SWE-RMS Officer Elections Coming Soon

We will be having our elections for our officers for FY06 very soon.

Current Ballot:

President: Lori Stucky
Vice President: Heather Doty
Secretary: Alina Shosky
Treasurer: Keny Moreland
Council of Representatives:
Tracey Whaley and Unknown

We currently have one position open for Council of Representative. Traditionally, in our section, the past president and immediate past president run for these positions. However, Jennifer Halstead our past president will not be able to fulfill her duties because she will be relocating to Southern California for the next 2 years for work.

So, we are looking for someone to run for this office. A COR needs to be a member of the section and have an interest in the business of the society. As a COR you will represent our section to the national SWE board. This position is sponsored by the Section. So, your expenses to conference will be reimbursed. If you can not make it to conference for the COR meeting, then a proxy may attend for you. Heather Doty has volunteered to be a proxy if needed.

Currently, all offices are running unopposed. If you would like to run for an office or you are interested in the COR position please respond to this e-mail so I can get you on the ballot.

Jere Zimmermann has graciously volunteered to be our impartial election official this year. You will receive a ballot in the mail and electronically. You may vote in either format.

Submitted by Tracey Whaley

SWE-RMS Awards Dinner May 23

This year SWE-RMS will hold our annual Awards Dinner on Monday, May 23, 2005, at the Chili Pepper Restaurant (near I-25 and 23rd). We will have networking at 6pm and buffet dinner at 6:30pm. This is our chance to recognize our scholarship and essay contest award recipients, honor our hardworking SWE-RMS members, announce our new officers, and have fun before the summer gets here! This is a great way to end the SWE-RMS fiscal year. We can’t wait to see everyone!

We will also be doing the Order of the Engineer Ceremony at the banquet. Please contact Tracey Whaley if you are interested. The cost is $15 to cover the steel ring. For more information on the Order of the Engineer: http://www.order-of-the-engineer.org/.

The order of the engineer is an informal organization. There are no dues or meetings. The organization has developed a type of Hippocratic Oath for engineers. The Obligation is a statement that the engineer takes to practice engineering ethically and with responsibility to the public. The engineer wears a steel ring on the pinky finger of the working hand so that she/he is reminded of the obligation when working.

Submitted by Tracey Whaley

Time to Renew Your Membership

Renewal notices were emailed or mailed on April 15 to all professional and student members. If you did not receive a notice, watch your mail for an invoice next week. For the first time, professional members can join SWE and either the National Society of Black Engineers (NSBE) or the Society of Hispanic Professional Engineers (SHPE) at a single, discounted rate. The joint membership rate is $110 for professional membership in either SWE and NSBE or in SWE and SHPE. This offer is only available for current members during the renewal cycle so take advantage of this special discount by renewing today. Retired, waived, unemployed and professionals returning to full-time study must upgrade to full membership status in order to take advantage of the joint membership offer. (continued on page 9)
Message from the President

We are nearing the end of the SWE FY05. Soon you will receive ballots to vote for your new officers. As we close out the year, I want to thank everyone for their hard work and dedication to SWE and for making the Rocky Mountain Section a success.

We have had many successes this year. We continued to offer programs to our professional members and students with two “mini-conferences”. Last fall we conducted a Section Vitality Workshop and this spring we offered workshops for professional development and networking. In October, many of us were able to attend the National SWE Conference in Milwaukee where we received Second Place in the Exxon Mobile Career Guidance Award and received $500. Through the spring the section has been very active but it was all “behind the scenes”. We offered our scholarships to high school students and conducted our Essay Contest for 6th graders. Each of these programs is successful because of our members volunteering to judge and evaluate. We also are administering over 200 Certificates of Merit to outstanding high school students who excelled in math and science. Again, many of our members are volunteering to present the certificates to the students. On March 3, 2005 the third annual Girls Exploring Science Engineering and Technology Event was held. Along with our other partners SWE-RMS hosted over 800 6th and 7th grade girls as they attended workshops related to science, engineering and technology. It was a wonderful event as it was in the past and again, many of our members worked endlessly to make this the best event ever!

These are just the highlights of all your hard work. I hope that you had the opportunity to attend the Awards Banquet to meet the young women who received scholarships and the essay contest awards. We will have one more opportunity to just have fun together this summer. Save August 14, 2005 for a family picnic. The place is to be determined. We will notify you by e-mail.

Next year will prove to be even more challenging since SWE is a national co-sponsor of E-week. We plan to do some special things this year for E-week. We will be looking for a Chair and committee to prepare programs during this event. Please consider what you can do to help with SWE-RMS programs next year.

We are in desperate need of a newsletter editor. Please contact me if you are interested. We are also looking at eliminating the paper mailing of the newsletter. If you would prefer to receive the newsletter electronically please drop me a note at tracey.whaley@swe.org. We want to save as many trees a possible. But, no worries if you are not electronically inclined. We will continue to mail the newsletter to all members who would like to receive a paper copy.

