

# The Voice

MARCH-APRIL 2011

# Voice

**ACEC**  
AMERICAN COUNCIL OF ENGINEERING  
COMPANIES OF TENNESSEE

THE VOICE OF TENNESSEE'S ENGINEERING COMPANIES

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## CDM wins *Grand Iris Award*, top honor in engineering excellence competition

Ok Ridge engineering firm CDM won *The Grand Iris Award*, the highest honor in the 2011 *Engineering Excellence Awards* competition sponsored by ACEC of Tennessee. CDM was recognized for its project Biologically Enhanced High Rate Clarification completed for the Knoxville Utilities Board (KUB).

CDM implemented an innovative solution to meet the needs of KUB as part of an ongoing Consent Decree that requires KUB to provide secondary treatment for all wet-weather flows at the Kuwahee and Fourth Creek Wastewater Treatment Plants without the practice of blending. To meet this challenge, CDM and Kruger Inc. developed a process called "biologically enhanced high rate clarification." This process combines a biological contact zone with a high-rate clarification process. Because there are no full-scale applications of this process, an extensive pilot testing study was developed to demonstrate treatment performance over a wide range of operating parameters and to identify final design criteria.

In addition, a *Grand Award for Engineering Excellence* was presented in each of the competition's entry categories. Firms receiving a Grand Award were: AMEC Earth & Environmental, Inc.; Barge Waggoner Sumner & Cannon, Inc.; CSR Engineering,

Inc.; EnSafe Inc. (2 awards); Gresham Smith and Partners (2 awards); Ross Bryan Associates, Inc.; and S&ME/PDC Consultants, LLC.

The award winners were announced on the evening of March 8 during a gala event at the Loews Vanderbilt Hotel in Nashville. Commissioner John Schroer, Tennessee Department of Transportation, was among the more than 275 engineers, business and civic leaders, and state, city and county officials from across Tennessee who attended the event.

**NOTE:** Please see pages 4, 5 & 6 of this newsletter for additional awards information and photos.



Engineering firm CDM won *The Grand Iris Award*, the top honor in the statewide *Engineering Excellence Awards* competition. Pictured at the award presentation are (left to right) Dwayne Frye, Knoxville Utilities Board; Steve Bostic, PE, Lamar Dunn & Associates, president of ACEC of Tennessee; Steve Field, PE, Stantec Consulting Services, chairman of the awards competition; and Josh Norton, PE, CDM.

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# Teamwork Pays Off

by Steve Bostic, PE  
President, ACEC of Tennessee

I am very proud of Tennessee engineers and ACEC of Tennessee members. During March, you proved – once again – that you can accomplish amazing things.

I am not only referring to the outstanding projects entered in the *Engineering Excellence Awards* competition. I am also referring to how engineers rallied and worked together to make the annual Legislative Reception and Engineers' Day on the Hill events so successful. You came, you min-



**Steve Bostic**

gled, you explained, and you made a positive impression on members of the General Assembly. You have my thanks and congratulations.

What's next? Well, we never know. The General Assembly is still in session. The economy of the state and nation is still stressed. Congress is debating and considering a variety of measures that could impact our businesses and profession.

One thing is certain – we need to continue working together. When Candy Toler, our executive director, contacts us and asks that we call our representative or senator, we need to respond. When our national and state organizations meet, we need to be there. We need to continue to show up, stay engaged, and work together.

## Engineers' Day on the Hill Visits in Nashville



Steve Bostic, PE, president of ACEC of Tennessee, Lamar Dunn and Associates, Knoxville; Speaker of the House Beth Harwell, Nashville; John Wimberly, PE, IC Thomasson Associates, Nashville



Gary Tysinger, PE, Tysinger Hampton and Partners, Johnson City; Steve Bostic, PE, president of ACEC of Tennessee, Lamar Dunn and Associates, Knoxville; Lt. Governor Ron Ramsey, Blountville; Candy Toler, executive director of ACEC of Tennessee; and Wayne Robertson, PE, Vaughn and Melton, Gray



Claire Barnett, PE, EnSafe Inc., Memphis; Rep. Jeanne Richardson, Memphis; and Frank Gianotti, PE, Tetra Tech, Memphis



Chuck Saunders, PE, Fisher and Arnold, Murfreesboro, and Sen. Bill Ketron, Murfreesboro

# Legislators Hosted at Annual Reception

Representatives of more than 35 engineering companies were on hand to welcome Tennessee's state senators and representatives to the annual Legislative Reception on March 7.



