theodore R. Maynard, Consulting Engineer/Geologist, St. Paul, MN

When the Enemy Just Might Be Us: Improving Collaboration and Information-Sharing between Siloed Teams - Part II

Simulation training continues from previous session.

MODERATOR: Melissa Prelewicz, P.E., M.ASCE, ASCE, Reston, VA

PRESENTERS: George Smart & Tammie Walrath, Strategic Development, Inc., Research Triangle Park, NC

HISTORY & HERITAGE

Shaping Baltimore

Enjoy this potpourri of Baltimore CE history, covering the causes and consequences of the fire that destroyed most of Baltimore's downtown business district 100 years ago; several Baltimore-centric projects from a structural engineering history course; discovery during a renovation and slope stabilization project of an historic hillside park that revealed centuries-old tunnels built to obtain sand for Baltimore's glass-making industry; and an intimate look at an historically significant mansion that has become home to the Engineering Society of Baltimore. For course details, visit www.ce.jhu.edu/perspectives.

MODERATOR: Matt Fenton, Maryland Transit Administration, Baltimore, MD

SPEAKERS:
Peter B. Petersen, D.B.A., School of Professional Studies in Business and Education, Johns Hopkins University, Baltimore, MD
The Great Baltimore Fire of 1904

Ben Schafer & Sanjay Arwade, Johns Hopkins University, Baltimore, MD
A Course in Structural Engineering History at Johns Hopkins University

Phil Der, Whitney, Bailey, Cox & Magnani, Towson, MD
History and Restoration of Federal Hill

Xin Sun, Jacobs Civil, Inc., Baltimore, MD
Garrett-Jacobs Mansion



**EO6 TECHNICAL TOUR: JOHNS HOPKINS UNIVERSITY
APPLIED PHYSICS LABORATORY
3:35 PM - 5:45 PM See page 39.**

INSTITUTE DAYS – SEI

Impact of Electronic Data Interchange on Structural Engineering Practice

This session will address the impact of EDI on the current state of our professional practice, including how it has already been providing benefits in some areas.

MODERATOR: Peter Carrato, Ph.D., Bechtel Corporation

SPEAKERS:
Robb Krumpen, P.E., Bechtel Corporation
Electronic Data Interchange and Its Potential Impact in the Construction Industry

Mark Holland, Paxton & Vierling Steel Company
A Business Case for the Use of Electronic Data Interchange

Robert Lipman, NIST, Gaithersburg, MD
Using the CIMsteel Integration Standards to Increase Project Productivity




THURSDAY, OCTOBER 21, 2004

Professional Liability Seminar / 8:00 AM - 4:30 PM / Presented by MARSH / See page 13.

