

May 2010 Volume 56, Number 8

Visit ASCE-NCS on the web: http://asce-ncs.org

Panel Discussion: Innovation and Grand Challenges for Engineering: Engineering the Tools of Scientific Discovery

The panel discussion title is a reference to the publication by the National Academy of Engineering. Check out this link to the Grand Challenges for Engineering, www.engineeringchallenges.org. This meeting will address the themes that are significant to the profession—innovation in engineering, competitiveness, and job creation. Specifically, we will be addressing the following:

In the popular mind, scientists and engineers have distinct job descriptions. Scientists explore, experiment, and discover: engineers create, design, and build. But, in truth, the distinction is blurry and engineers participate in the scientific process of discovery in many ways. Grand experiments and missions of exploration always need engineering expertise to design the tools, instruments, and systems that make it possible to acquire new knowledge about the physical and biological worlds. -from "Grand Challenges for Engineering," National Academy of Engineering,

www.engineeringchallenges.org

Invited Speakers

Dr. Jayfus Doswell, CEO, Juxtopia LLC (Baltimore, MD), Biology Adjunct Professor, Sojouner Douglass College. Subject: Small Business Innovative Research (SBIR) Grants

Johann Dobak, P.E., LEED AP, Alpha Corporation (Dulles, VA), Director, American Consulting Engineers Council (ACEC), Metro Washington DC. Subject: Innovation in Civil Engineering

Kendra Parlock, Global Marketing Manager, Grace Davison Biofuel Technologies (Columbia, MD). Subject: Managing Innovation and Technology in the Workplace



The location for the event is the Hyatt Regency Crystal City, located at 2799 Jefferson Davis Highway, Arlington, VA (ph: 703-418-1234). No free parking is available at the hotel for the meeting, but parking is offered at the hotel and free parking may be available on the street. Parking is also available at the Crystal City shopping mall and is only a short walk from the hotel. Take the Blue or Yellow line to the Crystal City Station. Take the escalators from the station up to the street. Once you are at the top of the escalators, turn to the left toward the brown Metro sign. The Hyatt shuttles stop at the corner (look for the White/Red Shuttle sign) every 1/2 hour. For pick-up at the Metro, you may call the hotel directly at 703-418-1234.

President's Corner

We had another outstanding Annual Awards Banquet where thirty members became life members. A total of eleven students received scholarships, five students received outstanding graduating senior awards, and seventy two graduating Civil Engineering students were recognized. At the annual banquet, we had one meritorious awardee, two community service awardees, one special recognition awardee, and the project of the year award.

This exceptional event, as well as another successful year, could not have been accomplished without teamwork and I thank all who contributed to our success. First, the NCS Board of Director. Starting with vice president **Marc Leeman** who chaired the Awards Banquet Committee, planned and organized all efforts regarding the awards banquet. I want to thank Dean Westman, past president, for an outstanding job in planning and organizing the October section meeting at the Capitol Visitor Center. Registration for the meeting had to be closed after 5 days of sending out the registration E-mail due to reaching capacity. Dean also organized many of the outreach events, including cub scout Day at the National Building Museum. I want to thank Fernando Pons for all his help with the March Yearly Sustainability Awards and Lecture, and for heading the Awards Nomination Committee for the Banquet. Outside of our annual continued on page 10

ASCE-NCS's Annual Banquet (April Section Meeting) Celebrates Leaders and Projects

Blaine D. Leonard, P.E., D. GE, F.ASCE, ASCE's National President Delivers Inspiring Keynote at the Banquet

April 20, 2010: The Hyatt Regency Crystal City served as a majestic backdrop for the National Capital Section's annual banquet. This annual event gives ASCE-NCS an opportunity to recognize and celebrate the achievements of scholarship winners, graduating ASCE student member seniors, volunteers, local

projects, and new ASCE Life Members. Registration and social hour started promptly at 6pm, dinner was served at 7pm and the event ended at 9pm.

We were honored to have Blaine D. Leonard, P.E., D. GE, F.ASCE, President of the American Society of Civil



Engineers (ASCE) deliver an inspiring keynote address. Mr. Leonard is the Research Program Manager with the Utah Department of Transportation in Salt Lake City, where he is responsible for balancing research needs and resources within the Department, and for managing a wide variety of research projects. Prior to

joining the Department, Blaine spent 20 years as a consulting civil engineer in Utah. He holds Bachelors and Masters Degrees from the University of Utah. He has served ASCE in numerous capacities at the national and local level, and is currently the Chair of the Task Committee to Achieve the Vision for Civil Engineering in 2025.

As we map out a strategy for the change necessary for our success, we envision transformation in areas of education and re-education, research and innovation, public policy and responsibility, and leadership. Having this shared understanding of how we will get to the future will allow us to unite in achieving the vision of who we will be and in determining our own destiny.

Download the two books: 1. Vision for Civil Engineering in 2025, and 2. Achieving the Vision for Civil Engineering in 2025: A Roadmap for the Profession from this page on the Society's website.

A Special Thank You to Our 2010 Banquet Donors



Newsletter

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September 2010 Issue Deadline: August 15, 2010

To Submit Articles: laurence.sauter@ferc.gov

Address Changes:

Call 1-800-548-ASCE, email <u>member@asce.org</u>, go to <u>http://www.asce.org</u>, or write: ASCE – Membership, 1801 Alexander Bell Drive, Reston, VA 20191. Remember to include your membership number.

