In this SWE Space Coast Newsletter Edition:

- We’re back! Catch up on all SWE-SC news inside.
- Mark your calendars, our next book club meeting is scheduled for Sunday, April 19th.
- Read our 2009 job search survival guide inside.
- Learn the 10 financial commandments for people in their 30’s.
- Discover the top 10 online job search tips
- Can tea benefit your health? Find out in ‘Health Galore’.
- A delicious chicken saltimbocca dinner
- Plus more!!!
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Society of Women Engineers
Space Coast Section
presents:

The Power of the Women on Whose Shoulders We Stand

Where: Rockledge Country Club
When: Tuesday, March 31, 2009
Time: 6:00 PM Social
       6:30 PM Dinner
       7:00 PM Speaker: Jill Tietjen
Menu: Choice of Chicken, Prime Rib, or Vegetarian Skewer/Wild Rice
RSVP: by Tuesday, March 24th

For questions contact Kathy Whitcomb at 321-427-2481

Cost:
$30 SWE members
$35 guests
$15 Students

To place your reservation, visit http://www.swe-sc.org/
SWE-SC Members,

We have reached an important milestone for this year. Most of our member intensive outreach events are now behind us. We’ve had an incredible year so far. We had WOW! That’s Engineering in October in Palm Bay, Introduce Girls to Engineering Workshop in Cocoa Beach at the end of January, we supported FIRST Lego League competitions, judged science fairs, and held our annual Awards Banquet on Feb. 24th at the Rockledge Country Club. All were incredibly successful events! Our Fiscal Year ends on June 30th - which leaves us one more major event for the year - our Professional Development Seminar which will be held on May 14th in Melbourne, FL at the Harris Customer Briefing Center (CBC). This is our one “fundraiser” for the year - which generates the funds for all the other important things we do - those mentioned above, plus funds scholarships for HS students and Camp KSC scholarships.

The Professional Development Seminar Planning Committee has been working hard to complete the schedule. We will have two incredible keynote speakers, and many other interesting sessions for leadership, motivational, technical and Career Enhancement/Diversity tracks. Please save the date and start your campaign to attend this important event! Detailed information will be posted to our website by the end of the month.

Of course, we still have other interesting things on hand for the next few months. March 31st is our Women’s History Month Celebration back at Rockledge Country Club. We are working out the details for a tour in April, and we’ll wrap up the year with a Membership Appreciation Event. The Golf Clinic sign up continues until March 9th - and finally for those who like to read - the SWE-SC book club continues to discuss a variety of interesting books.

Finally, our nominating committee will be meeting soon to propose a slate of officers for the next Fiscal Year. We are always in need of volunteers for officer positions, committee chairs, or committee representatives. If you are interested in being more active in the section, please contact one of the nominating committee members, and they can review the different openings available.

Thanks for all the support this year.

Lori McPherson
President
Our April Book Club Meeting will be on Sunday, April 19th @ 2 PM.

"My Stroke of Insight", by Jill Bolte Taylor, PhD is short, a quick read that will leave you inspired. Order your book today so you'll have time to read it before the next book club meeting. The next meeting will be held on the patio of the River Rocks Restaurant on US 1 near Pineada Causeway (formerly Chowder's Restaurant). RSVP to lmcpherson@walchem.com by April 17th if you're able to attend.

On the morning of December 10, 1996 Jill Bolte Taylor, a 37-year-old Harvard-trained brain scientist experienced a massive stroke when a blood vessel exploded in the left side of her brain. A neuroanatomist by profession, she observed her own mind completely deteriorate to the point that she could not walk, talk, read, write, or recall any of her life, all within the space of four brief hours.

In My Stroke of Insight, Taylor shares her unique perspective on the brain and its capacity for recovery, and the sense of omniscient understanding she gained from this unusual and inspiring voyage out of the abyss of a wounded brain. It would take eight years for Taylor to heal completely.

A fascinating journey into the mechanics of the human mind, My Stroke of Insight is both a valuable recovery guide for anyone touched by a brain injury, and an emotionally stirring ...
SWE-SC News

Summer Robotics Camp registration now open!

Registration for Summer Robotics Camps in June sponsored by SWE-SC, Florida FIRST LEGO League and FIRST Robotics Team 933 is now open. Final location and fees are not available yet due to uncertainties in school availability. We are opening registration since we continue to get questions from parents looking for registration information. These camps are subject to cancellation if a school is not available for conducting the camp program.

All camps are separated by gender. Note that space for Boys in these camps is extremely limited and are expected them to fill fast, so if you have a son interested in this program, be sure to register him early.

For details, check the website at www.swe-sc.org/Robotics

We will also be adding Saturday workshops for adults interested in coaching a FIRST LEGO League Team. Registration information will be made available in April.