Rep. Julia Hurley, Lenoir City (center) with Angie Cannon and Harold Cannon, PE, Cannon & Cannon, Knoxville



State architect Bob Oglesby (left) and Gary Tysinger, PE, Tysinger Hampton & Partners, Johnson City



Speaker Emeritus Rep. Jimmy Naifeh, Covington; Bob Murphy, PE, president of the Nashville Chapter of ACEC of Tennessee, RPM Transportation Consultants, Brentwood; Rep. Mike Turner, Old Hickory; and Pat Harcourt, PE, Askew Hargraves Harcourt & Associates, Memphis



Mack McCarley, PE, Thompson Engineering, Chattanooga; Rep. Gerald McCormick, Chattanooga; Monica Sartain, PE, Barge Waggoner Sumner & Cannon, Nashville; and David Young, PE, Volkert, Chattanooga



Mike Pohlman, PE, Pickering Firm, Memphis, the president-elect of ACEC of Tennessee, with Rep. Jimmy Eldridge, Jackson

Bryon Fortner, PE, Sevierville Public Works Director; Rep. Glen Casada, College Grove; and Bill Moore, PE, Gresham Smith and Partners, Nashville



# Engineering Students Awarded Scholarships

Carolyn Mariano, a junior at the University of Memphis, and Rebekah Kerley, a senior at Tennessee Technological University, were each presented a \$1,000 scholarship from ACEC of Tennessee at the Engineering Excellence Awards event on March 8. Mariano, who is studying Civil Engineering, will compete for national ACEC scholarships to be awarded in October. Kerley, who will receive a BS in Civil Engineering with a concentration in structures this May and plans to do graduate study in Structural Engineering next year, will compete on the national level for a scholarship from the Council of American Structural Engineers (CASE).



Carolyn Mariano (left) and Rebekah Kerley each won a \$1,000 scholarship from ACEC of Tennessee.

"Our scholarship program is another example of how ACEC of Tennessee is committed to the future of our profession. I am pleased that interest in the scholarship program is increasing," said Everett Cowan, PE, CEO of AE Guidance, LLC, Nashville, the chairman of the 2011 Scholarship Committee. This is the tenth year that ACEC of Tennessee has awarded scholarships to Tennessee engineering students. Past winners were students at Vanderbilt, UT-Chattanooga, UT-Knoxville and Tennessee Tech. In 2009, the winner of the Tennessee scholarship also won the national competition and received an additional \$10,000 scholarship.

## CALENDAR

APRIL  
26

Memphis Chapter Meeting  
Racquet Club of Memphis, 6:00 p.m.

Information:

Tim Verner

901-748-1811

tverner@fisherarnold.com

MAY  
18 - 19

ACEC of TN Planning Retreat  
Pickering Firm, Inc., Memphis

AUGUST  
24 - 26

ACEC of TN / TSPE Joint Annual Meeting  
Franklin Marriott Cool Springs, Franklin

## Member News

- **Littlejohn Engineering Associates**, Nashville, has acquired Land Design Innovations of Orlando, FL, a firm that specializes in municipal planning, economic and redevelopment services, civil engineering and landscape architecture.
- **Ashley T. Smith**, a project engineer in the Nashville office of **Stantec**, has received the 2011 Outstanding Practitioner Advisor Award from the American Society of Civil Engineers (ASCE) Eastern Region Younger Member Council for her volunteer work in advising local college engineering students.
- **Everett Cowan, PE**, former president of Gresham Smith and Partners, has launched **AE Guidance, LLC**. The company, launched in conjunction with management consulting firm **Compass Executives**, provides consulting services to architecture and engineering firms.
- **Steve Hays, PE, FACHE**, chairman of **Gobbell Hays Partners, Inc.**, Nashville, has been named a Fellow of The American Industrial Hygiene Association for his contributions to the field of industrial hygiene.
- **Chris Eggleston, PE, MBA**, has joined **Barge Waggoner Sumner and Cannon, Inc.** as Roadway/Bridge Structural Project Manager in the Nashville office.