Summer Planning Sessions

We will begin our summer planning in June and July by holding a number of sessions. One of the June sessions will focus on hearing from the faculty advisors. The other June session will focus on a 5-year planning horizon. As for the July session, it will consist of planning the 2010–2011 activities. To help with our planning sessions, we want to hear from you what is working well, and what needs to be improved. So, please, drop us an E-mail and let us know your thoughts. You can E-mail me at <u>afiff@bv.com</u>. We will also be launching our efforts towards the Infrastructure Report Card. You will be hearing more about this in the coming month. But if this is something that you are interested in being part of, please also drop me an E-mail.

Girl Scout Day at the National Building Museum

Saturday April 17th was Girl Scout Day at the National Building Museum. ASCE had one of four stations that the girls could explore throughout their time at the museum. The ASCE activity involved building and load testing a bridge made out of drinking straws. There were instructions to follow, but creative license was given to those wanting to develop their own bridges. The best part of the whole process was the wow factor of loading the bridges to failure.

The Girl Scouts had a great time, especially when our wonderful volunteers were around. A big thanks to our volunteers! Krystal Brum brought a group of volunteers from GW and Cimoya Collins brought volunteers from Howard University. The volunteers helped distribute materials, encourage and challenge the Girl Scouts and clean up.

All in all, it was a very successful day. Keep your eye out for other ways you can get involved with outreach through ASCE!



Girl Scouts building and load testing their drinking straw bridge.

2010 Life Members

Several NCS members have been invited to receive Life Member certificates at the 2010 Annual Awards Banquet. To achieve this status, a member must have reached their 65th birthday, have paid dues in any membership grade that when added to their age equals or exceeds 95, and have paid dues for at least 20 years. Life Members are exempt from dues and only pay a service fee to receive *ASCE News* and *Civil Engineering* magazine. The NCS offers its sincere congratulations to this year's Life Members.

Curtis Besse Barrett, M.ASCE Paul L. Bishop, Jr., Ph.D., P.E., F.ASCE Richard Cramond, Jr., Ph.D., P.E., F.ASCE Nilesh Chandrakant Chokshi, Ph.D., M.ASCE Donald Roman Dressler, P.E., M.ASCE Edward R. Fleischman, M.ASCE Anthony Robert Giancola, P.E., M.ASCE Robert W. Hanchett, P.E., M.ASCE Wendell P. Holmes III, P.E., M.ASCE Jau Scott Jin, P.E., M.ASCE Michael Harris Kleinrock, M.ASCE Mohammad A. Latif, P.E., M.ASCE Shiva K. Pant, M.ASCE Maria E. Pantin, Aff.M.ASCE Andrew E. Ramisch, P.E., PTOE, M.ASCE

Karsten H. Rothenberg, P.E., M.ASCE Richard Albert Schmalz, Ph.D., P.E., F.ASCE Nanda K. Sen, P.E., M.ASCE Michael W. Shelton, P.E., F.ASCE Mark S. Siegler, P.E., Aff.M.ASCE Forrest Ronald Sprester, P.E., R.L.S., BCEE, F.ASCE Fred E. Springer, M.ASCE Richard C. Steele, Aff.M.ASCE Roland C. Steiner, P.E., M.ASCE Mehmet A. Tayfun, M.ASCE Philip L. Thompson, P.E., M.ASCE Richard A. Unger, Aff.M.ASCE David Edwin Weatherby, M.ASCE Lloyd W. Young, P.E., F.ASCE Mary-Ann Zimmerman, P.E., M.ASCE

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2010 ASCE CYM Employer Recognition Nomination For Exemplary Support of Young Engineer Involvement in ASCE Activities



Introduction: Young engineer enthusiasm, meaningful involvement, and growth are the keys to ASCE's future. As a means of fostering individual Younger Member participation in Society activities, the ASCE Committee on Younger Members (CYM) has developed a program to help Sections and Branches recognize those employers who encourage their young engineers to get involved in ASCE activities. Special recognition will go to those organizations that exhibit exemplary support evidenced by efforts such as:

- Providing a model for involvement through company-wide participation in local, regional and national ASCE activities
- Encouraging and supporting Younger Members to attend ASCE meetings and seminars
- Encouraging Younger Members to prepare articles for publication in

2010 Annual ACE Mentor Program

Representatives of ASCE-NCS attended the 2010 Annual ACE Mentor Program of the Greater Washington Metropolitan Area Scholarship Awards Breakfast on Wednesday April 21st held in the Historic Terminal A Lobby of Ronald Reagan Washington National Airport. The keynote speaker was the **Commissioner of Public Buildings** for GSA, Robert A. Peck. ACE DC is a partnership of architects, construction managers, engineers, designers, professional societies and organizations, high schools and universities. Through this partnership, ACE provides mentors who guide student teams from DC, northern VA, and MD public schools as they explore educational and career opportunities in architecture, construction, and engineering. ASCE National's Leslie Payne is an active board member of ACE DC and ASCE-NCS is looking to become involved in this most worthy partnership to inspire and mentor budding young students. For more information on ACE-DC go to http://www. acementor.org/592 and if interested in participating on behalf of ASCE-NCS contact Stephen Powers at stephen@ designpowers.com to allow for an appropriate headcount.