Thank you for a wonderful year as SWE-RMS president. All of you make my job easy!

Tracey A. Whaley, P.E., F.P.E.

Request from the Editor

I am looking for someone to take over the newsletter at the end of June. I have been doing the newsletter for the last four years, and it’s time to move on. If you are looking for a way to be more involved, you might be the perfect candidate. Putting the newsletter together takes a few hours of time for each issue. The issues are currently bi-monthly. We currently have the generous support of Washington Group International, Inc., to handle all of the copying and mailing.

If you might be interested in taking on this role, please contact me. I can give you more information about the process then.

Tricia Schwaller
SWE-RMS Newsletter Editor

Subscribe to SWE-RMS Email

Subscribe to the SWE-RMS Email list to get the latest information on events and programs of the Rocky Mountain Section.

Be the first to know about tours, programs, networking meetings, and conferences. Be on the list. Be in the know!

To subscribe to the SWE-RMS mailing list: email listproc@lists.colorado.edu with the message:

subscribe swe-rms last name, first name

You should receive an email confirmation.

To unsubscribe, email listproc@lists.colorado.edu, and leave the subject line blank, and type the following in the body of the message: unsubscribe swe-rms
College Scholarship Winners

The college scholarship winners were chosen from 18 outstanding applicants this year. Seven of the applicants attend the Colorado School of Mines, five attend the University of Colorado at Boulder, and the others attend Colorado State University, the University of Wyoming, and the University of Denver. The most represented major was Civil Engineering, with five applicants in that field of study, followed by three each in Mechanical and Aerospace Engineering. Thanks to Denise Dulaigh, Julie Keahey, and LaToya Trotter for evaluating the applicants and choosing the winners.

Meghan Rae McKee - $1000 Lottye Miner Scholarship

Meghan has achieved a second scholarship from the Rocky Mountain SWE in 2005 having won one in 2004. Meghan is finishing her third year at the Colorado School of Mines majoring in Mechanical Engineering and maintaining a 3.81 GPA that places her in the top 5% of her class. This exceptional student wrote in her essay that her aptitude in science and math kindled her aptitude in engineering. Outside the classroom, Meghan has pursued internships to gain experience in various types of engineering. Recently, she worked for Rolf Jensen and Associates to gain knowledge and experience in the fire protection industry. She has also interned at petroleum, environmental, and wastewater engineering firms, and has learned how business and politics play a role in what engineers do. As a natural leader, she became interested in the management aspect of engineering after interacting with two women who own small engineering companies. These owners inspired Meghan to one day manage her own engineering firm.

At the School of Mines, Meghan has participated in leadership activities, such as class secretary, resident assistant, university ambassador, and freshman peer mentor. As a resident assistant, she has organized community service projects. Last year, six CSM students tutored elementary school students in reading, math, and language arts. She has also helped organize Thanksgiving dinners and food baskets for the needy.

Kathryn E. Rash - $1000 Pioneer Scholarship

Kathryn is completing her third year in a five-year program at the University of Colorado at Boulder, double-majoring in Aerospace Engineering and Anthropology and achieving a 3.9 GPA. Her goal is to research the effects of space travel on the human body and to develop technology to maintain the health and well being of astronauts while they are outside the earth’s atmosphere. She plans to earn a doctorate in space life systems and operations. To prepare herself for a career in space technology, Kathryn works at the Laboratory for Atmospheric and Space Physics (LASP) on CU’s campus as a Command Controller for the Space Flight Operations Team. She monitors three satellites (QuikSCAT, ICESAt, and SORCE) by supervising critical telemetry of flight dynamics, and power, thermal, propulsion, and communication subsystems. One of her references, a Flight Director at LASP, noted that Kathryn is doing work that operations centers typically assign to only seasoned professionals.

Outside of her studies, Kathryn has volunteered as a Student Ambassador to high school students interested in attending CU and/or majoring in engineering, and has organized study sessions for Calculus students. She is active in many professional organizations including SWE, Women in Engineering, and Sigma Gamma Tau-Aerospace (Engineering Honors Society).

Kelly Zuehlsdorff - $1000 Dorolyn Lines Scholarship

Kelly is finishing her fourth year at Colorado State University and expects to graduate in 2006. This excellent student, majoring in Mechanical Engineering, maintains a GPA of 3.91. Kelly chose the engineering field because engineers make a difference in every day life. In her essay, she notes that it is these small changes that make life more enjoyable. She is currently the President of the CSU student chapter of SWE and has been an officer since her freshman year. She coordinated the annual SWE Snow Sled Design Competition for local 4th through 6th grade girls. Kelly has volunteered as an instructor for the Saturday Morning Engineering Club, a program designed to encourage girls to pursue careers in engineering and the sciences. She is also involved with Tau Beta Pi and Pi Tau Sigma that provide weekly tutoring for entry-level physics, calculus, chemistry and engineering.

