

EASTERN NEBRASKA WIRE



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Future City Competition was a success

On Saturday, January 21, 4 of our SWE members volunteered to help judge student projects at the *National Engineers Week Future City Competition* which was hosted by ASCE. This year's program coordinator was Liz Roesler, a member of ASCE and also a member of SWE.

There were eight teams of middle school students who researched, built a model city out of recycled materials, and gave a presentation on a city in the future. This year's topic was "Creating a self sufficient system within the home which conserves, recycles and reuses all existing water sources." Each team had a dedicated professional engineer who has worked with them for the past 3 or 4 months on a weekly basis, helping them to develop their ideas. The students had the opportunity to develop a city in the SimCity 4 software, build a model of a portion of their city, write an essay of their water research and make a presentation about their city. They were judged on the content of their report and also on their presentation, and interaction with questions by the panel of judges.

The winning team of this competition receives a trip to Washington D.C to compete in the National Competition and \$300 scholarship for their school.

Many of these students came away from the program with a better understanding of the roles of engineers in their everyday lives, and also some now have an interest in pursuing careers in engineering. It is programs such as this that are a wonderful way to expose young men and women to the area of engineering as a career.



Message from the President



Engineers Unite

As some of you know, I spent most of my February out of town. From February 2nd to 17th, I was on a vision trip with the ELCA Nebraska Synod to Tanzania. Upon my return, I was in the office for a couple days before I went to Jacksonville, Florida for some meetings for another professional organization I am involved in, AREMA. Thus, I missed all of the Omaha area EWEEK activities, but I was not without engineering on either of these trips.

In Tanzania, we visited several organizations, schools, churches, and orphanages. From the roads to the buildings, I was able to view another country's, a third world country's use of engineering. It was amazing to me to see the same principles used but with different application methods.

The buildings I saw were not constructed with concrete blocks assembled in a factory or steel beams, but with materials found in the area. Some homes were made from earthen blocks, others were made with bricks formed from local base materials mixed with some cement. With such little at their disposal, the country was surviving using engineering principles. I was truly captivated by the works they were accomplishing.

When I was in Jacksonville, I was working on a committee for education and training within the railway industry. We were discussing ways to reach out to universities and the community to fill a gap of employees that is quickly approaching the industry.

Engineering is all around us. I find that I am looking at roads and buildings here in Omaha much differently after my visit to Tanzania. Take time to see the things around you in a new light, in the light of engineering.

Respectfully,

Amanda Stahlnecker

Eastern-NE SWE Section President

Board Meetings

Board meetings will be held the first Wednesday of every month at 5:30 at Lara Syrocki's house. All are welcome to attend. The officers and chairs will provide monthly reports and discuss unfinished and current business of the section. For more information contact the president, Amanda Stahlnecker, at president@swe-nebraska.org.

Tip of the Month:

From Best Care EAP HEALTHWORKS Fall 2007 Newsletter (summarized key points)

Practice the Art of Listening

Ask questions to fully understand the other person's point of view or ideas

Everyone wants to be heard, so give other the same respect

When it's your turn, you'll likely have a more captive audience

Recognize non-verbal cues – both yours and those around you

Be receptive of feedback, both good and not so good

CALENDAR OF EVENTS

Next Meeting

Joint Meeting with ASCE March 19, 2009

Location: Anthony's Steak House
7220 "F" Street
www.anthonyssteakhouse.com

Presenter: Christene Bywater, P.E.,
Project Manager
Omaha Public Power District
(OPPD)

Program: Sustainable Energy and
Environmental Stewardship at Omaha Public Power
District (OPPD)

Times: 5:30-6:30 pm - Social Hour
(Cash Bar)
6:30-7:30 pm - Dinner
7:30 pm - Meeting and Presentation

Special Note: Business Casual / Casual

Menu:

8 oz Sirloin with baked potato and vegetable and a house salad - \$24 including tax and tip

Chicken Cordon Bleu with rice pilaf and vegetable and a house salad - \$21 including tax and tip

Pecan Salmon with rice pilaf and vegetable and a house salad - \$25 including tax and tip

\$10 without meal

Biography

Christene graduated in 1998 with a Bachelor of Science Degree in Civil Engineering from the University of Nebraska at Omaha. She has worked for Omaha Public Power District since 1999 and has recently taken the position of Project Manager for the Sustainable Energy and Environmental Stewardship Division.