ASCE professional and technical journals

 Assisting in the payment of local and national dues

Guidelines:

The program will operate as follows:

- CYM will review nominations at its fall meeting and select organizations for recognition. Additional credit will not be awarded for any materials submitted in addition to the provided form.
- 2. Incomplete nomination forms will be disqualified.
- 3. For those organizations selected, CYM will:
 - a. Publish a list of winning organizations in the *Younger Member Newsletter*
 - b. Submit a list of winning organizations for publication in *Civil Engineering* magazine or *ASCE News.*
 - c. Encourage Sections/Branches to provide winning organizations with local recognition
 - d. Notify nominators of winning organizations.
 - e. Send a certificate to the Section or Branch President for local presentation.

- 4. CYM will award a **Superior** Employer Recognition Award
 - to a one public entity nominee and one private entity nominee that demonstrated exemplary support of Young Engineers in their organizations during the 2009 calendar year. This award was created to recognize employers who acknowledge that young engineers are today's leaders in the profession and set goals for their personal development.
- 5. Your organization may be nominated for the award each year. If your organization is a previous winner of the award, the following year's nominator must be a different Younger Member in the firm. The nominator must be an ASCE Affiliate Member, Associate Member, or Member in good standing.
- 6. Separate nomination forms may be submitted for individual office locations of an organization with multiple offices.

The nomination form can be found at: http://www.asce.org/uploaded-Files/Young_Member_Groups_-_ New/2010%20ASCE%20CYM%20 Employer%20Recognition%20 Application.doc ■

2009-2010 ASCE-NCS Scholarship Awards

This year the National Capital Section awarded \$11,000 in scholarships.

Name	School	Award	Scholarship
Lawrence Comiskey	CUA	\$500	
Nick Perrotta	CUA	\$1000	
Christopher Reymann	CUA	\$1000	
Megan Salame	GMU	\$500	
Michele Lockhart	GWU	\$1500	Williams Memorial
Abraham Todd	GWU	\$1500	Hathaway Memorial
Michael Zarrella	GWU	\$1000	
Amy Moinet	HU	\$1000	Harland Memorial
Byeong Moon	HU	\$1000	
Philip Utubor	HU	\$1500	Hummel Memorial
Mahboob Yonis	UDC	\$500	

Earth Day 40th Anniversary and EPA Design Expo on the National Mall

ASCE World Headquarters staffers and ASCE-NCS members helped the US Environmental Protection Agency celebrate the 40th Anniversary of Earth Day and the 40th Anniversary of the EPA at the EPA Design Expo on the National Mall Saturday April 24th and Sunday April 25th.

ASCE members manned an information booth and held a Water Filter Activity as part of the Earth Day event. Participating younger people built model water treatment plant filters out of plastic cones, cotton, paper, sand and gravel. Muddy water was passed through the filters to test who create the cleanest water. Special Thanks to ASCE Headquarters staffers Leslie Payne and Katerina Lachinova for organizing, assembling and breaking down the event. Thanks to ASCE staffers Erin Santiago, Sara Hagan, and Autumn Richtor for participating.

Thanks to all volunteers, including Sarah Hagan, Kevin Porter, Doreen Szalazar, Amanda Santiago, Nicholas Santiago, Dana Bres, Ali Anvari, Elizabeth Hunnewell, Jennifer Langoski, Steve Paska, Pamela Bingham, Heather, Banniger, Courtney Blann, Dave Florek, Abe Todd, K. Blair Wisdom, Michael Zarrella, Abdulkadir Hersi, Maryam Dadabhoy and Dean Westman.





Outstanding Civil Engineering Project Award Corbalis Water Treatment Plant Stage III Expansion, Herndon, Virginia

Over the last decade, Fairfax Water has been undertaking a significant capital investment to increase its water treatment capacity to meet growing customer demands. Fairfax Water provides drinking water on a retail and wholesale basis to over 1.5 million Northern Virginians; one out of every five Virginians receiving public water. By expanding the Corbalis Water Treatment Plant (WTP), sourced by the Potomac River, from 150 million gallons per day (mgd) to 225 mgd, Fairfax Water will be able to meet future customer demands.

The Corbalis WTP produces outstanding water quality with treatment that includes coagulation, flocculation, sedimentation, settled water ozonation, dual media filtration (including granular activated carbon), free chlorine disinfection and ammonia addition to provide a combined chlorine residual in the distribution system. The expansion of the Corbalis WTP is the second expansion in capacity since the plant's original construction in the early 1980's. The Stage III expansion increased the plant's capacity by 75 mgd and included several major process improvements, such as improvements to the ozone generation and diffusion system, conversion from gaseous chlorine to liquid sodium hypochlorite disinfection, installation of plate settlers for treatment of recycled plant process water, installation of an underground dedicated power feed to increase electrical reliability, and a new