8:00 AM - 9:30 AM • ASCE Concurrent Professional / Technical Sessions III

SPECIAL TIME: 8:00 AM - 10:00 AM	SPECIAL TIME: 8:00 AM - 10:00 AM	SPECIAL TIME: 10:00 AM - 12 NOON	WORKFORCE	LEADERSHIP & MANAGEMENT	TECHNICAL SESSIONS – SECURITY/MANMADE MITIGATION, RESPONSE, RECOVERY	INSTITUTE DAYS – SEI	GLOBAL STANDARDS OF PRACTICE
LEADERSHIP & MANAGEMENT	INSTITUTE DAYS – GEO	INSTITUTE DAYS – GEO		Influencing Public Policy			
<p>Engineering Ethics Live!</p> <p>The Editorial Board of the ASCE Journal of Professional Issues in Engineering Education and Practice (JPI), the National Institute for Engineering Ethics (NIEE), and the National Society of Professional Engineers Board of Ethical Review are pleased to present "Engineering Ethics Live!" Based on the NIEE Applied Ethics Case of the Month program, this high-energy forum features live performances of ethics cases as skits by ASCE Student Members from the US Military Academy at West Point, Howard University, and the University of Maryland, College Park, as well as audience participation and commentary from a distinguished panel of ethics experts.</p> <p>SESSION COORDINATOR: William D. Lawson, P.E., M.ASCE, Texas Tech University, National Institute for Engineering Ethics, Lubbock, TX</p> <p>MODERATOR: Dennis D. Truax, Ph.D., P.E., DEE, F.ASCE, Mississippi State University, Mississippi State, MS</p> <p>PANELISTS: E. Walter LeFevre, Ph.D., P.E., Hon.M.ASCE, University of Arkansas, Fayetteville, AR Paul C. Taylor, P.E., F.ASCE, Orange County Transportation Authority, Orange, CA William J. Lhota, P.E., P.S., M.ASCE, LHOTA SERVICES, Worthington, OH Louis L. Guy, Jr., P.E., DEE, F.ASCE, Consulting Engineer, Norfolk, VA</p>	<p>Beneficial Reuse of Waste Materials in Geotechnical and Transportation Applications</p> <p>Learn about recent, innovative developments in beneficial reuse of waste and recycled materials in transportation applications. Typical materials currently being used in highway applications include, but are not limited to, petroleum contaminated soils, coal combustion by-products, scrap tires, processed silica, recycled glass, concrete, asphalt, or plastics.</p> <p>MODERATOR: Ahmet H. Aydilek, Ph.D., University of Maryland-College Park, MD</p> <p>SPEAKERS: Tuncer B. Edil, Ph.D., P.E., University of Wisconsin-Madison, Madison, WI A Review of Mechanical and Chemical Properties of Shredded Tire-Soil Mixtures Takeshi Katsumi, Ph.D., Kyoto University, Kyoto, Japan Japanese Status on Use of Wastes and By-Products in Geotechnical Applications Dana N. Humphrey, Ph.D., University of Maine, Orono, ME Tire-Derived Aggregate as Lightweight Fill for Embankments and Retaining Walls Fred Hooper, Geotesting Express, Inc., Boxborough, MA Effects of Reclaimed Asphalt Shingles on Engineering Properties of Soils Jorge Zornberg, Ph.D., P.E., University of Texas-Austin, Austin, TX Use of Tire Bales in Highway Applications</p>	<p>Geotechnical Engineering Lessons, Innovation, and the Future</p> <p>Session includes a special technical presentation from a retired naval geotechnical consultant (SAME's 2002 Goethals Medal Award Recipient), followed by a panel, consisting of government, university, and engineering agency representatives, to discuss engineering technology policies, education, and innovation.</p> <p>MODERATOR: John Christian, Ph.D., P.E., Consulting Engineer, Boston, MA</p> <p>SPEAKERS: Arthur Wu, D.Sc., P.E., Retired Naval Geotechnical Contractor, Bethesda, MD Geotechnical Lessons Learned from Navy Design & Construction Practices Benjamin Wu, J.D., Technology Administration, Department of Commerce Government Engineering & Technology Policies That May Change the Future of Engineering Mark Tufenkjian, Ph.D., P.E., California State University at Los Angeles, CA Engineering Education That May Improve the Future of Geotechnical Engineering David Curfman, Naval Facilities Engineering Command, Washington, DC Navy's Engineering Innovation Program & Design Criteria Updates</p>	<p>Supplier Diversity – Marketing to a Diverse Customer Base</p> <p>Obtain an understanding of requirements pertaining to supplier diversity for federally funded projects.</p> <p>MODERATOR: Erika A. Gomez, CH2M Hill, San Jose, CA</p> <p>SPEAKERS: Julie Miller, Jacobs Civil Inc., St. Louis, MO Dave Collins, PTI, Houston, TX Marc Shulte, RBF Consulting, San Diego, CA Supplier Diversity</p>	<p>ASCE Congressional Fellows discuss how to affect public policy, from their Congressional experiences.</p> <p>MODERATOR: Cindy Orndoff, Ph.D., University of Missouri, Columbia, MO</p> <p>SPEAKERS: Timothy Hess, Fairfax, VA Margaret Layne, Blacksburg, VA Yumei Wang, P.E., Oregon Department of Geology and Mineral Industries, Portland, OR</p>	<p>Risk Management and Acceptable Risk for Natural, Accidental, and Malicious Threats I</p> <p>This session and Part II to follow are devoted to presenting the findings published in a recent ASCE monograph on Acceptable Risk Processes, co-sponsored by the "Risk Committees" of CIRIS and TCLEE, or in a follow-up monograph now in preparation. The speakers are all contributors to the monographs, with a speaker panel discussion to conclude the session.</p> <p>MODERATORS: Craig Taylor Erik VanMarcke, CIRIS ExCom, Princeton University, Princeton, NJ</p>	<p>WTC Reconstruction Program</p> <p>Get a general overview of restoration of PATH Service, from planning to structural conditions, temporary arrangements, construction scheduling and staging activities, structural elements and support facilities, site logistics and coordination, design considerations for future permanent construction, foundation wall stabilization, overbuild considerations, and service enhancements incorporated into the project. Design of the Freedom Tower will also be covered.</p> <p>MODERATOR: Edward M. DePaola, P.E., Severud Associates / Downtown Design Partnership</p> <p>SPEAKERS: Edward M. DePaola, P.E., Severud Associates / Downtown Design Partnership The Permanent Downtown PATH Restoration Program John Kamocai, P.E. Restoration of PATH Service – Temporary Design of Freedom Tower</p>	<p>Welcome & Call to Order</p> <p>Patricia D. Galloway, P.E., PMP, F.ASCE ASCE President 2004</p> <p>OPENING WORKSHOP: Setting the Stage</p> <p>MODERATOR: William P. Henry, P.E., F.ASCE, ASCE President-elect 2004</p> <p>SPEAKERS: Alan L. Boeckmann, Chairman and Chief Executive Officer, Fluor Corporation, USA (invited) World Economic Forum – Business Principles That Counter Bribery Maarten de Jong, Director of Institutional Integrity, The World Bank Corruption and The World Bank Dr. Jorge Diaz Padilla, Executive Committee Member, Federacion Internacional de Ingenieros Consultores (FIDIC) FIDIC Business Integrity Management Nancy Zucker Boswell, Managing Director, Transparency International - USA Global Construction Industries Report</p> <p><i>For details, see page 11.</i></p>
<p>Sponsored by D. W. Kozera, Inc. and GeoServices Corporation</p>			<p>TECHNICAL TOUR: BWI AIRPORT'S EXPANSION PROJECT 12:30 PM - 4:30 PM See page 14. Sponsored by Parsons Transportation Group Inc.</p>	<p>TECHNICAL TOUR: TWO DAMS – LOCH RAVEN & DRUID LAKE 12:30 PM - 4:30 PM See page 14.</p>			

SPECIAL TIME:
1:00 PM - 3:00 PM

SPECIAL TIME:
1:30 PM - 3:00 PM

2:00 PM - 3:30 PM • ASCE Concurrent Professional / Technical Sessions IV

WORKFORCE

Hands-On Capacity Building in the Developing World – Engineers Without Borders – USA

Engineers of the 21st century are called to play a critical role in contributing to peace and security in an increasingly challenged world. There is a need for training a new generation of engineers who can offer sustainable and appropriate technology solutions to the endemic problems faced by developing communities worldwide – and the United States. Engineers Without Borders meets that need by working with disadvantaged communities to improve their quality of life through implementation of environmentally and economically sustainable engineering projects. Student participants solve real engineering problems in the field while providing clean water, sanitation, electricity, and other basic necessities, working in partnership with the people that need them. Hear all about Engineers Without Borders' unique and successful approach.

MODERATOR:
Bernard Amadei, University of Colorado at Boulder, Boulder, CO

SPEAKERS:
William A. Wallace, Wallace Futures Group, LLC, Steamboat Springs, CO
Incorporating Appropriate Technology and Service Learning into Engineering Education Programs

Bernard Amadei, University of Colorado at Boulder, Boulder, CO
Capacity Building for the Developing World – From Theory to Practice

Cathy Leslie and Mark Reiner, Tetra Tech RMC, Longmont, CO
The Role of Professional Engineers in Capacity Building through EWB-USA Projects

Panel of students who have participated in field projects
Engineers Without Borders – A Student Perspective

INSTITUTE DAYS – GEO

Geotechnical Engineering I

Hear case studies on the use of geosynthetic materials and global slope stability evaluation in geo-environmental applications and redevelopment projects.