# Award Winners: Engineering Excellence Honored



*CSR Engineering, Inc. won the Grand Award in the small projects category for its work on a pedestrian underpass located underneath railroad tracks at Lane College in Jackson, TN. Pictured at the award presentation are (left to right) Pat Conyers, CSR Engineering; Steve Bostic, ACEC of Tennessee president; Steve Field, Engineering Excellence Awards chairman, and Kevin Walker, CSR Engineering.*



*AMEC Earth & Environmental, Inc. received the Grand Award for special projects for its emergency response following the May 2010 flood for inspection and repair of over 200 miles of railroad track completed for CSX Transportation. Pictured with the award trophy are AMEC representatives (left to right) Bernard Voor, Robin Hagerty and Chris Ramsey.*



*EnSafe, Inc. received the Grand Award in the environmental category for its project Pilot Test: Extreme Degradation Conditions completed in Tampa, Florida, for Helena Chemical Company. Displaying the award are Dave Backus and Lori Goetz, both with EnSafe.*



*S&ME, Inc. and PDC Consultants, LLC claimed the top honor in the water resources category for the project Little Chatata Creek Alignment completed for the Cleveland Municipal Airport Authority, Cleveland, TN. Troy Buttrey, PDC Consultants, and Brent Wood, S&ME, display the Grand Award.*



*Barge, Waggoner, Sumner & Cannon (BWSC) won the Grand Award for Studies, Research and Consulting Engineering Services for the Tennessee River Modeling project completed for the Tennessee Valley Authority (TVA). The Grand Award trophy is displayed by BWSC's Carrie Stokes and TVA's Gary M. Adkins.*



*Ross Bryan Associates won the Grand Award in the competition's structural system category for its work on The Clayton Center for the Arts in Maryville, a project completed for McCarty Holsaple McCarty Architects. Displaying the award are (left to right) Jarrod Meacham, Kurt Boyd, and David Wayman, all with Ross Bryan, and Paul Bielicki, McCarty Holsaple McCarty.*



*EnSafe Inc. won two Grand Awards for Engineering Excellence. One Grand Award was presented in the surveying/mapping technology category for its project, GIS Mapping: Stormwater Outfalls on State Highways, completed for the Tennessee Department of Transportation (TDOT). Pictured with the award are (left to right) Ginny Davis, EnSafe; Barry Brown, TDOT; Allison Bailey, EnSafe; and Suzanne Herron, TDOT.*



*A Grand Award was presented to Gresham Smith and Partners in the water and storm water category for the Second Creek Wastewater Storage Facility completed for the Knoxville Utilities Board. Displaying the award are Dale Mosley and Anthony Crist, Gresham Smith; Dwayne Frye, Knoxville Utilities Board; and Craig Parker, Gresham Smith.*



*Gresham Smith and Partners received the Grand Award in the competition's transportation category for the Bessemer Street / US 129 Bypass completed in the City of Alcoa. Pictured on stage during the award presentation are Michael Flatt, Gresham Smith; Steve Bostic, ACEC of Tennessee president; Steve Field, Engineering Excellence Awards chair; and Mark Johnson, City of Alcoa.*

## 2011 Engineering Excellence Awards

### ~Committee~

**Steve Field, PE, Chair**  
Stantec Consulting Services, Inc.

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Scoring  
Beaver Engineering, Inc.

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ACEC of Tennessee

**Judy Logue**  
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### ~Special Note of Recognition~

ACEC of Tennessee expresses particular thanks to Committee Member **Tiffany Henderson** and to **PBS&J, an Atkins Company** for their support and generous continued sponsorship of graphics and audio visual services for the Engineering Excellence Awards banquet. This generous sponsorship allows the event to evolve, improve and achieve new heights each year. Thank you!

