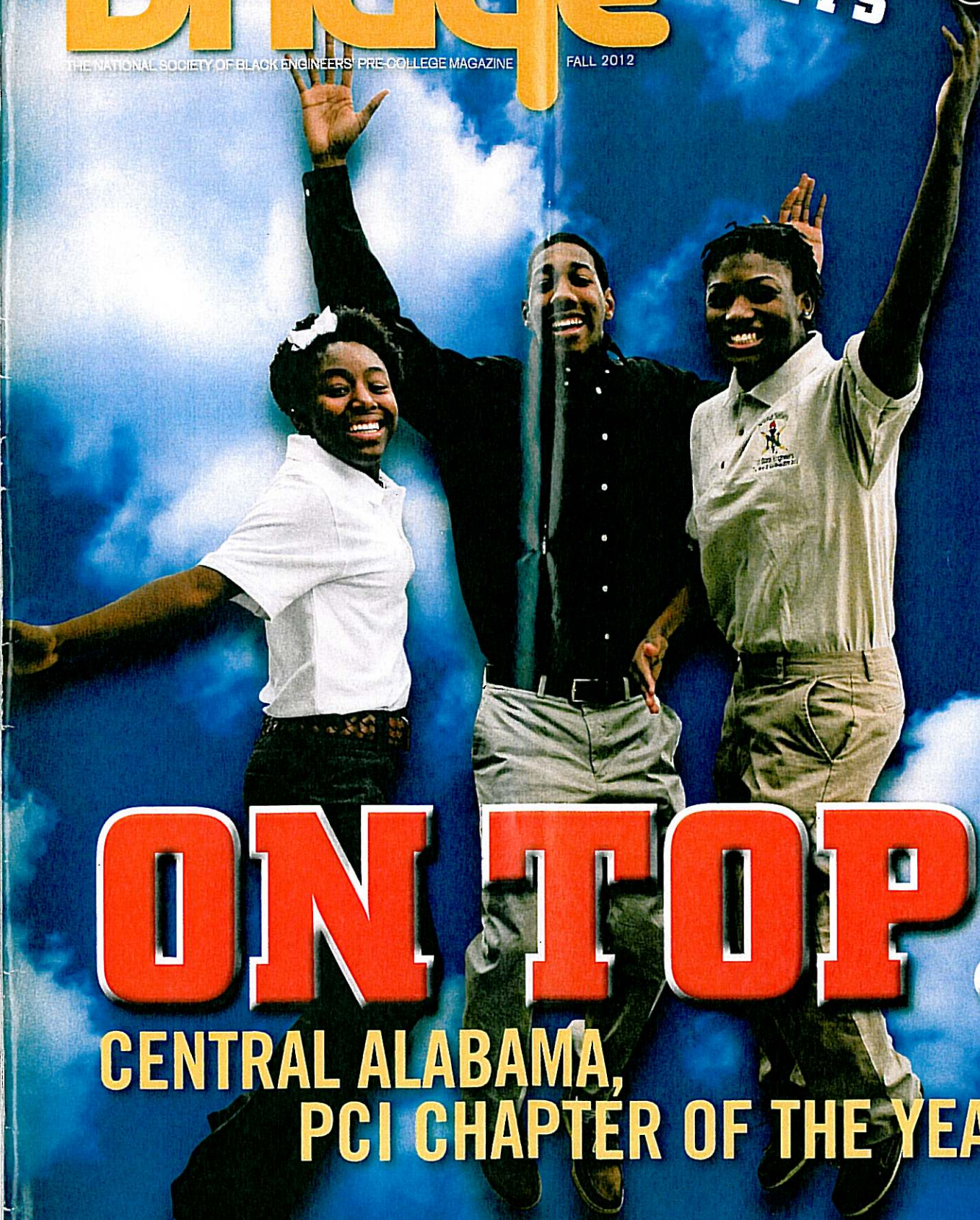


NSBE bridge

THE NATIONAL SOCIETY OF BLACK ENGINEERS' PRE-COLLEGE MAGAZINE

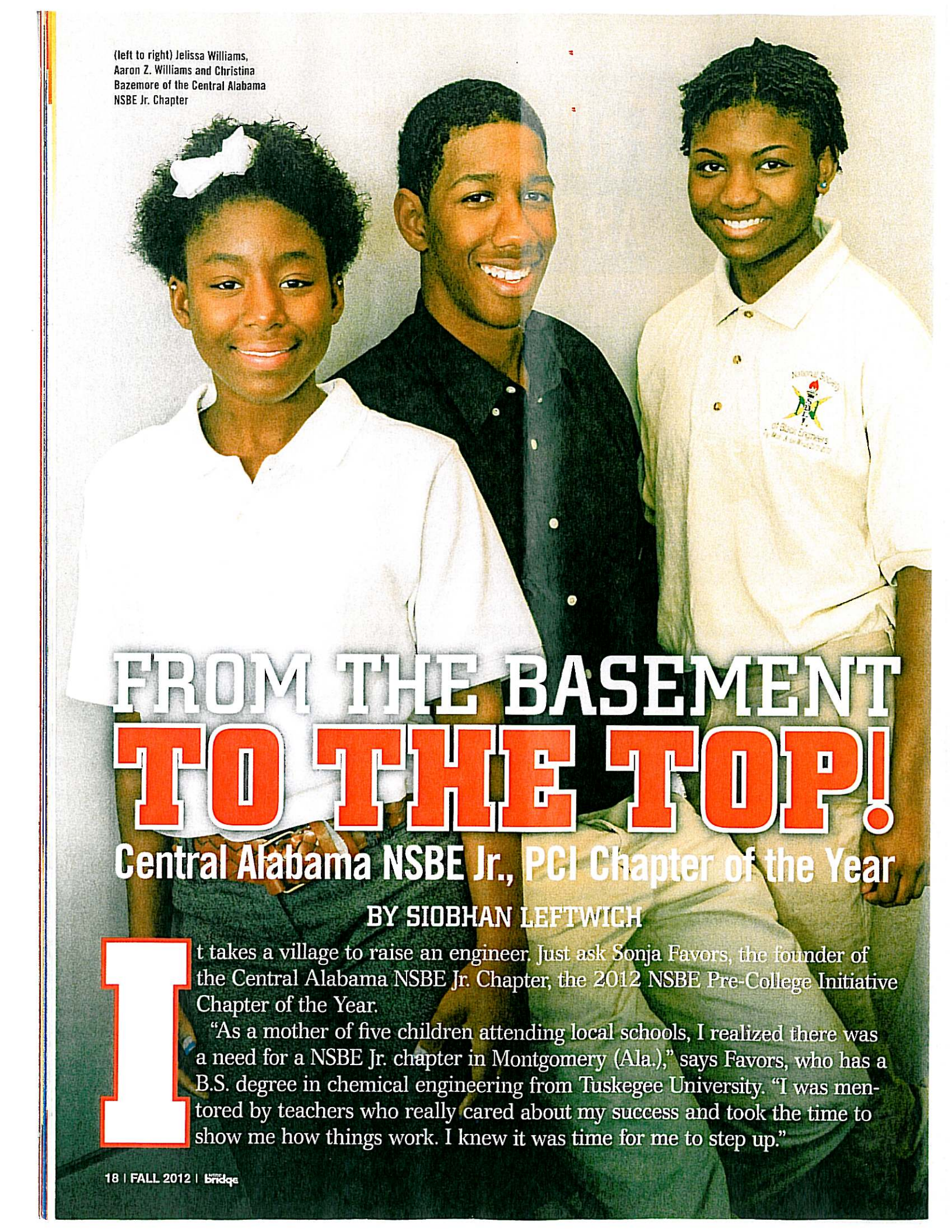
FALL 2012

BACK TO
SCHOOL
APPS



ON TOP!

CENTRAL ALABAMA,
PCI CHAPTER OF THE YEAR



(left to right) Jelissa Williams,
Aaron Z. Williams and Christina
Bazemore of the Central Alabama
NSBE Jr. Chapter

FROM THE BASEMENT **TO THE TOP!**

Central Alabama NSBE Jr., PCI Chapter of the Year

BY SIOBHAN LEFTWICH

It takes a village to raise an engineer. Just ask Sonja Favors, the founder of the Central Alabama NSBE Jr. Chapter, the 2012 NSBE Pre-College Initiative Chapter of the Year.

“As a mother of five children attending local schools, I realized there was a need for a NSBE Jr. chapter in Montgomery (Ala.),” says Favors, who has a B.S. degree in chemical engineering from Tuskegee University. “I was mentored by teachers who really cared about my success and took the time to show me how things work. I knew it was time for me to step up.”

"In four short years, our chapter has achieved more than I could have ever possibly dreamed of."

— Sonja Favors, Founder, Central Alabama NSBE Jr. Chapter

When Arnold Mayberry learned of Favor's plans, he jumped at the opportunity to pitch in.