MODERATOR:
Brian Zelenko, P.E., URS Corporation, Inc., Gaithersburg, MD

SPEAKERS:
Ghada Ellithy, Ph.D., P.E., Tenax Corporation, Baltimore, MD
Use of Geo-Fibers in Geo-Environmental Applications

Shana M. Opdyke, P.E., GeoSyntec Consultants, Inc., Columbia, MD
Designing a Vertical Landfill Expansion over Very Compressible Foundation Materials Using Prefabricated Vertical Drains (PVDs) and a Mechanically Stabilized Earth (MSE) Berm

Steve Kraemer, P.E., Haley & Aldrich, Inc., Boston, MA
Landfill Redevelopment: Turning Liability into Asset

H. James Lav, P.E., SCS Engineers, Columbia, MD
Landfill Expansion – Effect of Geosynthetic/Geosynthetic or Geosynthetic/Soil Interface Shear Strengths on Its Global Slope Stability



Sponsored by D. W. Kozera, Inc. and GeoServices Corporation



LEADERSHIP & MANAGEMENT

Embracing the Challenge of Supervision

There's a big difference between exercising the basic skills of supervision and being willing and able to practice the art of effective leadership. In this interactive session, you will explore how to be a good supervisor, the advantages of learning to be a strong leader, and the difference between administering and creating. Participants will discuss the attributes of supervisors and leaders, debunk the five leadership myths, review the principles of effective leadership, and discover the basic elements of successful supervision. Our facilitator conducted two sessions at the 2002 Annual Conference that were well attended and very well received.

PRESENTER:
Jill McCrory, Leadership Outfitters, Kensington, MD

Crossing the Bridge: From Student to Professional Engineer

Learn from leaders of student-based organizations initiatives taken to ensure successful transitions from student to engineering professional.

MODERATOR:
Marc C. Shulte, P.E., RBF Consulting, San Deigo, CA

SPEAKERS:
Michelle Lezama, National Society of Black Engineers, Alexandria, VA
Betty Shanahan, Society of Woman Engineers, Chicago, IL
Teresa Gomez, American Indian Science & Engineering Society, Albuquerque, NM

TECHNICAL SESSIONS – SECURITY/MANMADE MITIGATION, RESPONSE, RECOVERY

Risk Management and Acceptable Risk for Natural, Accidental, and Malicious Threats II

This session and Part I, which precedes it, are devoted to presenting the findings published in a recent ASCE monograph on Acceptable Risk Processes, co-sponsored by the "Risk Committees" of CIRIS and TCLEE, or in a follow-up monograph now in preparation. The speakers are all contributors to the monographs, with a speaker panel discussion to conclude the session.

MODERATORS:
Craig Taylor

Erik VanMarcke, CIRIS ExCom, Princeton University, Princeton, NJ



CE06 TECHNICAL TOUR: JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LABORATORY
3:35 PM - 5:45 PM
See page 39.

HISTORY & HERITAGE

Transportation

Learn more about the genius of regional Civil Engineering evident in transportation arteries constructed – and some envisioned but never constructed – to make Baltimore a merchant power more than a century ago.

MODERATOR:
Bernie Dennis

SPEAKERS:
Robert Kapsch, Ph.D., National Park Service, Potomac MD
The Maryland Cross-Cut Canal: The Anatomy of Early Nineteenth Century Engineering Feasibility Studies

Robert Williams, Maryland Transit Administration, Baltimore, MD
Northern Central Railroad's Calvert Street Station, Baltimore, 1850

Matt Fenton, Maryland Transit Administration, Baltimore, MD
The Baltimore and Ohio Railroad's Washington Branch and Construction of the Thomas Viaduct, 1835

J. Lawrence Lee, Ph.D., P.E., National Park Service, HABS/HAER Division, Washington, DC
The Baltimore Belt Railroad and Its Howard Street Tunnel

INSTITUTE DAYS – SEI

WTC Collapse Investigation by NIST – Part 1

Gain in-depth knowledge of the structural response to the impact of the airliners and aftermath from those who led the investigations.

MODERATOR:
Shyam Sunder, Ph.D., NIST, Gaithersburg, MD

SPEAKERS:
Shyam Sunder, Ph.D., NIST, Gaithersburg, MD
Overview of NIST Investigation

Fahim Sadek, Ph.D., NIST, Gaithersburg, MD
Baseline Structural Performance and Aircraft Impact Damage Analysis



GLOBAL STANDARDS OF PRACTICE

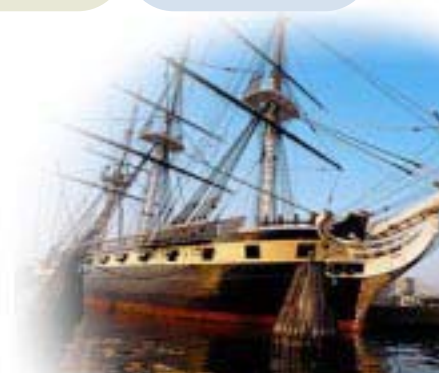
OPENING WORKSHOP: The Cost of Corruption on Infrastructure Development

MODERATOR:
Dr. Felipe Ochoa, Panamerican Federation of Consultants (FEPAC) (invited)

SPEAKERS:
Daniel Kaufmann, Director, Global Governance, World Bank Institute
Global Economic Perspective and Costs and Main Lessons Learned

Ching-Peng Shen, President, The Chinese Institute of Engineers, Taiwan (invited)
Asia Perspective
Rafik Meghji, President, Institute of Engineers Tanzania, Tanzania
Africa Perspective

For details, see page 11.





THURSDAY, OCTOBER 21, 2004

4:00 PM - 5:30 PM • ASCE Concurrent Professional / Technical Sessions V

SPECIAL TIME:
3:30 PM - 5:00 PM

**INSTITUTE DAYS –
GEO**
**Geotechnical
Engineering II**

Hear Case Studies as lessons learned from recent geotechnical projects.

MODERATOR:
H. James Law, P.E., SCS Engineers, Columbia, MD

SPEAKERS:
Mark McNeilly, P.E., Golder Associates, Inc., Newark, NJ
Restoring Downtown Path Service – Exchange Place Improvement Project

Robert Isenberg, P.E., CPG, SCS Engineers, Reston, VA
Geotechnical Issues Related to Environmental Concerns Involving Rehabilitation & Closure of the Hiriya Landfill, Tel Aviv, Israel

James G. Collin, Ph.D., P.E., The Collin Group, Ltd., Bethesda, MD
Design Issues Associated with Column-Supported Embankments and Load-Transfer Platforms

John Boschuk, P.E., JLT Laboratories, Inc., Canonsburg, PA
Designed to Fail – Veneer Cover Slopes

SPECIAL TIME:
5:30 PM - 6:30 PM

**Karl Terzaghi Lecture:
Pile Behavior –
Consequences of
Natural & Construction
Imperfections**

SPEAKER:
Professor Harry Poulos, Senior Principal, Coffey Geosciences; Emeritus Professor Civil Engineering, Sydney University, Sydney, Australia



For details, see page 12.