Continued on next slide
Introducing Girls to Engineering Workshop resounding success!!!

With over 600 girls in the 3rd to 6th grades, the halls of Cocoa Beach High School were filled with joy and excitement as the girls moved from class to class. We received many positive comments from the girls and their teachers. One girl told her teacher “This was better than my tenth birthday party at Sea World!” We have received numerous thank you notes from girls who attended who tell us they can’t wait until next year to attend. Each one has a favorite class that varied from Tool Time to Steady Hands to Designing a Candy Bag. All of the notes particularly commented on how impressed the girls were with meeting all the women engineers and finding out they could be engineers also.

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Award Banquet Recipients & Scholarship Winners

The Engineering Awards Banquet was held on February 24th at the Rockledge Country Club. The speaker for the evening was Rachael Hutter who spoke on “Engineering the Magic: Getting Fun Down to a Science at Walt Disney World.” Awards were given to:

Outstanding Woman Engineer – Wendy Martin
Distinguished New Engineer - Capt. Lindsay Mahoney
Technical Achievement - Donna Waln
High School Scholarship Award – Halei Benefield, Kelly Sue Cox, Kelly Snyder, and Katherine Ann Smith

Congratulations to our winners!
SWE-SC News (cont.)

Award Recipients:
Lori McPherson, Wendy Martin (Outstanding Woman Engineer), Capt. Lindsay Mahoney (Distinguished New Engineer), Donna Waln (Technical Achievement), Rachel Hutter, Keynote Speaker from Disney

Scholarship Recipients:
Halei Benefield, Kelly Sue Cox, Kelly Snyder, Katherine Ann Smith
ACROSS
1. A semiconductor switching device with four layers of alternating N and P-type material.
8. Transmit Incremental Tuning, abbr.
9. End Of Transmission
10. Type of Internet e-mail scheme, abbr.
12. Chemical symbol for platinum
13. Direct Digital Synthesis
16. Band between RF and BB
18. Min-to-max voltage of a waveform, abbr.
20. Army-Navy spec
21. One input to a mixer, abbr.
22. Display that came before the LCD
24. Deutsche Industrie Normenausschuss
25. An angle that has more than 90 degrees, but less than 180
26. The "M" in EMF
28. Applied Computational Sciences, abbr.
30. Be behind in phase
32. 300 Hz to 3 kHz
33. Jack Kilby's and Robert Noyce's invention that changed the world, abbr.
34. Ham abbreviation for "distant station"
36. Akin to an EE, IE, CE, AE, etc.
37. Chemical symbol for radium
38. Main brain of a computer, abbr.
40. Chemical symbol for calcium
42. Radar type used for making "blind" landings, abbr.
43. A receiver performance specification, abbr.
44. Voltage-Controlled Oscillator
45. Like a 3-way power divider, hybrid coupler, circulator, etc.

DOWN
1. End of a soldering iron
2. Web page language
3. Positive voltage lead color
4. Its chemical symbol is I
5. Official Space Shuttle designation, abbr.
6. Infinite resistance
7. Type of memory
11. Generally, the region of the radio spectrum above 1 GHz
15. Said of two functions that arrived at a common point
17. Chemical symbol for francium
19. Phase state between liquid and solid
20. Popular drafting software
21. Chemical symbol for lithium
23. Electronic assembly transport containers
24. Implement used to bore holes
27. Borland's programming language
29. Chemical symbol for californium
31. Modulation type, abbr.
33. International Amateur Radio Union
35. Transceiver, abbr.
37. Type of memory
38. Amplifier vendor in Santa Clara, CA
39. User Datagram Protocol
41. Logic family
Meet & Greet

Name: Susie C. Allen-Sierpinski

Workplace... United Space Alliance, Kennedy Space Center

Profession... Launch Operations Safety and Human Engineering

Work Description... I spend most of my time at the launch pads performing tasks in preparation for launch and post launch safing. I also conduct mishap investigations and provide recommendations for safety improvements. In addition I spend time verifying and validating human factors requirements for the Orion spacecraft.

How many years as a SWE member... I joined SWE as a student in 2001 while attending Florida Tech, I graduated in 2007 and joined the Space Coast section.

Tell us a little about yourself... I was born and raised in Nottingham, England. I moved to the US in 2000 to study Aerospace Engineering at Florida Tech, and I stayed at Florida Tech to complete my masters in Aviation Safety. Last year, I went back to school to study Industrial and Systems Engineering at UF. I have been married to my wonderful husband Paul for 4 months. I enjoy flying, scuba diving, shooting and traveling. Additionally, I am the secretary of the local section of the American Institute of Aeronautics and Astronautics.