"Our goal in forming the chapter was to fill the void between kids who are pushed to succeed and those who are left behind — not because they aren't smart enough to succeed, but because they haven't been exposed to science, technology, engineering and math (STEM)," says Mayberry, an environmental scientist for the State of Alabama and one of the chapter advisors. "We want to open their eyes to all possibilities, not just some possibilities."

"This chapter definitely fills a need," agrees Jessie Dixon, a mechanical engineer who works with the group on robotics. "About 10 years ago, the NSBE Montgomery Alumni Extension (MAE) would go out to local schools and career days and speak with students about engineering. I really got the impression that a large percentage of the kids we talked to were intimidated by engineering. This chapter was very much needed."

To gain support for the chapter, Favors turned to her network of engineers, other professionals and parents and, in three weeks, secured a church basement for meetings. That summer, she and the chapter attended the NSBE Summer Camping Conference.

"To think that our chapter, which now meets at Alabama State University, started off in a church basement, is remarkable," says Favors. "In four short years, our chapter has achieved more than I could have ever possibly dreamed of."

COMPETITION AND SERVICE

Indeed it has. For the past three years, the Central Alabama NSBE Jr. Chapter has won the High School Robotics Competition, the Try-Math-A-Lon (TMAL) Competition and the Kid Zone Competition for Region III. And the chapter has won the Region III Middle School Robotics Competition two years in a row.