Kelly’s work experience includes inspecting charge rolls and photoconductor drums for manufacturing printers at Lexmark International, Inc. She helped one engineer design a new device for testing the concentricity of photoconductor drums. She, also, participated in an internship with the packaging division of Ball Corp. Kelly is currently doing research related to using polymers in knee implant surgery. She plans to continue her education in graduate school, with a goal of pursuing a possible career in the biomedical industry.
Freshman Scholarship Winners

The freshman scholarship winners were chosen this year from 28 eligible applicants attending 25 different high schools. The most popular projected field of study was Mechanical Engineering, followed by Civil Engineering. Nearly 80% of the applicants intend to stay in Colorado or Wyoming, with six each planning to attend the Colorado School of Mines, the University of Colorado at Boulder, and the University of Wyoming. Following past trends, 75% of the applicants were from Colorado, and 25% from Wyoming. Thanks to Lucy Burris, Denise Canfield, Andrea Knight, Denise Pape, Jackie Schirmer, Tricia Schwaller, Emily Skalsky, Kara Sobieski, Jennifer Stamile for evaluating the applicants and choosing the winners.

Andrea Stephens - $500 Miner and Miner Scholarship

Andrea is graduating first in her class from Elbert High School in Elbert, CO and will attend the Colorado School of Mines. She is planning to major in Chemistry and/or Electrical Engineering. She has received several academic awards, and has a weighted grade point average of 4.2. Andrea is very active in her school and community. She has participated and lettered on every sports team offered at her high school, and even runs cross country track for a neighboring school. She has also been involved with the National Honor Society, the Spirit Squad, Prom Committee and the school Leadership Committee. In her community, she volunteers extensively through her church, providing youth leadership to middle school teens, and participating in various Missions. Last summer, she was part of a team that built a home for a family in Mexico. Andrea says she would love to pursue the family business of electrical engineering because it gives her excitement.

Adrienne Watral - $500 SWE-RMS Scholarship

Adrienne is graduating first in her class from Lyons Middle-Senior High School in Lyons, Colorado. She will be attending the Massachusetts Institute of Technology and plans to major in Mechanical Engineering. Adrienne has a straight-A average, including several honors and advanced placement courses.

She is a leader in her school and community, holding various student council positions, being on the yearbook staff, playing varsity volleyball, starting a local Habitat for Humanity chapter, participating in Girls’ State, tutoring, and more. Adrienne's Lego Aircraft design won top honors at the University of Colorado's High School Honors Institute in Engineering and Applied Science. This program solidified her passion for science and engineering and amplified her desire to create. She does indeed possess creative traits - Adrienne earned her place in the Crayola Hall of Fame for naming the Crayola color Macaroni and Cheese, when she was in first grade.

Congratulations to all of the SWE-RMS Scholarship Winners!

Submitted by Barb Kontogiannis and Mary Ann Tavery

From the Secretary

It has been brought to our attention that some members would prefer to receive the SWE-RMS newsletter in electronic format only. If you would like to opt out of the paper mailing, please email Heather Doty at heather.doty@swe.org with the email address you wish to have your SWE newsletter delivered to.

Also, please take a moment to go on the SWE website and update your contact information in the member directory. We use the member directory to update our mailing lists, both postal and electronic. To get to the member directory:

2. Click on “Member Log-in” in the upper right corner. If you don't remember your login information, you may click the link at the bottom of the window to have it emailed to you.
3. After you have logged in you will have access to the “Member Services” link on the left near the bottom of the page. From here you can renew your dues online, update your contact information, and request a SWE email alias.

Submitted by Heather Doty, SWE-RMS Secretary

Tietjen Rebuts Article about the “Woman Scientist”

SWE-RMS member and professional engineer Jill Tietjen has issued a rebuttal to an article in the April 14, 2005, issue of Electronic Design magazine. The original article was “What's All This ‘Woman Scientist’ Stuff, Anyhow?” by Bob Pease. You may find Jill’s response “Yes, Engineering Is A Woman’s Job” at http://www.elecdesign.com/Articles/ArticleID/10117/10117.html. There are many comments on the website in response to both articles.
Member Profile:  
Katheryn Jarvis Coggon

City of residence: Denver

Family: Husband, Brian; children Roark (age 4) and Monet-Elisse (age 6 months); cat Indra (Siamese)

Member grade: Professional

How long have you been a member of SWE?

original member 1988-1991, re-joined in 2001

How did you become involved in SWE?

I saw an article in the Denver Post about the national conference here in Denver and realized I missed being a part of SWE. I contacted the membership rep (then Jennifer Halstead) and started attending social events, then joined shortly thereafter.