plant-wide computer based process control system. Prior to the development of the final design, Fairfax Water, with its consulting engineer, Camp Dresser & McKee (CDM) conducted detailed water quality and treatability evaluations. An ozone system upgrade analysis was performed to evaluate the use of ozone for primary disinfection (to meet LT2 regulations). This analysis included bench-scale studies under different water quality conditions to determine ozone demand and decay characteristics for settled water ozonation. This information was used to develop a new approach for optimizing the design of ozone contactors to meet EPA CT-product values for Giardia and Cryptosporidium inactivation. **Computation Fluid Dynamic analysis** was also performed on the existing ozone contactors, which resulted in cost-effective baffle modifications to increase ozone transfer within the contactors. The design of the Stage III facilities was developed to seamlessly

integrate into the existing plant while maintaining an uninterrupted drinking water supply to Fairfax Water's customers. A competitive construction bid in the amount of \$160,079,000 resulted in a contract award to Pizzagalli Construction Company headquartered in Burlington Vermont.

Major systems included in the Stage III project included:

- Expansion of the raw water control chamber, including automated raw water flow control, chemical addition and mixing
- 2. A new plant-wide chemical delivery systems which included using the existing centralized bulk storage with new loop piping system to feed pumps at each application point.
- 3. A complete conversion from gaseous chlorine to bulk delivery liquid sodium hypochlorite.
- Flocculation-sedimentation basins with 75-mgd capacity, including a new ozone contractor
- 5. Expansion of the ozone system with two additional 1,500-ppd generators and an additional 26,000 gallons of LOX storage
- 6. Two 60-mgd raw water pumps
- 7. Two 33-mgd finished water pumps
- A new 75-mgd filtration building housing eight dual-media (GAC/ sand) filters
- 9. A new 14 million-gallon underground clearwell and modification *continued on page 6*

Outstanding Civil Engineering Project Award

continued from page 5

to two existing clearwells to provide 28 million gallons of on-site finished water storage.

- 10. A new recycle treatment system, which included a new plate settler system, two decant basins and detention basin.
- Two new solids dewatering belt filter presses with a new polymer feed system
- 12. Miscellaneous renovations to existing facilities to accommodate the expanded conveyance, storage, and treatment systems at the Corbalis WTP.
- 13. Complete replacement of the existing UNIX-based distributed

control unit panels, SCADA servers, operator workstations, and Human Machine Interface (HMI) software with new, open-



Aerial view of the Pond C improvements at the Corbalis Water Treatment Plant.

architecture, process control system components.

14. Expansion and upgrade of electrical power and mechanical systems.

A partnered effort between Fairfax Water, the design engineer (CDM) and the contractor (Pizzagalli Construction Company), has led to the successful operation of the largest water treatment plant in the Commonwealth of Virginia. Major facilities and capacity were delivered to Fairfax Water on schedule with a total construction cost less than 1% above the original construction contract value.

Community Service Award

The Community Service Award recognizes outstanding contributions by an individual toward community improvement in the Washington metropolitan area. In granting the award, the NCS Board of Directors determines that the awardee must have made, in the opinion of community leaders, an outstanding, selfless contribution of time and talent toward a civil engineering related activity that has furthered the welfare of the community within a three-year period preceding the award. An appropriate engraved plaque is given, naming the individual and accomplishment.

Albert A. Grant, P.E., F.ASCE

Albert "Al" Grant is a distinguished civil engineer in the Washington, DC

area and has served the community both locally and nationally unselfishly for years. In 1988 he was ASCE's National President. He has been a driving force for over 10 years for the Engineers Forum on Sustainability



(EFS) at the National Academies in Washington, DC, and has recently served EFS as chairman. He was also a leader in the NCS's and ASCE's participation at the P3 Sustainable Design Competition Finals and Sustainable Design Expo in Washington, DC.

Al Grant has been active in many professional and technical organizations throughout his career and has been recognized accordingly. He was awarded the 2008 Joan Hodges Queneau Palladium Medal, given by the American Association of Engineering Societies, which honors an engineer's outstanding achievement in environmental conservation. Some of his past accomplishments are impressive and are summarized below.

- Organized and chaired the Engineers Forum on Sustainability, in cooperation with the American Society for Engineering Education (ASEE)
- Elected to Board of Directors of the Renewable Natural Resources Foundation (RNRF) as a Public Interest Member and, in 2002, elected Chair of the Foundation and reelected in 2004.
- Chaired the ASCE Sustainable Development Technical Activities Committee
- Led development of the ASCE National Policy Statement on the role of the Engineer in Sustainable Development
- Led creation of ASCE's Sustainable Development Action Plan, and Sustainability Guidelines for ASCE Sections, Branches and Student Chapters, to promote sustainability activities at the local level.
- Active in promoting environmental stewardship in the interfaith community for many years, he has helped prepare environmental policy statements and action guides for use by religious institutions in conserving energy and reducing carbon footprints at the institution and at home.
- Organized the DC metro area's first regional ridesharing program and promoted telecommuting as

strategies to reduce traffic congestion and air pollution.