# 275 people attend awards gala

The more than 275 people who attended the Engineering Excellence Awards gala event viewed the panels of all the project entries and visited with colleagues from across the state during a reception prior to the dinner and awards presentations.



◀ *Paul Sloane, TDEC Deputy Commissioner; John Schroer, TDOT Commissioner; Rick Sinclair, Lamar Dunn & Associates*

*Steve Field, Engineering Excellence Awards Committee Chair, Stantec; Dick Burleson, featured speaker, Neel-Schaffer* ▼



*Jim Morinec, AECOM; Ed Cole, Transit Alliance of Middle Tennessee; Laura Reinbold, TTL Inc.*



*Paul Degges, TDOT; Stan and Amy King, Florence & Hutcheson, Inc.*



*Hal and Kerri Balthrop, Architects and Engineers Board; Saya Qualls and Paul Davis, TDEC; Paul Stonecipher, AECOM*



*James Bearden, Gresham, Smith and Partners; Don Friedman, Crow Friedman Group; Dale Mosely, Gresham, Smith and Partners*

## Thank You, EEA Sponsors

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Tennessee Road Builders Association  
TranSystems Corporation

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H.W. Lochner, Inc.  
KS Ware & Associates, LLC  
Kiewit Infrastructure Group  
Robert G. Campbell & Associates, LP  
RPM Transportation Consultants, LLC  
S&ME, Inc.  
Strategies Group, Inc.  
TLM Associates, Inc.  
TTL, Inc.  
T.W. Frierson Contractor, Inc.  
Vaughn & Melton Consulting Engineers

### Door Prizes

Franklin Marriott Cool Springs  
French Lick Resort – West Baden Springs Hotel  
Loews Vanderbilt Hotel Nashville  
Stantec Consulting Services, Inc.  
Vaughn & Melton Consulting Engineers, Inc.

# Teamwork powers electric vehicles

by Christopher W. Umberger, NCARB, PMP®,  
LEED®AP BD+C  
Senior Project Manager  
Barge Waggoner Sumner & Cannon, Inc.

**O**ak Ridge National Laboratory (ORNL), managed by UT-Battelle, is the Department of Energy's largest multi-purpose research laboratory. It is also the largest energy-research center in the United States. ORNL has joined with the State of Tennessee, the Tennessee Valley Authority, and Ecotality to partner with Nissan, NA in the promotion of zero-emission vehicles and their supporting infrastructure. This team is currently involved in a demonstration project to provide power for electric vehicles (EVs).



**Chris Umberger**

## Solar-Assisted Chargers

At ORNL, 25 solar-assisted EV charging stations can accommodate the Nissan Leaf and other plug-in electric vehicles. A 54 kW solar array with a three-phase, grid-tie power inverter provides power in conjunction with normal utility power for the 25 charging stations for the Electric Vehicle Supply Equipment (EVSE). The system

includes Level 2 chargers, using a standard J1772 electrical plug designated by the Society of Automotive Engineers (SAE) for use in all future electric vehicles such as the Nissan Leaf, as well as plug-in hybrid electric vehicles such as the Chevy Volt and the Toyota Prius. The installation also includes a battery storage system and Internet connectivity for the electronic components so researchers can track usage and performance of the systems and gather data for future enhancements.

A new 100-space parking lot on the ORNL campus has a canopy structure over 25 spaces to support the solar array. The power generated by the solar system is fed to the utility grid; the power used by the EVSE chargers is taken from the utility grid. The grid-connected battery system stores small amounts of power to help level the load on the utility grid during times of charging multiple vehicles in one centralized location.

As demand for alternative energy sources increases, research and development into new delivery methods and opportunities in commercialization will grow. Teams of research facilities, engineering firms, utility companies, and commercial entities – including automakers – are working together to bring years of study to practical reality.