Sponsored by D. W. Kozera, Inc.
& GeoServices Corporation

WORKFORCE
**Impact of the BOK on
Civil Engineering
Curriculum Design**

The focus of this session is the impact of the recently released "Civil Engineering Body of Knowledge for the 21st Century" on the development and redevelopment of Civil Engineering curricula and how achievement of the body of knowledge can be assessed.

MODERATOR:
James K. Nelson,
Western Michigan University,
Kalamazoo, MI

SPEAKERS:
J.P. Mohsen & Mark French,
University of Louisville,
Louisville, KY
The CE BOK – Building on 30 Years of Proven Success

Kevin G. Sutterer & Michael A. Robinson, Rose-Hulman Institute of Technology, Terre Haute, IN
Some Perspectives of Predominately Undergraduate Institutes on the BOK

Marlee Walton & Max Porter, Iowa State University, Ames, IA
Impact of the BOK on Programs at Research Universities

J. K. Nelson, O. Abudayyeh & E. Tsang, Western Michigan University, Kalamazoo, MI & Thomas J. Siller, Colorado State University, Fort Collins, CO
The BOK and Program Assessment

**LEADERSHIP &
MANAGEMENT**
**Exploring Creativity
for Both Right and
Left Brainers**

You can conquer the challenge of creativity and innovation! With the right tools, anyone can increase their personal creativity quotient. Break through the creativity barrier in this hands-on session by exploring how to spark creative thinking; discover how to build a creative environment within any organization; and practice creative brainstorming techniques.

PRESENTER:
Jill McCrory, Leadership Outfitters, Inc., Kensington, MD

Career Transitions

Here are the key factors that you should consider before making career transition decisions, plus some resources available for facilitating such transitions. Our panelists represent leaders on various career paths, including academia, private practice, public service, and the military.

MODERATOR:
Shari Tavaf Adams, San Francisco Bay Area Rapid Transit District, Oakland, CA

PANELISTS:
Barbara Proft, URS, Denver, CO

Joe Manous, US Military Academy, West Point, NY

Lisa Nungesser, Parsons Brinckerhoff Quade & Douglas, Inc., Baltimore, MD

**TECHNICAL SESSION –
SECURITY/MANMADE
MITIGATION,
RESPONSE, RECOVERY**
**Projects Related
to FRPs**

Three papers will be presented that are devoted to Fiber-Reinforced Polymer Composites (FRP), used for new construction and rehabilitation of bridges.

MODERATOR:
Srinivasa L. Iyer, CES, In
Engineering, Anaheim, CA

SPEAKERS:
Hota GangaRao, Ph.D.,
West Virginia University,
Morgantown, WV
FRP Composite Bridge Project in Frederick County, Maryland

Tom Wright, Bedford Reinforced Plastic Inc., Bedford, PA

Monroe County Bridge Project with FRP Composite Deck
Srinivasa L. Iyer, CES, In
Engineering, Anaheim, CA
Rehabilitation of Wood Truss Bridge Project in Douglas County, Washington State with FRP Deck

**HISTORY &
HERITAGE**
**Engineers & Their
Designs**

Probe the tales of those responsible for early engineering feats in the Baltimore area, including Wendell Bollman, John Greiner, Robert E. Lee, Benjamin Henry Latrobe, Sr., Benjamin Henry Latrobe, Jr., and the masterful 17th century surveyors of a hostile wilderness who set the boundaries for Maryland, Pennsylvania, and Delaware.

MODERATOR:
Bernie Dennis

SPEAKERS:
Matt Fenton, Maryland Transit Administration, Baltimore, MD
B&O: Incubator of Early Engineering Entrepreneurs

Keith Duerling, Maryland Transportation Authority, MD
Robert E. Lee – Early Works in Baltimore Ports

James Dilts, Baltimore, MD
The Latrobes – First Family of Engineering in Baltimore

Douglas Andrew, Jacobs Civil Inc., Baltimore, MD
The Mason Dixon Survey

**INSTITUTE DAYS –
SEI**
**WTC Collapse
Investigation by
NIST - Part 2**

Gain in-depth knowledge of the structural response to the impact of the airliners and aftermath from those who led the investigations.

MODERATOR:
Shyam Sunder, Ph.D., NIST,
Gaithersburg, MD

SPEAKERS:
John Gross, Ph.D., NIST,
Gaithersburg, MD
Structural Fire Response and Collapse Analysis

H.S. Lew, Ph.D., NIST,
Gaithersburg, MD
Analysis of Building and Fire Codes and Practices


**GLOBAL STANDARDS
OF PRACTICE**
**OPENING
WORKSHOP:
Existing Standards
of Practice**

MODERATOR:
Bob Crist, Chair, Task Committee on Global Standards for Professional Practice

SPEAKERS:
Jimmy H. Smith, President, National Institute for Engineering Ethics (NIEE)
The American Experience

ICE Representative TBD
European Standards

José Medem, Past President, World Federation of Engineering Organizations (WFEO)

Existing Global Standards
Bob Crist, Chair, Task Committee Global Standards for Professional Practice
Committee Report/Results of Review

SPECIAL TIME:
5:30 PM - 6:00 PM

CLOSING COMMENTS

**One-Page Draft Statement
Conclusion/Next Steps
Looking to Los Angeles**

MODERATOR:
William P. Henry, P.E., F.ASCE,
ASCE President-elect 2004

For details, see page 11.

4:00 PM - 5:30 PM • ASCE Foundation Estate & Financial Planning Seminar

See page 15 for more information.