What positions have you held?

I volunteer for many things but have been Essay Contest Chair for two years.

What have you enjoyed most about SWE? Why?

The mission and the people. SWE-RMS is particularly true to the mission of SWE to bring engineering, science and technology to young women in the region. We have several programs intended to introduce middle and high school girls to our profession and instill in them some excitement about pursuing careers in engineering or related technical fields. That mission appeals to me, making it easier to volunteer my time to the organization.

In addition to helping young people discover engineering, SWE-RMS consists of some wonderful professional women. I have enjoyed getting to know and become friends with many of the members and look forward to more of the same in the future.

What is your current occupation/title?

I am a lawyer at Holme Roberts & Owen LLP where I practice "high tech" litigation, mostly environmental and intellectual property litigation.

How did you get to that position?

After engineering, I went to law school for three years, held a position with the state Air Pollution Control Division, and then started with HRO. As a lawyer, I had a lot of freedom to determine which area of the law in which to specialize. I focused in law school on environmental law because it was a natural fit after engineering. A couple of years ago I decided to add patent litigation to the mix. Both areas allow me to use my engineering training and problem solving skills.

What was your college training?

I have a B.S.E. in Nuclear Engineering.

How did your college training help you get to that position?

In my legal practice, I work with experts and many technical issues on a daily basis. My undergraduate engineering experience provides a great base for learning the new technical fields. As compared with my colleagues, I typically have a shorter learning curve.

Any words of wisdom for college students entering the work force:

Find something you like to do, and when you see new opportunities to grow, pursue them. Don't let someone else dictate how you will pursue your career, but instead determine the focus you want and then find a way to make it happen.

Hobbies/interests:

Anything outdoors (running, biking, swimming, hiking, camping, gardening); playing with my children; reading science/fantasy fiction; and cooking/eating. I also like to travel internationally, especially SCUBA dive destinations.

Report from National Student Section Vitality Committee

The Student Section Vitality Task Force is very excited to announce that it will become a SWE Committee effective July 1, 2005. The new committee will be called the Collegiate Leadership Coaching Committee (CLCC). The CLCC is currently recruiting new members to serve on region teams in all areas of the country. If you are interested in joining the CLCC, please contact Danielle Forget Shield at studentsectionvitality-tf@swe.org.
**Undergraduate SWE Members Needed for Judging**

We are looking for SWE members interested in judging written reports for the Technical Presentation Competition at the region level. As a judge, you would receive electronic copies of up to 7 reports no later than June 5th and scores will be due June 24th. Judging criteria and scoresheets are provided. Judges with a variety of backgrounds are desired, with ranges in discipline and experience. Email heather.doty@swe.org if you are interested.

TPC is open to all undergraduate SWE members. The region winner receives a travel grant to the National Conference to compete in the national competition. If you have connections with any SWE student members, please encourage them to enter!

Submitted by Heather Doty

**Report from National Career Guidance Committee**

**Chairperson: Carol Lehr**

Last month we asked readers to send us their comments about some of the reasons why there are proportionally more boys than girls involved in math and science-related curriculums. We received several responses to the question: "Should society view the fact that women in the U.S. are underrepresented in the fields of math and science as a serious problem?" Here are some of the responses:

"Women need to be more evenly represented in math and science. Anything that encourages a diverse work place will only benefit employers in the long run. People with different backgrounds lead to new views on old ideas." and "Lack of diverse representation forces stagnancy, which leads to lower U.S. quality of inventions."

Another reader wrote about the teachers and guidance counselors that contributed to her decision to choose engineering. She mentioned that she attended grade schools that had good math and science teachers, whereas her younger siblings did not. She felt that if "children have a good math teacher, they are more likely to enjoy math." The same is true with science or any other subject. She spoke about her high school guidance counselor that encouraged her to attend a "Women in Engineering" seminar. She writes, "I didn’t have much of a clue on what engineering was all about, but the Women in Engineering seminar and the good math and science teachers I had made all the difference."

We also asked you to tell us about some of the Career Guidance-related activities that have helped your section to inspire young women in your area:

The Detroit Section described a Career Day at a high school where local high school students could learn about a variety of professions. They also participated in a Diversity Career Day for girls, Hispanic, and African American children. “In both cases, SWE put forth a strong presentation on why we need more engineers and fun things that young people can do when they become engineers.”

And on the other side of the country, SWE-Los Angeles (LA) teamed up with SHPE-LA and NSBE-LA to hold an essay contest with the theme “Why I Want to be an Engineer.” The contest was held at schools in three different areas of Los Angeles. The winners were announced during Engineers Week at each school. Essay writers also had an opportunity to tour the Jet Propulsion Lab in Pasadena and get a chance to talk one-on-one with engineers.