- Named 1988 Alumni of the Year in Engineering by the Catholic University of America.
- Has taught graduate courses in urban transportation at American University and Howard University.
- Has written extensively, including articles on telecommuting, strategic planning, engineering management and sustainability.
- Fellow of the American Society of Civil Engineers (ASCE) and President of ASCE in 1987–88
- Chair of the American Association of Engineering Societies (AAES) in 1991
- Recipient of the Kenneth Andrew Roe Award for "strong support and leadership in making the concept of sustainable development a key element of AAES' strategic plan, and enhancing engineering unity by promulgating the essential role of the engineer in sustainable development."

Pamela R. Bingham

Pamela Bingham has been a tireless volunteer and advocate for civil engi-

neers and the community from her days as an engineering student through her career as a practicing engineer. She has used her background to not only solve technical problems, but to work for community



equity and improvement. She has been a great asset to the NCS and many other *continued on page 7*

Community Service Award

continued from page 6

groups over the years. Some of her many accomplishments are summarized below.

- District of Columbia Council of Engineering & Architectural Societies, Secretary, ASCE Delegate, Executive Committee, National Engineers Week Committee
- American Society of Civil Engineers,
 - NCS Diversity Chairperson
 - Sustainability Committee/ Sustainability Award Committee
 - Engineers Forum on Sustainability at National Academy of Engineering—Presenter (May 2008)

- GSCNC STEM Career Day Planning Committee/Exhibit
- Girl Scout Day at National Air & Space Museum, Booth Coordinator
- Career Day and National Engineers Week Elementary School Volunteer
- National Building Museum Scout Day, Spring 2009
- Howard University, Advisor/ Mentor for Civil Engineering Senior Project, Middle School for Math & Science Future Cities Team

National Society of Black
Engineers, Environmental
Engineering Special Interest Group,

Special Projects Advisor/New Orleans, National Convention GIS Workshop Co-Organizer, Georgia Tech NSBE Service Project Advisor, NSBE Alumni Extension Metro DC officer, 2006 Humanitarian Award recipient, volunteer for Career Fairs, American Education Week, Science Fairs

Society of Women Engineers, Executive Committee, Girl Scouts Committee Chairperson, volunteer for pre-college program at University of Maryland and Howard University

Meritorious Service Award

This award recognizes individual members of the NCS who have made outstanding contributions to the work of the Section. The awardee must be an active member who has contributed significant time and talent to the Section and who sets a high standard of professionalism through service.

Jeffrey L. Bugno, PE, LEED AP

Since 2001, Jeff Bugno has been employed by Bay Engineering, Inc. in Annapolis, Maryland, working on a variety of land development projects, including residential and commercial development. He has been an ASCE

Maryland Environmental Site Design Workshops

ASCE-NCS will be sponsoring a series of workshops for design professionals on how to implement Maryland's new Environmental Site Design stormwater management regulation in the fall. Continuing education certificates will be provided by the Community College of Baltimore County. More information will be posted on the http://asce-ncs. org website as the workshop details are finalized. member for a number of years and has served in numerous leadership positions for both the Maryland and NCS's Younger Member Forums. He was also a member of the 2008 Northeastern Regional Younger Member Council Conference planning committee. He currently serves as the Education Committee Chairperson for the NCS.

Jeff Bugno has served the NCS in a number of capacities and is recognized as one of the leaders in the Section. His contributions and accomplishments include:

- Younger Member Forum President
- Scholarship Committee

- Banquet Committee
- Toys for Tots Program
- Engineers Without Borders
- Regional Conference Organizer

In addition to his leadership activities, Jeff has always volunteered where needed to assist the section. His leadership is an example for all members and he has proved to be a strong mentor for the next generation of civil engineers.

Mr. Bugno graduated from The Pennsylvania State University where he majored in Civil Engineering and minored in Environmental Engineering and Russian.

The 2010 American Control Conference Baltimore, Maryland, June 30 to July 2, 2010

The ACC is the annual conference of the American Automatic Control Council (AACC). The 2010 ACC, held in cooperation with IFAC, will present a technical program consisting of new developments in theory and practice in the area of automatic control. The technical program will consist of over 1100 presentations. In addition to regular technical sessions, this includes 27 invited sessions, 5 special sessions, 8 tutorial sessions, and 6 pre-conference workshop sessions.

Further information may be found at the 2010 ACC website—<u>http://www.</u> a2c2.0rg/conferences/acc2010/.

Important Deadlines

Advance registration: May 9, 2010 **Hotel reservations:** June 1, 2010 (or subject to availability)

For More Information

- Please contact:
- Glenn Y. Masada 2010 ACC General Chair, <u>masada@mail.utexas.</u> edu
- Richard D. Braatz—2010 ACC Program Chair, <u>braatz@uiuc.edu</u>

Regional North Atlantic Division 2010 Small Business Conference

May 11–12 at the Javits Convention Center, New York City, located on 11th Avenue between 34th and 39th streets.

The U. S. Army Corps of Engineers, New York District, is proud to present the Regional North Atlantic Division 2010 Small Business Conference at the Jacob Javits Convention Center, New York City, NY, May 11–12, 2010.

North Atlantic Division includes the five Corps of Engineers Districts in the northeastern US: Norfolk, Baltimore, Philadelphia, New York, and New England. In the past year we have obligated over \$3 billion in design and construction contracts. We have goals for obligating directly to small businesses and for sub-contracting to small businesses. Come join us and learn about your business opportunities with the Corps of Engineers.