Sponsored by ARCADIS



8:00 AM - 9:30 AM • ASCE Concurrent Professional / Technical Sessions VI

WORKFORCE	LEADERSHIP & MANAGEMENT	LEADERSHIP & MANAGEMENT	INSTITUTE DAYS – CI	SPECIAL TIME: 8:00 AM - 8:45 AM INSTITUTE DAYS – CI	INSTITUTE DAYS – EWRI	INSTITUTE DAYS – SEI
<p>Department Heads Forum: Faculty Licensing – Yes or No?</p> <p>Join us for this opportunity to discuss the Civil Engineering classroom of the future, focused on the issues of whether or not to require faculty to be licensed Professional Engineers.</p> <p>MODERATOR: Erjing Smith, University of Connecticut, Storrs, CT</p> <p>SPEAKERS: James Nelson, Western Michigan University, Kalamazoo, MI Results of Recent Survey of Heads William Schonberg, University of Missouri-Rolla, Rolla, MO Some Arguments Pro and Con</p> <p>PANELISTS: Chik Erzurumlu, Portland State University, Portland, OR George List, Rensselaer Polytechnic University, Troy, NY Jack Billingsly, Delaware Board of Professional Engineers</p>	<p>Financial Management for Engineering Managers</p> <p>Hear the latest views on earned-value analysis and activity-based costing.</p> <p>MODERATOR: Coy Veach, Freese and Nichols, Inc., Fort Worth, TX</p> <p>SPEAKERS: Lee Barco, P.E., PMP, BearingPoint, Norfolk, VA The ABC's of Activity Based Costing Coy Veach, Freese and Nichols, Inc., Fort Worth, TX Financial Management and Earned Value Analysis</p>	<p>Leadership during Your Midlife Crisis</p> <p>How do you provide leadership after the kids have gone and the dog dies? Are you having difficulty relating to the personal values of your younger staff? Does leadership by example no longer work? Are some of your fellow principals burned out and just putting in their time waiting for retirement?</p> <p>MODERATOR: H. Edmund Bergeron, P.E., H.E. Bergeron Engineers, P.A., North Conway, NH</p> <p>SPEAKERS: Frank Votapka, US Forest Service, Kootane National Forest, Libby, MT Leadership Succession Planning Gregg Ten-Eyk, P.E., Leonard Rice Engineers, Inc., Denver, CO A Time for Self-Reflection, a Personal Coach and Mentor James Colantonio, Coler & Colantonio Engineers, Inc., Norwell, MA An Employee Survey to Measure Job Satisfaction and Motivation</p>	<p>TRACK 1</p> <p>Downtown PATH Reconstruction</p> <p>Get a complete overview of the WTC site and Downtown Restoration Program, with discussion of the main structural and construction issues within the site (e.g., slurry wall support) and design of the Terminal Building and Station.</p> <p>MODERATOR: Mel Garber, Robert Silman Associates, PC, New York, NY</p> <p>SPEAKER: John Kolaya, Yonkers Contracting Company Yonkers, NY PATH Reconstruction</p>	<p>TRACK 2</p> <p>E-Projects: On Site Today</p> <p>Discover how project teams are using e-business services to reduce today's cost of doing business.</p> <p>MODERATOR: Bill East, Engineering Research and Development, USACE, Champaign, IL</p> <p>SPEAKER: Nancy Wilkie, US Department of State, Roslyn, VA E-Collaboration on US Embassy Designs</p>	<p>EWRI Wetlands Session I – Saving Coastal Louisiana Wetlands</p> <p>Coastal Louisiana is one of the world's most significant wetland areas. It has lost more than 900,000 acres since the 1930s. As recently as the 1970s, the loss rate for Louisiana's coastal wetlands was as high as 25,600 acres per year. This session will present challenges and options to protect and restore one of America's largest and most productive expanses of coastal wetlands. Discussion will focus on integrating ecological and engineering expertise to develop restoration alternatives in this region.</p> <p>MODERATOR: Kyle Schilling, EWRI GB</p> <p>SPEAKERS: Randy Hanchey, Assistant Secretary for Coastal Restoration, Louisiana Department of Natural Resources, Baton Rouge, LA & Robert Twilley, Director, Center for Ecology and Environmental Technology, Department of Biology, University of Louisiana, Lafayette, LA</p>	<p>Best of the Best from 2004 Structures Congress</p> <p>The Structural Engineering Institute has arranged for the three best presentations from its 2004 Structures Congress to roll into this single session. Each year, attendees of the Structures Congress vote on their favorite presentation of the Congress, the Public Relations Committee of SEI tallies the ballots, and the three top vote-getters join to present this exciting session, to bring you THE BEST OF THE BEST directly from the Structures Congress, which took place in Nashville in May 2004.</p> <p>MODERATOR: Jim Rossberg, P.E., Structural Engineering Institute, Reston, VA</p>
				<p>SPECIAL TIME: 8:45 AM - 9:30 AM</p> <p>E-Projects: Impact on Tomorrow</p> <p>Find out from industry leaders what's coming up in internet based project collaboration.</p> <p>MODERATOR: Bill East, Engineering Research and Development, USACE, Champaign, IL</p> <p>SPEAKERS: Jerry Laiserin, The Laiserin Letter, New York, NY E-Collaboration Today and Tomorrow Raj Veeramani, Ph.D., University of Wisconsin, E-Business Consortium, Madison, WI Impacts of E-Collaboration</p>		



**H&H TECHNICAL TOUR:
THOMAS VIADUCT, BOLLMAN TRUSS BRIDGE,
B&O RR MUSEUM**
8:30 AM - 12:30 PM
See page 21.
Sponsored by Century Engineering, Inc.



**TECHNICAL TOUR:
SEAGIRT MARINE TERMINAL**
12:30 PM - 4:00 PM
See page 25.
Sponsored by Moffatt & Nichol



**TECHNICAL TOUR:
TENAX PLANT**
12:30 PM - 3:30 PM
See page 25.



BALTIMORE CONVENTION CENTER • BALTIMORE, MARYLAND, USA



FRIDAY, OCTOBER 22, 2004

2:00 PM - 3:30 PM • ASCE Concurrent Professional / Technical Sessions VII

SPECIAL TIME: 2:00 PM - 2:45 PM
INSTITUTE DAYS – CI
TRACK 1

Na Kika Offshore Platform

Learn about the extraordinary Na Kika Offshore Platform, currently under construction, that will ultimately become the tallest structure attached to earth.

MODERATOR: Mel Garber, Robert Silman Associates, New York, NY

SPEAKER: William Luyties, Shell International Exploration and Production Inc., Houston, TX
Construction of the Na Kika Offshore Platform

SPECIAL TIME: 2:45 PM - 3:30 PM

B&O Railroad Renovation Project

Hear our panel discuss three challenging aspects of the Roundhouse Renovation Project. Within two days of its roof collapse in a snowstorm, the Roundhouse had engaged Whiting-Turner – working closely with the engineer, architect, and museum – to clean up debris, protect the balance of the collection, and stabilize the remaining structure. Century Engineering, the engineer-of-record, performed a structural analysis and reported on the cause of collapse. In addition to designing the replacement structure for the collapsed lower roof, it analyzed the upper roof that was not damaged and determined that it did not meet current codes and should be replaced. SMG Architects, experts in historical renovation and architecture, handled all architectural issues. They performed considerable research to ensure that new construction is true in its historic nature.