Thank you all for your responses and involvement in K-12 activities. I would like to encourage all sections to submit their programs for one of the Career Guidance Awards this year.

Taken from http://www.swe.org/E-newsletter/

**Engineers Week 2006**

On Wednesday, May 4, SWE formally announced its EWeek 2006 sponsorship with Northrop Grumman Corporation. This is an incredible opportunity for SWE to bring awareness to its mission, programs, and passion like never before. Also announced was the chosen program platform, Connecting Educators to Engineering. The main goal of the program is to raise awareness for the societal benefits of the engineering profession to middle school educators who represent the most sustained and consistent channel to young minds. Connecting Educators to Engineering will present educators with tools to give engineering a prominent position within their middle-school curriculum as well as a mentoring component for direct access to engineers throughout the country. For continued updates on SWE and Northrop Grumman's exciting sponsorship visit www.swe.org/eweek.

Taken from http://www.swe.org/E-newsletter/
Rae Ann Dougherty Named to US-Egypt Presidents’ Council
Denver Business Consultant Will Work to Promote Business Opportunities Between US and Africa’s Second Largest Economy

DENVER, November 12, 2002 – Rae Ann Dougherty, president and CEO of Denver-based management consulting firm R&R Strategies, Inc. (RRSI), has been appointed by the Bush Administration to serve on the US-Egypt Presidents’ Council. Dougherty is one of 14 US appointees to the council, and the only one from Colorado. In addition to the US delegation appointments, there are 13 Egyptian appointees named by Egyptian President Hosni Mubarak.

Dougherty, whose firm provides business and management consulting services, brings to the Council a rich understanding of organizational structure, management, and performance. Currently, she serves a variety of large and small corporate clients.

“I am extremely pleased and honored to be appointed to the US-Egypt Presidents’ Council and hope that my mix of corporate and entrepreneurial experience will add value to the Council,” said Dougherty. “There is a tremendous economic opportunity in Egypt as it is both a strong and growing economy and I welcome the challenges of promoting these opportunities in the United States and here in Colorado.”

Currently, Egypt is the 39th largest economy in the world and the second largest in Africa as measured in Gross Domestic Product, with annual output of $89.1 billion. The Egyptian economy has posted healthy 4.4% growth between 1990 and 1999, outpacing the United States with a growth rate of 3.3% during the same period.

“With a background that includes working in entrepreneurial ventures and large, global corporations, I think I bring a unique perspective to the Council,” Dougherty added.

Dougherty expects business opportunities between the US and Egypt to be greatest in agriculture, technology, tourism and Egyptian cotton, as Egypt is the 44th largest goods trading partner of the US. In 2001 U.S. goods exports to Egypt totaled $3.6 billion. U.S. imports from Egypt were $882 million. Egypt is one of the biggest customers in the world for U.S. corn and wheat, purchasing $786 million in these products in 2001. Other major U.S. exports to Egypt in 2001 include aircraft ($828 million), machinery ($404 million), plastic ($286 million), and vehicles ($240 million).


The US-Egypt Presidents’ Council was established in 1995 under US President Bill Clinton’s administration and renewed in 2001 by President Bush. The Council works to strengthen the long-standing partnership between the two countries around strategic, economic, commercial and technology initiatives.

Note: Just recently, Rae Ann is only now returning to the USA. Recently the US, Israel and Egypt signed a significant trade treaty. She was heavily involved in the process as a member of the US-Egypt Presidents’ Council. It is very exciting to see this type of accomplishment that will increase the standard of living of individuals in the region while enhancing stability and peace through trade and commerce. Below is a summary of the treaty and its implications.

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QIZ Agreement: A Milestone for Egypt

On December 14, 2004 in Cairo, U.S. Trade Representative Robert B. Zoellick, Egyptian Minister of Foreign Trade and Industry Rachid Mohamed Rachid, and Israeli Deputy Prime Minister Ehud Olmert, signed an agreement to create the first Qualifying Industrial Zones (QIZs) in Egypt. This agreement allows Egypt to export to the U.S. duty-free certain Egyptian goods that to the U.S. duty-free. The agreement is of both economically and symbolically important for Egypt. It comes at a crucial time for the Egyptian apparel industry, which faces increased competition from Asia, and will create new opportunities for other Egyptian exports. The agreement also marks a major significant improvement in US-Egyptian trade relations after following a very difficult 18-month period.

Under the agreement, three QIZs have been designated in Egypt -- the Greater Cairo Zone; the Alexandria Zone; and the Suez Canal Zone, which includes an industrial area of
in Port Said. Under the QIZ program, manufacturers must add at least 35 percent to the value of an article produced within these zones to qualify for duty-free access to the U.S. market. In the case of Egyptian QIZs, this 35 percent minimum can include content originating from Israel, Egypt, or the U.S.