If you have any ideas for topics of meetings or other suggestions or know of another organization's meeting that would be of interest to the section, please email SWE_Planning@swe-nebraska.org.

Upcoming Meetings

LEED Presentation

By Elizabeth Hunter
April 21st at noon
At Leo A Daly

College Prep Event Planning Committee

Initial Meeting
April

Strategic Planning Meeting

May

"Gaining Social Capital"

Dr. Morer, College of Saint Mary
May

25th Anniversary Celebration

June

2010 WOW! That's Engineering Planing Committee

Initial Meeting
June



LADY IN THE SPOTLIGHT

Finding Your Legwarmers and Your Personality

I am not into haute couture, and I do not subscribe to fashion magazines or read them for that matter. I always dreamed of being Christie Brinkley or a runway model as a child, but I live in Wisconsin and love cheese too much to be anorexic. Instead, I have discovered my true identity as a civil engineer, math geek, and outdoor enthusiast on the side.

My cousin Katie is 16 and a fashion goddess. She gave me a pair of legwarmers for Christmas. She was excited about giving me the gift, because she had purchased it by herself after I encouraged her to buy me something "hip and in style." I was honestly so excited about the legwarmers. The pink and gray striped pattern was very eye catching and fun, but when it came down to wearing them I was clueless on how to incorporate them into my everyday wear. I also couldn't picture myself in them, especially because I had never seen anyone wear them at the college I attend, so I put them in my closet with all the other trendy items that I bought and never wore.

After looking at the legwarmers on my closet shelf everyday and some encouragement from my roommate, I decided to step out of my comfort zone and wear them to school. I thought wearing them would be a test to see if I really cared about what other people thought of me, which I honestly thought I didn't. So with a jean mini skirt, a sweater, and my snazzy pair of legwarmers I stepped out of my car and walked up the hill to the engineering building. All of a sudden I was so aware of everyone around me, looking at me, rolling their eyes at my attempt to be young and hip. I even thought I heard giggling. Wow, I couldn't believe how much I cared about what other people thought. I really thought I was over this stage in my life. Throughout the day people made comments, some were nice others were jokes, and I made jokes to cover up my embarrassment of the situation. Never again I thought, never again.

As the day went on and I walked from class to class my leg warmers began to look like bulky socks, as they kept falling to my ankles, and I was sure that this made them even more ridiculous looking. "Huh!" I gasped as I sat down in one of the chair in

the room where I study. My friend Nathan smiled and said, "Hey LyeZ!" that's my nickname he shouted, "Those look great and they have pink, so they are so you!" Nathan is one of those people who isn't scared to be himself and different than others. I smiled back; his comment comforted me. It reminded me that the reason he is my friend is because I'm "LyeZ," me, not because I am "cool." As we discussed our day, I felt better. Just as I began to start my lab report, I had the best idea of all! Instead of ditching the legwarmers like I had originally planned, I decided to engineer a way to hold them up in order to keep them from falling down when I walked. After a few ideas and failed attempts, it was found that the combination of double sided tape and some elastic did the trick. The legwarmers stayed up the rest of the day and no one knew I had a ring of double sided tape around my legs and elastic stirrups in my shoes. I was so proud of my design and the fact that my legwarmers stayed in place, that comments and stares did not bother me the rest of the day, because I was able to incorporate something I enjoy, engineering and problem solving, into my legwarmers making them truly a part of who I am.

Although I strived to be for so long, I am not your typical girl. I used to spend hours dreaming about how wonderful life would be if I "fit in" and could be like the popular girls. The irony is that life is wonderful because I don't fit into the mold of what people think I should do and wear. There is power and excitement in doing something that at first may be a little uncomfortable, different, or challenging. It helps a person discover their weaknesses, strengths, and true personality. So I challenge you now to put on legwarmers, metaphorically of course, and step outside your comfort zone. Don't be afraid to discover who you really are.