Message to SWE Members...
In order to get the most out your membership volunteer in the education programs that SWE organizes. The dinner meeting are great for meeting professional women in the area, but actually getting involved in the community is what I find the most beneficial.
The SWE-SC Newsletter
presents:

New!!!

Travel Bug

Our newest section where your pictures are the stars!

We want to know where our members have been. Where are they going? What fun things are they up to? Send us your pictures along with a caption of picture content and your picture could be featured in a future edition of Travel Bug. To shy to submit a pic of yourself? Show us your family or a scenic shot! So take out those cameras and start snapping away!

Send your pictures to Ivette @ ivette.rivera-1@nasa.gov
Travel Bug

We want to see where you’ve been! Send us your pictures!

Ivette Rivera went to Puerto Rico and snapped this picture of El Morro Fort in the town of Old San Juan.
This Month in Engineering History

April

Here are some famous inventions that were patented in the month of April.

1766 – The first fire escape was patented. The contraption was a wicker basket on a pulley with a chain.

1849 – Walter Hunt patented the first safety pin.

1864 – The US minted the first coin with “In God We Trust” on it.

1869 – Isaac Hodgson received patent #88,711 for the “roller skate”.

1889 – Charles Hall patented an inexpensive method for the production of aluminum, which brought the metal into wide commercial use.

1920 – Elijah McCoy received a patent for an air brake pump lubricator.

1988 – Ledger & Stewart on behalf of Harvard University were issued the first patent for a new animal life form – a genetically altered mouse.

1997 – Hooshan received a patent for an automatically rinsing baby bottle
Engineering Marvels

● The International Space Station

The International Space Station (ISS) is a research facility currently being assembled in Low Earth Orbit. On-orbit construction of the station began in 1998, and is scheduled to be complete by 2011, with operations continuing until around 2015. As of 2009, the ISS is the largest artificial satellite in Earth orbit, larger than any previous space station.

The ISS is the largest and most complex international scientific project in history. And when it is complete just after the turn of the century, the station will represent a move of unprecedented scale off the home planet. Led by the United States, the International Space Station draws upon the scientific and technological resources of 16 nations: Canada, Japan, Russia, 11 nations of the European Space Agency and Brazil.

More than four times as large as the Russian Mir space station, the completed International Space Station will have a mass of about 1,040,000 pounds. It will measure 356 feet across and 290 feet long, with almost an acre of solar panels to provide electrical power to six state-of-the-art laboratories.

Fast Facts:
• About 850 clock hours of spacewalks, will be required to maintain and assemble the station.
• The ISS travels at an average speed of 17,210 miles per hour, completing 15.7 orbits per day.
• The station has been visited by astronauts from 16 different nations and was the destination of the first 6 space tourists.
Weirdest Job Seeker Stunts
by Rosemary Haefner

What would you do to get your dream job? Bribe the employer with food or gifts? Hit on the hiring manager? Become a stalker?

Job seekers will do almost anything to stand out among the competition. There is no length a candidate won't go to and no line someone won't cross in order to get a job.

Hiring managers nationwide shared the most unconventional methods job seekers used to grab their attention in CareerBuilder.com's latest survey "How to Get in the Front Door."

While some candidates' efforts were impressive -- like giving Power Point presentations, distributing portfolios on CD and working for a day to demonstrate talents -- others' were complete turn-offs.

One candidate called incessantly for weeks before and after the position was filled. Another clueless candidate asked for another interview after being told that the job was filled. One job seeker brought coffee for the entire office, while another asked the interviewer out to dinner.
Weirdest Job Seeker Stunts (cont.)

If you think that's weird, here are some of the most bizarre things job seekers did to get noticed:

- Wore a tuxedo.
- Used a celebrity official fan site as one of their portfolio accomplishments.
- Brought a baby gift to the interviewer who was pregnant.
- Sat next to the hiring manager in a church pew.
- Left Yankee tickets for the interviewer.
- Sent a nude photo of himself to the hiring manager.
- Tried to do a stand-up comedy routine.
- Waited for the hiring manager at his car.
- Came dressed as a cat.
- Said they "smiled on command."

Multiple people are vying for the same open positions in most situations. Trying something out of the ordinary to market your skills and accomplishments can give you an edge over other applicants. The key to executing effectively and making yourself memorable for the right reasons is coupling creativity with professionalism and persistence.

Rosemary Haefner is CareerBuilder.com's Vice President of Human Resources and Senior Career Adviser.
Job Search Survival 2009  
by Deborah Walker

Undoubtedly, this is the toughest year on record to land a new job. Reaching your career goal will take courage and nerves of steel. Are you up to the challenge? Here are three tips for job-search endurance that will keep you on the right track toward your employment goal.