Furthermore, to qualify for QIZ status, at least 11.7 percent of a product’s content must come from Israel. This requirement is intended to promote trade and cooperation between Egypt and Israel, and thereby contribute to peace and economic growth in the region.

Jordan, which implemented a similar agreement in 1998, has benefited greatly from QIZs. Considered the country’s strongest engine for growth, Jordan’s QIZs have so far generated an estimated 35,000 jobs, primarily in the textile and apparel manufacturing sector.

Similarly, it is Egypt's textile and apparel industry which stands to gain the most from the QIZ initiative, particularly due to the currently high U.S. apparel tariffs on imported garments (up to 35% in some cases), the positive reputation the industry has gained through the use of Egyptian cotton in the global market, and the vertical integration this well-established industry already enjoys in Egypt.

The QIZ agreement comes just in time. Under the WTO Agreement on Textiles and Clothing, trade quotas on apparel were scheduled to expire January 1, 2005. As a result, Egyptian apparel exporters anticipate fierce competition from low-cost Asian manufacturers who will no longer face quota restrictions in the U.S. market. The duty-free status of Egyptian QIZ exports will ensure Egyptian apparel exports can remain competitive.

In fact, with a QIZ agreement in effect between Egypt, Israel and the U.S.A., some expect Egyptian exports of woven and knitted apparel to the U.S. are expected to exceed US$ 2 billion. Asian foreign investments in Egypt, particularly in the apparel sewing sub-sector, are also expected to increase as investors take advantage of the Egypt’s duty free status and relatively low labor costs, energy and infrastructure. With the only vertically integrated textile industry in the Middle East and North Africa, Egypt is positioned to take full advantage the benefits of QIZs. It is the only country in the region with available raw material (Egyptian cotton), a spinning and weaving industry, a dyeing and finishing industry, and an apparel and home textile manufacturing industry.

Other Egyptian products stand to benefit from the QIZ agreement as well. As Minister Rachid noted, Egypt is keen to diversify its exports to the U.S. in areas such as furniture, leather, and other industrial products, and has programs in place that will promote this expansion.

### Two Professional Development Programs Now Available

#### Mentoring Connection – Being and Finding the Perfect Protégé
Thursday, June 2, 2005 Noon PST/2:00 pm CST/3:00 pm EST. Register today for the one-hour Web seminar - www.swe.org/webmentor

Mentoring relationships can be a key factor to your personal and professional growth if you can gain the full benefits from the experience. Spend an hour with Florence Stone, author of The Mentoring Advantage: Creating the Next Generation of Leaders and learn ways to leverage and find your key mentoring experience. Ms. Stone will spend time on what to look for when searching out a protégé or a mentor and then move on to tools and techniques for making the relationship work. By realizing the full benefits of a mentoring relationship you can be put on the path to becoming or creating a next generation leader.

For more detailed information, visit the Professional Development programs section of the Web site.

#### Bias-Free Leadership – Your Competitive Advantage
A one-day seminar sponsored by the Society of Women Engineers, the National Society of Black Engineers (NSBE), the Society of Hispanic Professional Engineers (SHPE), and Abbott Laboratories for middle level managers.

June 23, 2005 8:00 am - 4:00 pm Register at www.swe.org/biasfree

Bias in the workplace has for too long been misunderstood, misdefined, and misdiagnosed. This involving and informative workshop breaks new ground as it takes a fresh look at what bias is, how it impacts our leadership abilities, and, most important, what to do about it. From identifying our hidden “Guerilla Biases” to emphasizing the fact that all groups – men or women, gay or straight, black or white, native-born or immigrant – are capable of bias, Dr. Thiederman generates new thought on a subject that impacts our lives, our diversity efforts, and the success of our organizations. For full details, visit the Professional Development programs section of the Web site.

*Taken from http://www.swe.org/E-newsletter/
The Exam

The following concerns a question in a physics degree exam at the University of Copenhagen:

"Describe how to determine the height of a skyscraper with a barometer."

One student replied:

"You tie a long piece of string to the neck of the barometer, then lower the barometer from the roof of the skyscraper to the ground. The length of the string plus the length of the barometer will equal the height of the building."

This highly original answer so incensed the examiner that the student was failed immediately. He appealed on the grounds that his answer was indisputably correct, and the university appointed an independent arbiter to decide the case. The arbiter judged that the answer was indeed correct, but did not display any noticeable knowledge of physics. To resolve the problem, it was decided to call the student in and allow him six minutes in which to provide a verbal answer which showed at least a minimal familiarity with the basic principles of physics. For five minutes the student sat in silence, forehead creased in thought. The arbiter reminded him that time was running out, to which the student replied that he had several extremely relevant answers, but couldn't make up his mind which to use. On being advised to hurry up, the student replied as follows:

"Firstly, you could take the barometer up to the roof of the skyscraper, drop it over the edge, and measure the time it takes to reach the ground. The height of the building can then be worked out from the formula \( H = 0.5gt^2 \). But bad luck on the barometer.