SWE Trivia

Question: The Lady in the Spotlight is someone who has been involved in our section this past year. Who is the Lady in Spotlight?

ANNOUNCEMENTS

UNL SWE BUSINESS ETIQUETTE TRAINING

UNL SWE hosted Business Etiquette Training, Wednesday, February 25th at Othmer Hall on UNL's campus. Sponsored by JEO, Cheryl Samusevich, Etiquette Solutions of Lincoln, gave a presentation on proper business etiquette giving those in attendance the extra *edge* to outclass the competition in a job interview and other business situations. UNL SWE President Erika Amborn commented, "It is so very important for us to continue to have these experiences to increase not only the skills of our members, but also to make available these types of seminars to the entire college." UNL SWE's goal of the seminar was to provide relevant experiences for students to develop their soft business skills so that they may conduct themselves properly in the business world. "We feel that events such as these are essential for our personal and professional growth," added Amborn.

Topics covered by Ms. Samusevich included Introducing Yourself and Handshaking, Proper Dress and Attire, Eye Contact, Remembering Names and Business Card Protocol. All who participated learned a great deal about how to conduct themselves appropriately in the future. Professional members in attendance felt it sent a good message to the engineers that are entering the workforce, yet it was also a good refresher after being in industry for some time. Cheryl Samusevich is trained and certified by the Protocol School of Washington®. She has a Bachelor's Degree in Education from The University of Nebraska at Kearney with over fifteen years of teaching experience and over twenty years of experience in sales and marketing. Her website is <http://www.etiquettesolutions.com>.

EWEEK

If you participated in any EWEEK activities, please send me a paragraph summarizing the event and your experience to share with the rest of the section.

LOCAL JOB POSTINGS

To post local engineering or engineering related jobs please contact our SWE section at newsletter@swe-nebraska.org.



This weekend we got a reminder that we are still in winter so be sure to keep warm and drive safely.

Answer: Elizabeth Roesler

IN THE POLITICAL ARENA

BARACK OBAMA'S RECORD ON SCIENCE (partial)

Education

Affirmative Action

In response to a question from the Association of Women in Science and the Society of Women Engineers on what his position is on anti-affirmative action initiatives, Obama said "we oppose these ballot initiatives, which would roll back opportunity for millions of Americans and cripple efforts to break down historic barriers to the progress of qualified women and minorities. We recognize the need to maximize the talent pool that the United States brings to the Science and Engineering enterprise. It would be unfortunate if anti-affirmative action initiatives distracted us from the pressing need to develop and exploit the talent of all of our citizens, including women, minorities, persons with disabilities, English language learners, and students from low income families. . . . And while Joe Biden and I support affirmative action, we also support efforts to increase opportunities for qualified men and women from low income backgrounds to attend colleges and universities – regardless of their race or gender."

Early Education

Senator Obama's Zero-to-Five Plan involves emphasizing infant education to ensure that they would be ready for kindergarten. Obama also plans to expand the Head Start Program by providing more funding.

Elementary & Secondary Education

According to his website, Obama hopes to reform the No Child Left Behind Act by supporting schools that need additional resources rather than the current policy of punishing them. Obama vows to support after school programs, summer learning opportunities, and college outreach programs. Senator Obama also says he wants to make Math and Science education a priority. He also hopes to address the drop-out crisis by passing legislation to intervene during the middle school years. Barack Obama advocated early childhood education by helping to create Illinois's Early Learning Council.^[13]

Higher Education

Senator Obama plans to propose the American Opportunity Tax Credit. This would provide a \$4,000 tax credit for higher education, ensuring that the first \$4,000 of a college education is free for most Americans. This would be paid for by increasing taxes for those who make over \$250,000 a year.

According to his education plan, Obama also hopes to simplify the process for applying for financial aid by "enabling families to apply simply by checking a box on their tax form, authorizing their tax information to be used, and eliminating the need for a separate application."

Senator Obama co-sponsored the new GI Bill would cover the full educational costs of post 9/11 veterans who served at least 90 days. The bill provides upfront tuition payments, \$1000 yearly stipend for books and supplies, and a monthly living stipend.