The event will feature educational workshops, an Exhibit Hall with large and small business exhibitors, as well as business matchmaking sessions. Over 400 attendees will represent all levels of federal, state, and local government agencies, the small business community, large/prime contractors, and many more!

Benefits of Attending:

- Attend workshops to learn the nuts and bolts of contracting with the Corps of Engineers
- Learn about the Corps of Engineers small business goals
- Learn about how your large business can benefit from sub-contracting to small businesses
- Learn about the contracts the Corps of Engineers plans to advertise in the next year
- Meet the Corps of Engineers people who determine acquisition strategies and evaluate bids/proposals



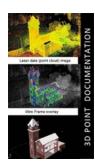
- Hear Government leader's discuss their agency's role in promoting small business
- Formally and informally network with many other businesses and several Government agencies to find opportunities and business partners

Attendance is \$125 per person. Exhibit spaces are available for a fee (\$500 for a large business/ \$225 for a small business).

Go to the Conference Web Site to register and for all the details: <u>http://</u> <u>www.nan.usace.army.mil/sbc2010/</u> <u>index.html</u>

Automation Excellence Awards Hosted at GMU on April 7, 2010

A collaborative effort between the NCS of ASCE and the ASCE Student Chapter at George Mason University made this <u>event</u> possible. This group annually celebrates excellence in Civil Engineering



automation by recognizing projects and/or initiatives in the metropolitan Washington, DC area that have demonstrated superiority in the use of automation in planning/design, construction, and/or operations. The event key-

note was presented by **Stephen Hagan** of <u>GSA</u> and **Mitch Schefcik** of <u>Optira, Inc</u>. The keynote was an engaging discussion about the value BIM offers infrastructure builders. It was also a fascinating study of how laser data scanning significantly improved the planning process for the DHS Headquarters project that is being built where St. Elizabeth's Hospital was in Washington, DC. This year there were three nominees vying for the award:

- Dulles Silver Line Metro Project for the tight integration of software with construction equipment to deliver efficiencies not otherwise possible
- InterCounty Connector Project for automating the flow of environmental compliance field data

to stakeholders in design and permitting agencies

 Harmony Algorithm for its unique approach to optimizing the design of water distribution networks in challenging urban settings

The award was jointly shared by the **Dulles Silver Line Metro** and the **InterCounty Connector** projects.



The photograph collage above shows (L-R) Mr. William Bergeson and Mr. Steve Barna of the Metropolitan Washington Airports Authority (MWAA) accepting the award for the Silver Line Project from Mr. Jacobo Flores (GMU ASCE Student Chapter President) and Mr. Ranjit Sahai (NCS Automation Committee Chairman); Mr. Sahai and Mr. Flores holding the award plaque for the InterCounty Connector Project on behalf of Maryland State Highway Administration; Mr. Sahai with Lucky student and Mr. Flores with the book he won at the raffle; Mr. Flores and Mr. Sahai congratulating Mr. Hagan; and Mr. Flores and Mr. Sahai congratulating Mr. Schefcik for an outstanding keynote.

Looking for Knowledge, Networking, CEUs—Opportunities? Then the Third International fib Congress is a must-attend event!

The *fib* Congress is a unique and extraordinary opportunity. The event is both a technical conference and a trade show that brings together concreteindustry experts, stakeholders, and practitioners from all over the globe. Because the event takes place only once every four years and in a different country each time, we are quite fortunate to have it in the United States this year, in a time when new ideas, new technology, diversification, and networking are vital to success. Here is a brief overview of some of what the *fib* Congress offers.

Education: The *fib* Congress will feature a huge educational component, with over 500 peer-reviewed technical papers. These papers address all structural-concrete-related subjects and markets. To see a list of sessions, <u>click</u> <u>here</u>. Technical sessions qualify for continuing education credits or professional development hours. There will also be a host of other sessions related to management, marketing, finance, sustainability, and operations.

Exhibits: The *fib* Congress will host over 100,000 square feet of exhibits. Come see the latest in technology and products, from design and management software to mixer and handling systems. To see a list of exhibitors, <u>click</u> <u>here</u>. The Exhibit Hall includes lunch and spirits each day.

Networking: The *fib* Congress attracts the leading concrete designers, researchers, and practitioners from over 50 countries. Several networking and social events are scheduled to facilitate the exchange of ideas and relationship building.

Location: The *fib* Congress will take place at the Gaylord National Resort and Convention Center in National Harbor, Md., May 29–June 2, 2010.

Hall, lunch, and spirits on selected

day.
Daily registration: \$400-includes access, for one day, to education sessions, Exhibit Hall, receptions, events (except for dinner cruse), and activities (except for guest tours) on selected day.

Trade show-only registration:

\$100—includes access to the Exhibit

Registration is Now Open

Full registration: \$1075—includes access, for all days, to education sessions, Exhibit Hall, receptions, events (except for dinner cruse), and activities (except for guest and plant tours), as well as a copy of the proceedings (on disk—a \$200 value).

Invest in your future! Register today! To register, please <u>click here to down-</u><u>load the registration form</u> and fax it to (312) 361-8078 or email it to <u>cfaul@pci.</u><u>org</u>.