"Or if the sun is shining you could measure the height of the barometer, then set it on end and measure the length of its shadow. Then you measure the length of the skyscraper's shadow, and thereafter it is a simple matter of proportional arithmetic to work out the height of the skyscraper.

"But if you wanted to be highly scientific about it, you could tie a short piece of string to the barometer and swing it like a pendulum, first at ground level and then on the roof of the skyscraper. The height is worked out by the difference in the gravitational restoring force \( T = 2\pi\sqrt{\frac{l}{g}} \).

"Or if the skyscraper has an outside emergency staircase, it would be easier to walk up it and mark off the height of the skyscraper in barometer lengths, then add them up.

"If you merely wanted to be boring and orthodox about it, of course, you could use the barometer to measure the air pressure on the roof of the skyscraper and on the ground, and convert the difference in millibars into feet to give the height of the building.

“But since we are constantly being exhorted to exercise independence of mind and apply scientific methods, undoubtedly the best way would be to knock on the janitor's door and say to him 'If you would like a nice new barometer, I will give you this one if you tell me the height of this skyscraper.'"

The student was Nils Bohr, the only Dane to win the Nobel prize for Physics.

Time to Renew Your Membership (continued from page 1)

Students, if you have graduated in the last 12 months or will graduate by June 30, 2005, and are not continuing your education at this time, please upgrade your membership to professional status. Dues are the same for a student upgrade or renewal. Simply click on [www.swe.org/renew](http://www.swe.org/renew) to submit your renewal/upgrade. Questions regarding your membership should be forwarded to [hq@swe.org](mailto:hq@swe.org).

Taken from Cassida’s Corner on [http://www.swe.org/E-newsletter/](http://www.swe.org/E-newsletter/)

(Cassida Razor is membership manager, staff liaison to the Membership Committee, as well as registration manager for the National Conference.)

Emerging Leaders Awards Deadline Extended to May 31

You now have a few extra weeks to get your Emerging Leaders Award nominations in! These awards recognize the accomplishments of mid-career women who have demonstrated outstanding technical excellence in a variety of areas. Remember to keep your information on your nominee down to five pages or less. If you have any questions or are interested in judging this exciting awards category contact the committee chair at [awards-chair@swe.org](mailto:awards-chair@swe.org).

Taken from [http://www.swe.org/E-newsletter/](http://www.swe.org/E-newsletter/)

Region I will host its conference

March 3 & 4, 2006, (proposed dates) at Kansas State University, Manhattan, Kansas.
CU-Denver Continuing Engineering Education Program

July 2005

Essential Project Management
In today’s fast paced environment, people are doing more with less. Since many employees are now wearing several different hats, they need to manage their tasks and time efficiently. Additionally, management expects projects to run faster, cheaper, and better than ever before. This workshop will give participants the skills, tools, and methodologies to successfully manage such projects.

This is a basic class for business owners, managers, team leaders, project managers, and project team members who are interested in or responsible for the cost, schedule, and scope of projects.

Class is scheduled Thursday and Friday, July 21 and 22, 2005 from 8:30 a.m. to 4:30 p.m. at the CU at Interlocken campus at Level (3) Communications in Broomfield. The course cost is $495 and includes instructor notes. Students who successfully complete the course will earn 1.4 continuing education units.

Fall 2005 Courses
We are in the process of planning and posting our Fall 2005 courses. If you would like to be added to our mailing list for the Fall schedule or update your mailing information, contact Colleen.Anderson@cudenver.edu.

Currently scheduled are our refresher courses for the Fundamentals of Engineering and Professional Engineering Exams for Fall 2005. We will post information on topics and registration on our website shortly. Mark your calendars for these dates:

Professional Engineer’s Examination Refresher Course for Civil Engineering
Saturdays, August 6 - October 15, 2005; 8:30 a.m. - 12:30 p.m.; $525

NEW this year!
Professional Engineer’s Examination Refresher Course for Chemical Engineering
Saturdays, August 13 - October 8, 2005; 8:30 a.m. - 12:30 p.m.; $425

Professional Engineer’s Examination Refresher Course for Electrical Engineering
Saturdays, August 20 - October 15, 2005; 8:30 a.m. - 12:30 p.m.; $425

Professional Engineer’s Examination Refresher Course for Mechanical Engineering
Saturdays, August 20 - October 15, 2005; 8:30 a.m. - 12:30 p.m.; $425

Fundamentals of Engineering (FE) Examination Refresher Course
Saturdays, September 17 - October 15, 2005; 8:00 a.m. - 5:00 p.m.; $475

Professional Engineer’s Examination Refresher Course for Civil Engineering: Boot Camp
Thursday, Friday, and Saturday, October 6 - 8, 2005; 8:00 - 5:00 p.m.; $495

Would you like to receive a flyer regarding the refresher courses? Email Colleen.Anderson@cudenver.edu and notify her as to which refresher you would like.