Obama stated the following on his website: "One of his first bills sought to increase the Pell Grant to \$5100 for low income students. Obama passed legislation to improve the Higher Education Act through his membership on the Health, Education, Labor, and Pensions committee as well."

Evolution/Intelligent Design

Obama has expressed his belief in evolution stating, in an interview with *The New Yorker* editor David Remnick, "[e]volution is more grounded in my experience than angels."^[14]

In an interview with the *York Daily Record* in March 2008, Obama addressed the topic of science and religion, saying:

"I'm a Christian, and I believe in parents being able to provide children with religious instruction without interference from the state. But I also believe our schools are there to teach worldly knowledge and science. I

believe in evolution, and I believe there's a difference between science and faith. That doesn't make faith any less important than science. It just means they're two different things. And I think it's a mistake to try to cloud the teaching of science with theories that frankly don't hold up to scientific inquiry."^[15]

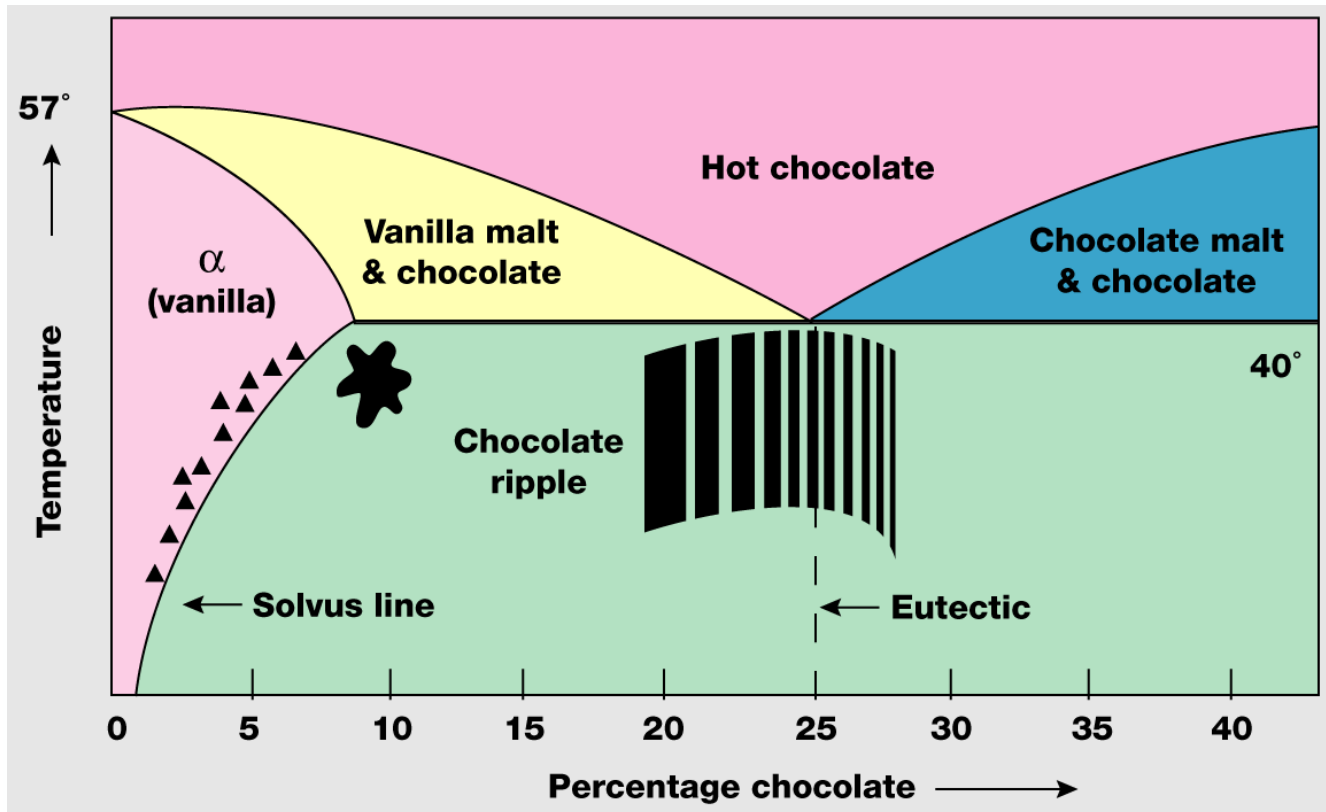
Teachers

According to his [website](#), Senator Obama wants to recruit new teachers by creating the Teacher Service Scholarships, which would cover four years of undergraduate tuition, and two years of graduate teacher education for those who want to pursue a career in teaching. He hopes to retain and support these teachers by pairing them with mentors and providing paid collaborating time to share ideas. Obama also hopes to promote innovative ways to increase teacher salary that are developed by teachers themselves.

Women in Science and Engineering

In response to a [question from the Association for Women in Science and the Society of Women Engineers](#) on the equality of Title IX funding in regards to academics and athletics, Obama gave his full support to funding Title IX, saying "Title IX, though, does not even mention sports. It applies to all educational programs that receive federal funding. If pursued with the necessary attention and enforcement, Title IX has the potential to make similar, striking advances in the opportunities that girls have in the STEM disciplines. For 35 years, Title IX has been a bulwark against sex discrimination against students and employees at all levels of education. Joe Biden and I will fight to make sure women have equal opportunities and access from prekindergarten through graduate school."

FACTS AND FIGURES



<http://science.nasa.gov/newhome/headlines/images/ms101/chocolate.gif>

PERSONAL & PROFESSIONAL GROWTH

*"Whatever you do, or dream you can, begin it. Boldness has genius and power and magic in it."
~ Johann Wolfgang von Goethe*

Are You a Professional? (from TipsForSuccess.org)

How you look, talk, write, act and work determines whether you are a professional or an amateur. Society does not emphasize the importance of professionalism, so people tend to believe that amateur work is normal. Many businesses accept less-than-good results.