MODERATOR: Ray Crawford, Parsons Brinckerhoff, Herndon, VA

PANELISTS:

Gerry Hiller, The Whiting-Turner Contracting Co., Frederick, MD
Construction Challenges

Bill Rocky, Century Engineering, Inc., Towson, MD
Engineering Challenges

Walter Schamu, SMG Architects, Baltimore, MD
Architectural Challenges


SPECIAL TIME: 2:00 PM - 2:45 PM
INSTITUTE DAYS – CI
TRACK 2

Hot Topics in Site Safety

This is your opportunity to hear the latest initiatives for safety in the Civil Engineering workplace.

MODERATOR:

Bill Nash, P.E., McCarthy Building Co., St. Louis, MO

SPEAKERS:

Michael Toole, Ph.D., P.E., Bucknell University, Lewisburg, PA & Stew Burkhammer, OSHA, Washington, DC
OSHA-ASCE/CI Alliance

Mumtaz Usman, Ph.D., P.E., Wayne State University, Detroit, MI

Safety Programs for Engineering Firms

SPECIAL TIME: 2:45 PM - 3:30 PM

Hot Topics in Crane Safety

Today's advancements in crane safety devices will be on the platform for in-depth discussion.

MODERATOR: Matt Burkart, P.E., Aegis Corporation, Southampton, PA

SPEAKERS:

Michael Toole, Ph.D., P.E., Bucknell University, Lewisburg, PA
Design of Fall Arrest Systems

Harlan Fair, P.E., Fair & Associates, Hawthorne, NY
Crane Safety

INSTITUTE DAYS – SEI

NSF-Funded Research Activities in Structural Engineering

This session will highlight the various research activities funded/co-sponsored by the National Science Foundation, an independent federal agency charged with funding basic research in the United States for the past than 50 years. Hear about the role of NSF in promoting basic research into structures and structural performance over the years and into the future. The changing definitions of hazards will also be discussed.

MODERATOR:

P. Balaguru, Ph.D., National Science Foundation, Arlington, VA

SPEAKERS:

Steve McCabe, Ph.D., P.E., National Science Foundation, Arlington, VA
The Structural Engineering Research Program at NSF for Hazards Mitigation
Vilas Mujumdar, Ph.D., National Science Foundation, Arlington, VA
NEES – Next Generation of Earthquake Engineering Research


INSTITUTE DAYS – EWRI

EWRI Wetlands Session II – Aral Sea and CALFED Lessons Learned

Presenters will focus on the lessons learned from major wetland restoration projects (CALFED Bay Delta and Aral Sea) through the efforts of multi-disciplinary teams covering issues such as restoring a healthy ecology and sustainable water management for these regions. How much have we learned about how to organize, focus efforts and money, and apply technical and ecological expertise to effect restoration?

MODERATOR:

Representative of EWRI Watershed Council TBD

SPEAKERS:

Masood Ahmad, The World Bank, Lead Water Resources Specialist, Europe and Central Asia Region & TBD
Representative from California Bay Delta Authority


WORKFORCE

ABET Today and 2020

A panel of educators and practitioners who have been involved in the accreditation process during and since the transition to EC2000 will discuss whether the EC2000 process is producing better engineers and what the engineers of 2020 will be like if the accreditation process remains unchanged until then. There are many pressures on the educational and accreditation systems to lengthen educational requirements required for licensure and broaden ways to license or certify professionals. This panel will provide perspectives on how these pressures will affect engineering education and accreditation by 2020.

MODERATOR:

William Coulbourne, P.E., URS Corporation

PANELISTS:

David C. Martinelli, Ph.D., West Virginia University, Morgantown, WV
Richard Anderson, ABET President-Elect
Maurice Mow, Chair, ASCE Committee on Curriculum and Accreditation
Peter Carrato, ABET Evaluator

LEADERSHIP & MANAGEMENT

Management of Public Assets

Learn what Management of Public Assets can do for your agency. A panel of three public agency speakers will discuss their objectives in adopting asset management practices, their experiences implementing these practices, and challenges they have overcome along the way. Presenters represent a range of jurisdictions and agency size.

MODERATOR: John Hodgkins, Chair, ASCE Task Committee on Govt. Engineers, Yarmouth, ME

SPEAKERS: John Hodgkins, Chair, ASCE Task Committee on Govt. Engineers, Yarmouth, ME
What Is Asset Management?

Dan Dawood, P.E., Pennsylvania DOT, Harrisburg, PA
Life Cycle Cost/Benefit Cost Analysis Applications to Asset Management

Paul Reisner, City of Philadelphia Streets Department, Philadelphia, PA
GIS Applications to Asset Management

Capt. Jay Manik, P.E., US Coast Guard Office of Civil Engineering, Washington, DC
Shore Facilities Capital Asset Management

LEADERSHIP & MANAGEMENT

The Engineering Workforce: Transformed

This session will focus on changes brought to the engineering world in the last two decades, as more women have entered the general workforce. Discussion will entertain general acceptance, measurable accomplishments, and a look into the future for women in the engineering profession. Discussion will begin with a personal interpretation of the woman engineer on her journey through the college years and how she met the challenge.

MODERATOR: Erika E. Gomez, CH2M Hill, ASCE CDWCE, San Jose, CA

SPEAKERS:

Patricia D. Galloway, P.E., FASCE, PMP, The Nielsen-Wurster Group, Inc., Princeton, NJ; ASCE President 2004

Saw-Teen See, Leslie E. Robertson Associates, R.L.L.P., New York, NY

Maria C. Lehman, P.E., FASCE, Erie Co. Department of Public Works, Buffalo, NY

SPECIAL TIME:
4:00 PM - 4:45 PM

INSTITUTE DAYS – CI

TRACK 1

Renovation of Fallingwater

From word and picture, learn about the renovation of Frank Lloyd Wright's signature home "Fallingwater," located in Western Pennsylvania. The complete history of the property will be offered, from the original design and construction to the complex renovation techniques employed for its preservation.