At their annual Engineering Day (E-Day) event at Montgomery's Oak Park, the chapter members and advisors give local students the opportunity to participate in hands-on math, science and technology experiments.

"We also recruit kids at school by showing them the projects we're working on," says Chapter President Aaron Z. Williams, 17, a senior at Loveless Academic Magnet Program (LAMP) High School, in Montgomery. "They're always interested in seeing the robots," chimes in Chapter Vice President Tyus J. Mayberry, 16, who also attends LAMP.

In addition to E-Day, Central Alabama, now 50 members strong, helps provide meals for senior citizens and mentors younger students.

"Our advisors really depend on us to step up and be leaders," says Williams, who plans to pursue a career in aerospace engineering. "The older kids are expected to tutor the younger kids in science and math, and our advisors are always there if high school kids need help."

MEETING THE CHALLENGES

Despite the chapter's successes, it has struggled to secure funding to send all of its members to NSBE Fall Regional Conferences and Annual Conventions.

"We've addressed this by holding year-round fundraisers that include car washes, fruit sales, raffles and voluntary donations," Arnold Mayberry says. "Our members and their parents really chip in to give these fundraisers their all." The chapter's Alumni partner, NSBE-MAE, also helps with fundraising. And Mayberry and other advisors regularly dip into their own pockets to pay for supplies for the chapter's engineering projects.

"We consider it an investment in our race's future," says Mayberry, who, at 48, is pursuing a B.A. in civil engineering at Auburn University. "I had receipts last year where I bit the bullet for over \$500. But it's worth it to me: we're trying to turn on the light for these kids. We make them give back by tutoring and recruiting more students to the chapter," he adds with a laugh.

Williams, who was the captain of Central Alabama NSBE Jr.'s winning robotics team last year, chalks up the chapter's success to its members' determination, creativity and ingenuity.

"Once the school year starts, we do a different experiment each month," he says. "One might be building a bottle rocket or a car, for example. Then we discuss the experiment and actually build one, test it and talk about the results. It's fantastic."

EXPANDING THE WORLD

Both Tyus Mayberry and Williams stress that traveling to the competitions has been almost as fun as winning them.

"I really like meeting members from around the world," Williams says. "And I especially like seeing new cities. Seeing the arch in St. Louis (during NSBE's 2011 Annual Convention) was really cool."

"When we go to these conventions, it's also an opportunity for our membership to see what each city has to offer," Arnold Mayberry explains. "We make it a point to stay an extra day so that our students are exposed to the wider world beyond Montgomery. It is important for them to realize that their work as engineers can take them across the country and even across the world."

Favors, like Mayberry, is all about expanding the members' horizons.

"One of my greatest pleasures has been taking students and guiding them in a direction and seeing a change in them," she says.

WINNERS ALL

One of her proudest success stories is that of former member Jillian Bibbins, who is now a sophomore at the University of Alabama.

"I'm the first chapter member to enter college," *CONTINUED ON PAGE 20*



Seeing new cities: Members of the Central Alabama NSBE Jr. Chapter in Pittsburgh, Pa., at NSBE's 2012 Annual Convention

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says Bibbins, who plans to study electrical and computer engineering. She credits her membership in NSBE Jr. with her decision to pursue an engineering career.

"I got an e-mail from one of my friends asking if I wanted to join," she recalls. "At the time, I didn't have any interest in engineering, but I ended up going to a meeting. Before I knew it, I was taking an engineering class at my high school. I was hooked."

This past summer, Bibbins, who plans to become an astronaut, traveled to the NSBE Jr. Regional Leadership Conference. Now heavily involved in the NSBE chapter at the University of Alabama, she is still thrilled by her participation in the Central Alabama NSBE Jr. Chapter.

"It was an amazing experience," she says. "My favorite competition was the TMAL, because the first year we completely failed at it, but the second year we won third place and the third year we won first place. We really banded together and studied for it. I really think everyone should join NSBE!"

"It's been exciting that our members have gained so much interest in the areas where they've won the awards," says Dixon. "That's the part I enjoy the most. I especially like seeing students who may not have started out with enthusiasm or optimism but who are now confident in their abilities."

Make that confident and more than competent. From its members to its advisors to its parents, this chapter is brimming with winners. ■

Siobhan Leftwich is a writer based in Baltimore, Md.

ENGINEER A GREEN WORLD in the NSBE JR. POSTER CONTEST!

Create a poster to express your view of how to improve the environment.

Who's Eligible: All NSBE Jr. members in grades 6–8

How to Enter: Submit your contest information via IMPak no later than Dec. 14, 2012.

Mail Your Poster to: NSBE Bridge Poster Contest, 205 Daingerfield Road, Alexandria, VA 22314

Prizes: A cash prize will be awarded to the winning participant in each grade.

The top posters will be published in *NSBE Bridge* magazine!

For more information, and contest rules, go to <http://www.nsbe.org/NSBE-Jr/Competitions-and-Contests.aspx>, or e-mail BridgeContest@nsbe.org.