The *fib* Congress is a once-in-a-lifetime opportunity! For more information, visit <u>www.fib2010washington.com</u> or contact Colin Faul at <u>cfaul@pci.org</u>. ■

Dayton Water Conference May 10-12 2010, University of Dayton

The purpose of the **Dayton Water Conference** is to improve awareness and collaboration between large companies, engineering firms, universities, utilities, start-ups, NGOs and governments by educating attendees on new water technologies, innovations and prospects. Whether the developments are in materials, IT, engineering, financing, or public policy; the conference will shine a spotlight on all advancements and provide best practices across the spectrum of the water field, with a particular emphasis on activities in the Dayton area.



For information on attending or exhibiting at the Dayton Water Conference, please contact Vincent Caprio by email at <u>vince@daytonwater-</u> <u>conference.org</u>.

For registration please visit <u>http://</u> www.daytonwaterconference.org/ register.php. ■

Podcasts from ASCE National

Listen To The New Podcast Series—<u>An</u> <u>Eye on Infrastructure</u>, an ASCE Committee on Critical Infrastructure (CCI) sponsored podcast series featuring industry experts discussing current issues relating to critical infrastructure.

The inaugural episode examines the engineer's role in emergency management featuring Dennis Schrader, P.E., Former FEMA Deputy Administrator for National Preparedness, and current President at DRS International, LLC and Daniel Martin, CEM, CFM, Integrated Solutions Consulting.

Episode 2 Catastrophic Failures: Emerging Threats to Critical Infrastructure features an expert panel discussion given at the FEMA Higher Education Conference in Emittsburg, MD. The podcast is broken into four episodes examining critical infrastructure as an emerging issue in emergency and disaster management education.

The newest episode discusses ASCE's Guiding Principles for the Nation's Critical Infrastructure featuring Joe Manous, Jr., P.E., Ph.D., D.WRE, F. ASCE Future Directions Team Leader for the Institute for Water Resources, US Army Corps of Engineers.

All Podcasts can be found through <u>http://ciasce.asce.org/podcast</u>. ■

PDHs and CEUs

In an attempt to always relay timely and accurate information to our membership, we feel compelled to clarify the difference between Professional Development Hours (PDH) and Continuing Education Units (CEU). In newsletters and publications of the past, professional credit for an event might have been misstated. Below is an excerpt from the National ASCE site (http://www. asce.org/Content.aspx?id=18788):

PDH—A contact hour (nominal) of instruction or presentation. The common denominator for other units of credit.

CEU—Unit of credit customarily used for continuing education courses. One continuing education unit equals 10 hours of class in approved continuing education course.

Give those parameters; our monthly Section meetings will almost always be 1 PDH which is the equivalent to 0.1 CEU.

President's Corner, cont'd

banquet, this meeting was the best attended this year. I want to thank Qamar Kazmi our treasurer for keeping on top of the financials. I want to thank John Casana, NCS secretary, and chair of the sustainability committee for an outstanding job with the March Sustainability Awards and Lecture. I want to thank Rollie Berry who in addition to organizing the November meeting about NASA's technology landscape, has been the newsletter editor for the past two years and working patiently with all of us for articles! I want to thank director Chris Manalo, for a great job with the Infrastructure Security panel discussion in February. I want to thank director Stephen Powers, for planning and organizing NCS efforts of restoration of the fences around the Boundary Stones, planned for May 15, 2010. I want to thank director David Dajc for reviewing our constitutions and bylaws, in order to start the process of revising them. Finally I want to thank Adam Stewart for being a great Young Member leader. YMF continue to be very active and has provided more than 100 volunteers in the various events, from the Cub Scout at NBM, Girl Scout at NBM, Family Day at NBM, hosting the section PE review course, registrations at the section meetings, providing judges at the ASCE 2010 Virginia Conference at CUA, EPA Design Expo, to list few.

This year we had a number of events that required volunteers. I want to acknowledge the following NCS members who organized many of the volunteering events: **Dean Westman, Emily Dean, Pamela Bingham, Thomas Lanyon,** and **Marcus Cherundolo**.

I want to thank out **newsletter sponsors** and the **banquet sponsors** for their financial supports. Without them, it may be needed to raise our registration fee.

I want to thank **Bernie Dennis** for being the guest speaker at the September meeting about National Civil Engineering Landmarks in the NCS, for planning the January meeting about the St Elizabeth 3D imaging efforts, and for all efforts in re-energizing the structural committee. Bernie also was the chair of scholarship Trust committee which awarded this year's 11 scholarship to college students and has been a great mentor to me through my term. I also want to thank Pamela Bingham for planning the May meeting, being the diversity committee chair and for organizing a number of our volunteering events. I also want to thank Ranjit Sahai, for planning a joint meeting about Excellence in Automation, at George Mason University with the George Mason University Student Chapter, and for all efforts in delivering an excellent revamped website. Please make sure to visit the site to hear about our events, be part of polls, and to stay in touch! I also want to thank Jerry Crosby for all help with the coordination of revamping of the website. Jerry was the NCS webmaster for more than 10 years! Also, I want to thank Ed O'malley for his leadership. The geotechnical committee continues to be the model committee for consistently doing an outstanding job.