Registration NEW this Year
We are redesigning our registration process so it is more convenient and secure for you! We will continue to receive registration forms, but DO NOT SEND PAYMENTS. The university will now automatically bill you once class has begun.

You can locate registration forms for our courses on our web site at www.cudenver.edu/engineer/cont, linked to the respective course. You may also register by phone by calling 303-556-4907.

Other News: Continuing Education in Boulder
The Division of Continuing Education and Professional Studies at the University of Colorado at Boulder offers a variety of short courses and certificates in technology and engineering fields. Some courses we’re offering this summer include MATLAB, Six Sigma Black Belt, Statistical Orbit Determination, Comprehensive XML, Web Programming with ASP, Application Development with C#, Introduction to Oracle, Computer Ethics, Security for the Home Computer User, and much more. See our newsletter at http://compapps.colorado.edu/CA_newsletter.cfm for more details and course offerings. Call 303-492-5148 to register or for more information.

Newsletter Sponsor
We thank Washington Group International, Inc., for their support in printing and mailing the SWE-RMS newsletter.
### OFFICERS

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
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<tbody>
<tr>
<td>President</td>
<td>Tracey Whaley</td>
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<tr>
<td>President-Elect</td>
<td>Lori Stucky</td>
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<td>Secretary</td>
<td>Heather Doty</td>
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<td>Treasurer</td>
<td>KenYetta Moreland</td>
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<td>Representatives</td>
<td>Sandra Scanlon</td>
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<td>Jennifer Halstead</td>
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### COMMITTEES

<table>
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<tr>
<th>Committee</th>
<th>Name</th>
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<tbody>
<tr>
<td>Archives</td>
<td>Myrian Lewis</td>
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<tr>
<td>Awards</td>
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<td>Career Guidance</td>
<td>Erica Messinger</td>
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<td>Certificates of Merit</td>
<td>Dawn Williams</td>
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<td>Family Issues</td>
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<td>Fund Development</td>
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<td>Diana Dede</td>
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<td>Investment</td>
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<td>Newsletter</td>
<td>Tricia Schwaller</td>
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<tr>
<td>P.O. Box</td>
<td>Tracey Whaley</td>
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<tr>
<td>Professional Development &amp; Programs Coordinator</td>
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<td>Publications Coordinator</td>
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<td>Barbara Kontogiannis</td>
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<td>Mary Ann Tavery</td>
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<td>Science Fair</td>
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<td>Student Section Coord.</td>
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<td>Web Page Masters</td>
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<td>CU Denver</td>
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<td>U of Denver</td>
<td>Jennifer Halstead</td>
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<td>U of Wyoming</td>
<td>Judy Nelson</td>
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<td>U of Southern Colorado (Pikes Peak Section)</td>
<td>Jane M. Fraser</td>
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### SWE Reps

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<tr>
<th>SWE Reps</th>
<th>Name</th>
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<tr>
<td>CEC (CO Eng’g. Council)</td>
<td>Kim Blair</td>
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Calendar of Events
For complete details, directions, and more, visit the RMS website calendar.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<td>May 23, 2005</td>
<td>SWE-RMS Awards Dinner, Chili Pepper Restaurant (near I-25 and 23rd), 6 p.m. (see page 1)</td>
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<tr>
<td>July 11, 2005</td>
<td>Deadline for SWE-RMS July/August 2005 Newsletter (anticipated release date: August 1)</td>
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<tr>
<td>August 14, 2005</td>
<td>SWE-RMS Family Picnic (Time and location TBA)</td>
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<tr>
<td>September 12, 2005</td>
<td>Deadline for SWE-RMS September/October 2005 Newsletter (anticipated release date: October 7)</td>
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<tr>
<td>October 28 – 29, 2005</td>
<td>NCEES Exams – October 28 (PE, PLS), October 29 (FE, FLS)</td>
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<td>November 2-5, 2005</td>
<td>SWE National Conference, Anaheim, California</td>
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<tr>
<td>November 14, 2005</td>
<td>Deadline for SWE-RMS November/December 2005 Newsletter (anticipated release date: December 9)</td>
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<td>March 3 – 4, 2006</td>
<td>Region I conference, Kansas State University, Manhattan, Kansas</td>
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<tr>
<td>April 21 – 22, 2006</td>
<td>NCEES Exams – April 21 (PE, PLS), April 22 (FE, FLS)</td>
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<tr>
<td>October 11 – 14, 2006</td>
<td>SWE National Conference, Kansas City, Missouri</td>
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Society of Women Engineers
Rocky Mountain Section
P.O. Box 260692
Lakewood, CO 80226-0692