MODERATOR:
Raymond Crawford, Parsons Brinckerhoff Construction Services, Herndon, VA

SPEAKER:
Mel Garber, Robert Silman Associates, New York, NY

SPECIAL TIME:
4:00 PM - 4:45 PM

INSTITUTE DAYS – CI

TRACK 2

Constructability Review I

Gather with us to discuss the development of a constructability state-of-practice report, hear industry professionals discuss constructability practices, and learn about a draft Guideline on Constructability

MODERATOR:
John Gambatese, Oregon State University, Corvallis, OR

SPEAKERS:
Susan Florian, Parsons Brinckerhoff, Washington DC
Iris Tommelein, University of California at Berkeley, Berkeley, CA

WORKFORCE

TC2K: The Preparation, The Presentation, and The Evaluation

Join us for a forum of presentations on TC2K experiences. During the criteria transition, there are still many questions concerning interpretation, specifics on implementation, and extent of evaluation. Educators and practitioners who have been through the new process have invaluable experiences to share. They include members from schools who have been visited, evaluators who have assessed schools using the new criteria, TAC representatives, and others who will contribute to the discussion and add recommendations to make this process successful.

MODERATOR:
Sonya L. Cooper, Ph.D., New Mexico State University, Las Cruces, NM

SPEAKERS:
TBA

LEADERSHIP & MANAGEMENT

Leveraging Technology to Improve Business Practices

There are many technology tools available to improve our business practices, but are they really helping us to be more efficient? This session explores these tools and case studies of how they can be used to improve efficiency and quality in our engineering and business practices. It will also explore new tools, and present case studies on integration of project management tools and computer-aided design and drafting tools in an enterprise environment.

MODERATOR:
Harry Farchmin, Camp Dresser & McKee, Inc., Milwaukee, WI

SPEAKER:
Harry Farchmin, Camp Dresser & McKee, Inc., Milwaukee, WI

Overview of Technology Integration in a Large Consulting Firm – A User's Perspective

SCOTT McClelland, P.E., CDM, Tampa, FL

Enterprise Integration of Project Management Tools

LEADERSHIP & MANAGEMENT

Getting to Win-Win with Your Stakeholders

As engineering professionals, we need to identify stakeholders and build consensus among the various interested parties in order to have a successful project. This session will show by example how to successfully involve the various stakeholders and be a leader of a project.

MODERATOR:
Ken Matsuoka, County of Ventura, Ventura, CA

SPEAKERS:
Susan Hann, PE, AICP, City of Palm Bay, Palm Bay, FL

Engaging Citizens for Positive Results!

Marcy Schwartz, CH2M Hill, Portland, OR

Building Interagency Partnerships to Streamline the Environmental Review Process

Cynthia Orndoff, Ph.D., University of Missouri, Columbia, MO

Stakeholder Interaction – Identifying and Valuing Issues

INSTITUTE DAYS – SEI

Structural Engineering in Mega-Projects

The many facets of mega-projects will be broached in this session for all who want to get an understanding of the big picture.

MODERATOR:
Sanj Malushte, Ph.D., Bechtel Corporation/Johns Hopkins University, Baltimore, MD

SPEAKERS:
Steve Wutrich, Bechtel Corporation, London, UK
Tacoma Narrows Caisson Anchoring

Mike Rafter, Baltimore-Washington International Airport Authority, Maryland Aviation Administration, BWI Airport, MD

BWI Airport Expansion Program

Peter Yin, S.E., Port of Los Angeles, CA

Container Wharf Design and Construction at West Coast Ports




INSTITUTE DAYS – EWRI

EWRI Wetlands Session III – Mesopotamian Marshes Dilemma

How to plan for restoration of the Mesopotamian Marshes, an area slightly larger than the Everglades, drained by Saddam Hussein in the 1990's. This session will discuss how much ecological restoration is possible along with restoration of the way of life of the hundreds of thousands of people displaced by this drainage project. The water needs of the Marshes related to availability in a regional/basin context will also be discussed.

MODERATOR:
Don Kisicki, Chief, International and Interagency Affairs, COE

SPEAKERS:
Jerry W. Webb, P.E., US Army Corps of Engineers, Principal Hydrologic and Hydraulic Engineer & Senior Advisor to the Ministry of Water Resources in Iraq, September 2003- March 2004
Nesreen Mustafa Seddeek Berwari, Iraq Interim Government Minister of Municipalities and Public Works




SPECIAL TIME:
4:45 PM - 5:30 PM

Rehabilitation of the Historic Going-to-the-Sun Road

The historic 52-mile Going-to-the-Sun Road in Glacier National Park, MT, started construction in 1921, opened in 1933, and now carries nearly a half-million cars in the four months it is open each year. While improvements and maintenance continued on the Road over the years, major rehabilitation is needed. An engineering study of this Civil Engineering landmark recommended rehabilitation concepts, cost estimates, and a design/construction schedule. The study considers the road's setting, historic, cultural, environmental, and regional economic significance. This presentation by the project manager will focus on this significance, the design/construction concepts recommended for rehabilitation, and current status of efforts.

MODERATOR:
Mel Garber, Robert Silman Associates, New York, NY

SPEAKER:
Joseph J. Kracum, P.E., Kracum Resources LLC, Chairman, CI Management Practices in Construction, Glenwood Springs, CO



SPECIAL TIME:
4:45 PM - 5:30 PM

Constructability Review II

Discussions continue from the prior session.

MODERATOR:
Jim Pocock, US Air Force Academy, CO

SPEAKERS:
Eul-Bum Lee, Institute of Transportation Studies, University of California at Berkeley, Berkeley, CA
Sarah Picker, California Department of Transportation, Oakland, CA



Charting the Future!



SATURDAY, OCTOBER 23, 2004

8:00 AM - 9:30 AM • ASCE Concurrent Professional / Technical Sessions IX

SPECIAL TIME: 8:00 AM - 10:00 AM

WORKFORCE

Lessons Learned – Diversity Best Practices

This session will be a panel discussion on the best practices of diversity initiatives in other engineer firms. Come ready to listen and learn how you can build diversity within your own organization.

MODERATOR: Dwayne T. James, Jacobs Civil Inc., St. Louis, MO

SPEAKERS:
Mike Kennedy, CH2M Hill, Greenwood Village, CO
Internal Diversity

Gabriele Mack, Jacobs Civil Inc., St. Louis, MO
Diversity with Subconsultants

Wendy Lopez, The LOPEZGROUP, Dallas, TX
Colorblind Techniques to Hiring

LEADERSHIP & MANAGEMENT

Knowledge Management from the Beginning and End of the Civil Engineer's Career

The first few weeks in an organization are critical to a new hire's ultimate success or failure. On the other hand, many Civil Engineers are retiring after spending most of their careers with one organization. This session will impart information to ease new hires into their new environment successfully, and urge measures to save knowledge and gain experience from retirees.