Many thanks to the **NCS past presidents** who I sought their advice, support, and feedback consistently through my term; and also many thanks to Region 2, under Director **Reza Darvishian**.

The attendance of our monthly section meetings have been great; and this was possible for the great speakers and programs we had; Bernie Dennis in September about National Civil Engineering Landmarks in the NCS, Stephen Ayers Acting Architect of the Capitol, in October at the Capitol Visitor Center about the **Construction of the Capitol Visitor** Center; Dr, Manoo with Nasa in November about Nasa's Technology Landscape; Stephen Hagan with GSA and Mitch Schefcik with Optira in January about the St Elizabeth 3D imaging efforts; Ernesto Acosta with Homeland Security, Kevin Morley with American Water Works Association and William Gott with **Nuclear Regulatory Commission** in February for the Infrastructure Security and Prepardness panel discussion; Dr. Wayne Clough, Secretary of the Smithsonian in March about Sustainability; Blaine Leonard, ASCE President, in April (as well in March introducing Dr. Clough) about ASCE 2025 vision; and Kendra Parlock, with Grace Davison Biofuel Technologies, Dr. Preston McGee, Prescott Global Inc., and Dr. Jayfus Doswell, Juxtopia, later in May, about Innovation and The Grand Challenges

for Engineering: Engineer the Tools of Scientific Discovery.

I want to thank the leadership of the faculty advisors, chapter presidents, and the student members in the five schools in our area. From UDC, thank you Dr. Behera (faculty advisor) and student chapter president Mickael Desta. From Catholic University, thank you Dr. Lucko (faculty advisor) and Margaret Keller (chapter president). Also, congratulations for hosting the 2010 ASCE VA conference which included the steel bridge and concrete canoe competitions, led by graduating seniors Chris Hudson and Steve Miller. From GWU, thank you Dr. Manzari (faculty advisor) and Evan Tusini, chapter president. From Howard University thank you Dr. Jones (faculty advisor), Dr. Efimba who has always been at most NCS event with the students, and Philip Utubor (chapter president). Finally from GMU, thank you Dr. Casey (faculty advisor) and Jacobo Flores chapter president. Jacobo has done an outstanding job working with the NCS.

Many thanks for the companies we are working for, for continuing to support ASCE-NCS activities by giving us the help we need.

Last but not least, many thanks to ASCE HQ staff for helping us tremendously; there are a lot to list; but thank you Karen Albers, Patrick Ballou, Nancy Berson, Michael Cook, Alicia Karwoski, Leslie Nolen, Leslie Payne, Melissa Prelewicz, Amanda Rushing, Rachel Schmidt, and Peter Shavalay.

Fady

Employment Clearinghouse

Positions Wanted

CAD Draftsman/Designer with 24 years experience in Structural drafting and 5 years experience in Architectural drafting, seeks full time job in Montgomery Co., DC Metro area, or Frederick Co. Experienced in AutoCad, Revit, and Microstation. Available immediately. Email Fred Edelstein at <u>Fredelstein@comcast.net</u> or write: 9920 Killarney Ln., Gaithersburg, MD 20877. Phone (301) 330-1570 (please leave msg). **Civil Engineer:** a PhD student in The Catholic University of America "Construction Engineering and Management program." Seek private or municipal position in northern Virginia area. Phone (703) 462-3663, aaljabhan@gmail.com.

Project Engineer: 2 years experience in Alaska Heavy Civil Construction for the oil and gas industry. Seeking new successes. Experienced with Hard Dollar, Primavera, MS Project, & proposal developments. Spent extensive time at remote jobsites managing projects. Drafting skills include: AutoCad, Microstation, SolidWorks. Email William Low at WilliamR.Low@ gmail.com, phone: (818) 681-9323. The ASCE-NCS provides the Employment Clearinghouse as a free service to its membership. The Clearinghouse allows members to post short (100 word maximum) notices for available positions or candidates seeking employment. If you have questions or would like to post a position, please contact Joe Doane, sassi22@verizon.net.

By submitting a "Position Available" notice, all employers are certifying that they are equal opportunity employers.

Calendar of Events (Also available on our website under the Events tab)

Tuesday, May 18

Innovation and Grand Challenges for Engineering: Engineering the Tools of Scientific

Discovery. 6pm to 8:30pm, Hyatt Regency, Crystal City, VA. Panel Discussion: Innovation and Grand Challenges for Engineering: Engineering the Tools of Scientific Discovery. The topic is a reference to the publication by the National Academy of Engineering. Check out this link to the Grand Challenges for Engineering, www.engineeringchallenges.org. Contact Pamela Bingham at Pamelabingham@gmail.com.

Wednesday, May 12

ASCE-NCS YMF Happy Hour. 6pm, Hard Times Cafe in Arlington. Contact Marcus for details at <u>mcherundolo@</u> gmail.com

Saturday, May 15

ASCE-NCS: Boundary Stones Restoration Project. Volunteers needed to begin restoration work on the fences installed to protect the boundary stones. First fence (East Cornerstone located at the intersection of Eastern Ave and Southern Ave in Southeast DC and Seat Pleasant MD). Contact Stephen at <u>stephen@design-</u> <u>powers.com</u> or Elena at <u>erubalca@</u> <u>gmail.com</u>.