Schools graduate students who cannot read. You can miss 15% of the driving-test answers and still get a driver license. "Just getting by" is an attitude many people accept. But it is the attitude of amateurs.

"Don't ever do anything as though you were an amateur.

"Anything you do, do it as a Professional to Professional standards.

"If you have the idea about anything you do that you just dabble in it, you will wind up with a dabble life. There'll be no satisfaction in it because there will be no real production you can be proud of.

"Develop the frame of mind that whatever you do, you are doing it as a professional and move up to professional standards in it.

"Never let it be said of you that you lived an amateur life.

"Professionals see situations and they handle what they see. They are not amateur dabblers.

"So learn this as a first lesson about life. The only successful beings in any field, including living itself, are those who have a professional viewpoint and make themselves and ARE professionals" — L. Ron Hubbard

A professional learns every aspect of the job. An amateur skips the learning process whenever possible.

A professional carefully discovers what is needed and wanted. An amateur assumes what others need and want.

A professional looks, speaks and dresses like a professional. An amateur is sloppy in appearance and speech.

A professional keeps his or her work area clean and orderly. An amateur has a messy, confused or dirty work area.

A professional is focused and clear-headed. An amateur is confused and distracted.

A professional does not let mistakes slide by. An amateur ignores or hides mistakes.

A professional jumps into difficult assignments. An amateur tries to get out of difficult work.

A professional completes projects as soon as possible. An amateur is surrounded by unfinished work piled on top of unfinished work.

A professional remains level-headed and optimistic. An amateur gets upset and assumes the worst.

A professional handles money and accounts very carefully. An amateur is sloppy with money or accounts.

A professional faces up to other people's upsets and problems. An amateur avoids others' problems.

A professional uses higher emotional tones: Enthusiasm, cheerfulness, interest, contentment. An amateur uses lower emotional tones: anger, hostility, resentment, fear, victim.

A professional persists until the objective is achieved. An amateur gives up at the first opportunity.

A professional produces more than expected. An amateur produces just enough to get by.

A professional produces a high-quality product or service. An amateur produces a medium-to-low quality product or service.

A professional earns high pay. An amateur earns low pay and feels it's unfair.

A professional has a promising future. An amateur has an uncertain future.

The first step to making yourself a professional is to decide you ARE a professional.

Are you a professional?