MODERATOR: Heather Audet, The Robert B. Balter Company; ASCE Committee on Employment of Civil Engineers, Owings Mills, MD

SPEAKERS:
Carol Barbary, CH2M Hill, Northeast Region, Herndon, VA
Mitigation of Knowledge Drain from Retirees

Mayo Lucas, Whitney, Bailey, Cox & Magnani, LLC, Baltimore, MD

Training Orientation for Civil Engineers

TECHNICAL SESSIONS – SUSTAINABILITY IN THE US

Innovation in Sustainable Engineering

Hear the latest examples of innovation in sustainability in planning, design, and construction, including discussions of sustainability challenges and applications for major environmental improvement projects. Examples include sustainable highways, Florida Everglades improvements, and life-cycle environmental performance measurement of building products.

MODERATOR: Albert A. Grant, F.ASCE, Potomac, MD
SPEAKERS:

Hal Kassoff, Parsons Brinckerhoff, Washington, DC
Sustainable Highways – Oxymoron or Opportunity?
Stuart J. Appelbaum, US Army Corps of Engineers, Jacksonville District, Jacksonville, FL
Case Study on Florida Everglades Project

Bobbie Lippiatt, National Institute of Standards and Technology (NIST), Gaithersburg, MD
Building for Environmental and Economic Sustainability (BEES 3.0)

INSTITUTE DAYS – SEI

Hazard Risk Reduction Activities of FEMA-DHS

This session provides an overview of FEMA's contributions and ongoing leadership in the structural engineering profession.

MODERATOR: Edward Laatsch, FEMA, Washington, DC

SPEAKERS:
Michael Mahoney, Washington, DC
FEMA's Earthquake Risk Reduction Projects
Paul Tertell, FEMA, Washington, DC
FEMA's Post Disaster Building Performance Assessment Project

Mila Kennett, FEMA, Washington, DC
FEMA's Risk Management Series to Minimize the Effects of Potential Terrorist Attacks on Commercial Buildings

John Ingargiola, FEMA, Washington, DC
FEMA's Building Code Development Activities



INSTITUTE DAYS – SEI

Alternative Delivery Systems for Mega-Projects

The infrastructure needs of today's society are often met through large, complex undertakings. As public owners decide their strategies for these mega-projects, many are adopting non-traditional procurement methods or organizational forms. During this session, leaders from three local mega-projects describe the value of the alternative delivery systems they are using.

MODERATOR: Larry Anderson, P.E., Alexandria, VA

SPEAKERS:
Russell L. Fuhrman, P.E., Potomac Crossing Consultants, Alexandria, VA
Value Added by a General Engineering Consultant at the Woodrow Wilson Bridge Project

Paul J. Wiedefeld, P.E., Executive Director, Maryland Aviation Administration
Use of Program/Construction Managers for Baltimore-Washington International Airport Expansion

Neil J. Pedersen, P.E., Administrator, Maryland State Highway Administration

Adopting a Design-Build Delivery System for the Maryland InterCounty Connector



2:00 PM - 3:30 PM • ASCE Concurrent Professional / Technical Sessions X

WORKFORCE

Communicating in a Global Market: A Cultural Diversity Simulation Exercise

This workshop will examine communication differences through a fun-filled Bafa Bafa simulation exercise that should be a rewarding educational-cultural experience.

MODERATOR:
Kim Parker Brown, NAVFAC HQ, Washington, DC

FACILITATORS:
Kristina Swallow, Poggemeyer Design Group, Inc., Las Vegas, NV
Sue Pederson-Stahl, TEI Engineers and Planners, Lake Mary, FL
Vilas S. Mujumdar, Ph.D., National Science Foundation, Arlington, VA

HISTORY & HERITAGE

Water Resources

Lively discussion of past, present, and future approaches to the City of Baltimore's water supply efforts will be offered.

MODERATOR: Matt Fenton, Maryland Transit Administration, Baltimore, MD

SPEAKERS:
Nancy Fenton, Baltimore Public Works Museum, Lutherville, MD
Baltimore's Water Supply, 1787-1854

Robert J. Andryszak, P.E. & Theresa A. Bruton, Rummel, Klepper & Kahl, LLP, Baltimore, MD; Nicholas H. Frankos, Plant Superintendent, Back River Wastewater Treatment Plant, Baltimore, MD

Anaerobic Sludge Digestion at Baltimore's Back River Wastewater Treatment Plant

Yingwei Ni, P.E., Maryland State Highway Administration, Baltimore, MD

Druid Lake Dam – 1871

INSTITUTE DAYS – SEI

Seismic Safety of Federal Buildings

Take part in this session to hear short presentations on agency programs to evaluate and mitigate hazards in owned or leased federal buildings.

MODERATOR: TBA

SPEAKERS:
Stephen Cauffman, NIST, Gaithersburg, MD
Interagency Committee on Seismic Safety in Construction (ICSSC): History, Accomplishments, Impact

John Baals (tentative), Washington, DC
Seismic Safety of Federal Lifeline Systems

H.S. Lew, Gaithersburg, MD
Development of New NEHRP Handbook of Techniques for the Seismic Rehabilitation of Existing Buildings

PANELISTS TBA:

Representatives of General Services Administration, US Department of Defense, US Department of Energy, Veterans Administration, US Department of the Interior
Seismic Safety in Federal Buildings: Agency Perspectives



TECHNICAL SESSIONS – INTERNATIONAL SUSTAINABILITY

International Sustainability

Explore sustainability on a global scale from the challenges of megacities to small hands-on actions of volunteers working in the developing world. Engineers are making a difference!

MODERATOR: Lt. Gen. Henry J. "Hank" Hatch, P.E., F.ASCE, US Army (ret.), Oakton, VA

SPEAKERS:
George Bugliarello, Ph.D., Polytechnic University, Brooklyn, NY
Megacities and the Challenge of their Sustainability with Rapid Growth Amidst Poverty and Unsustainable Past Decisions

Bernard Amadei, University of Colorado, Boulder, CO
Hands-On Voluntary Engineering in the Developing World – Engineers Without Borders