ACEC of Tennessee expresses its appreciation to the independent panel of judges that determined the winners of the 2011 Engineering Excellence Awards competition. The judges gathered at the Tennessee Engineering Center in Nashville in February to review, evaluate and rank all the entries. The judges are pictured reviewing and discussing one of the entries. Left to right are **Peter Heindenreich**, consultant, Hall Strategies, Nashville; **Michael Skipper**, executive director, Nashville Area Metropolitan Planning Organization (MPO), Nashville; **Ipshta Thomas, EI**, TVA and ACEC's 2009 Scholar of the Year; **Scott Turnbow**, senior manager, TVA, Chattanooga; **J.T. Malasri, PE**, residential Level 4 engineer, Memphis Light, Gas & Water, Memphis; **Dayakar Penumadu, PhD**, head of the Civil and Environmental Engineering Department, University of Tennessee, Knoxville; and **Marlin Keel, PE, RLS**, director of Public Works and city engineer, Mt. Juliet. Not in the photo is judge **Daniel A. Badoe, PhD**, professor of Civil Engineering, Tennessee Technological University, Cookeville.

# ACEC

AMERICAN COUNCIL OF ENGINEERING COMPANIES  
of Tennessee

Tennessee Engineering Center  
800 Fort Negley Boulevard  
Nashville, TN 37203

Return Service Requested

## MARCH-APRIL 2011 INSIDE

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### Welcome, New ACEC Member

**KCI Technologies, Inc.**  
7003 Chadwick Drive, Ste. 343  
Brentwood, TN 37027  
(615) 377-2499  
www.kci.com

**Key Contact:**  
John Felkins, PE  
Practice Leader  
john.felkins@kci.com

KCI Technologies is an employee-owned, multi-discipline engineering firm. KCI offers services in a wide range of disciplines including civil engineering (general, structural, transportation); construction management; environmental; forensic; geotechnical; development; planning; surveying/GIS/mapping; and water/wastewater.

### Welcome, New Partner Program Member

**Ryan Search & Consulting**  
4322 Harding Pike, Suite 417  
Nashville, TN 37205  
615-202-0883  
www.ryansc.net

**Contact:**  
Dan Ryan  
dan@ryansc.net  
Ryan Search & Consulting provides executive search, leadership consulting and recruitment process outsourcing services to firms in the design and construction world.

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## FROM THE EXECUTIVE DIRECTOR

### *Congratulations and Thanks to You!*

by *Candy Toler*  
Executive Director, ACEC of Tennessee

**W**hat a great celebration of engineering excellence on March 8 when 21 firms showcased their most innovative projects. There were 24 projects entered in the competition and more than 275 people attended the awards banquet. Congratulations to CDM, winner of the Grand Iris Award for the Knoxville Utilities Board's **Biologically Enhanced High Rate Clarification** project.



**Candy Toler**

Steve Field (Chair, Stantec), Greg Brubaker (Co-Chair, KS Ware & Associates), the EEA Committee, and Judy Logue (ACEC of TN) did an outstanding job creating an event to remember. Thanks for all of your efforts.

#### Up on Capitol Hill

It was the year for records; there was a record turnout of engineers at the legislative reception and Engineers' Day on the Hill. We told lawmakers about our concerns for the safety of Tennesseans and the role engineers play in improving our communities. Legislation under consideration this session includes:

- continuing the Architects' and Engineers' Board, which we support;

- supporting the requirement that PEs prepare bid specs for street improvement projects;
- opposing the need for state departments to justify contracting work to the private sector;
- opposing efforts to modify timing on traffic signals unless appropriate under the Manual on Uniform Traffic Control Devices;
- opposing efforts to give local preference in purchasing goods and services;
- opposing efforts to prohibit bid spec changes within 48 hours of bid opening/acceptance;
- supporting efforts to hold engineers and contractors harmless for accidents in construction zones if the driver was driving recklessly or under the influence of alcohol or drugs;
- opposing the elimination of professionals on environmental boards;
- opposing efforts to allow registered interior designers to do non-structural work;
- opposing restricting funding for stream mitigation to the county where the impact occurred;
- opposing the establishment of new standards for energy reduction.

If you would like more information on any of these, let me know (ctoler@tnc.org).

Thanks for supporting your profession in many ways.