1. **Keep your career goal realistic.**

   This is not the time to strike out in a risky career direction. Following your heart toward a career in which you have little qualifications could yield months of frustration as you find yourself competing against legions of candidates far more qualified. Unless you are in the position to hold out for a very long job search, concentrate on positions where you are best qualified.

2. **Realize it will take longer to land your next position.**

   If you’ve never experienced a lengthy job search, set your expectations out several months and practice patience. You will apply for many positions as the perfect candidate, and get no response. Expect that. You will conduct perfect interviews and hear nothing back. Expect that as well. Just remember that eventually the right company with the right job at the right time will come your way if you stay calm and focused and don’t let discouragement keep you from moving forward. Just keep with it.
3. **Write a better resume than your competition.**

Less jobs and more applicants equals extremely high competition. The quality of your resume has never been more important. For the best possible resume keep these guidelines in mind:

- Focus your resume. Avoid a one-size-fits-all resume.
- Showcase your best information in the top half of page one.
- Include accomplishments that illustrate your ability to solve today's business challenges.

4. **Sharpen your interview skills.**

With employers interviewing only the best of the best, when you are chosen to interview be sure you are your competitive best. You CANNOT “just wing” an interview and expect to be called back for a second. Today it takes solid interview strategy to earn a second round of interviews. Interview books are helpful, but they usually fall short of teaching you how to read the interviewer's mind to understand his/her hiring motivations. A study in the art of selling is more effective to achieve great interview performance. A few basic selling strategies include:

- Asking the right questions to understand the interviewer's “hot button” motivations.
- Formulate answers around the interviewer's motivations.
- Know your accomplishments well enough to weave them effectively through your interview to achieve top candidate status.
Throughout 2009, the best jobs will go to those who persevere and stay focused. Keeping your expectations and goals realistic will help prevent the emotional ups and downs. Prepare for your job search as if you were competing in a marathon. With patience, endurance and skill you will win your next job.

Deborah Walker, CCMC is a career coach helping job seekers compete in the toughest job markets. Her clients gain top performing skills in resume writing, interview preparation and salary negotiation. Learn more about Deborah Walker, career coach at: http://www.AlphaAdvantage.com
10 Financial Commandments for your 30’s
by Kiplinger’s Personal Finance Magazine

Here are 10 principles that should be carved in stone for every 30-something:

1. Pay off your mortgage debt.

Your 30s bring financial responsibilities you may not have had in your 20s, such as a mortgage or a family. Nothing frees up cash to meet those obligations like getting rid of your debt. We hope you paid off your credit cards in your 20s (if you didn't, make it a priority). Next, focus on getting rid of student loans and other nonmortgage debt, such as auto loans.

2. Kick the debt cycle altogether.

What good is it to pay off your loans only to take out another one and rack up more debt? An easy way to save for big-ticket items -- and avoid going back into debt -- is to put money you would have used for monthly debt payments and interest charges into a savings account. For instance, after you make that final $300-a-month student-loan payment, keep making an equal payment to yourself. After one year, you'll have $3,600 saved.

Continued on next slide
3. Get serious about retirement.

Basically, you need to figure out when you want to retire, how much money you want to have by then and how much money you'll need to sock away now to reach that goal. Time is still on your side -- use it! Get serious now so you can have a comfortable retirement without sacrificing too much in the meantime. Wait until your 40s or 50s and saving could become downright painful.

4. Diversify your investments.

You want to make sure your money is spread among different types of investments to protect yourself in case one sector of the market tanks. Generally, you should aim to allocate 50% to 55% of your portfolio to large companies, evenly split between growth and value; 20% to 25% to small companies, evenly split between growth and value; and 25% to foreign companies.

5. Continue to Learn.

Don't stop investing in yourself once you land a job. Keep your earning power growing through continuous education, training and personal development.
6. Protect your assets.

Even the best-laid financial plans can be derailed by an unexpected cost. So it pays to be prepared for the "what ifs" in life. For most 30-somethings, that means having adequate homeowners (or renters) insurance, health insurance and disability insurance.

It also means having an ample emergency fund. You started stocking your fund in your 20s, but by your 30s, you should have the full stash of money to cover three to six months' worth of expenses in case of a job loss, medical emergency or other surprise. (If that seems impossible right now, start with $500.)

7. Live simply.

Deferred gratification may not be fun, but adopting a simple lifestyle is one of the surest ways to meet today's needs and still reach your long-term goals. Take a look at your spending to identify areas you could trim the fat. Small sacrifices can add up to big rewards.

It's easy to get jealous of friends and family who are living larger and seem to be doing much better than you are. Remember, keeping up with the Joneses is a losing game. Someone else's success may be a facade. Tune out the financial peer pressure around you and focus solely on what you know for certain: the state of your own personal finances.
10 Financial Commandments for your 30’s (cont.)

8. Make your will known.

A will ensures your wishes are carried out should the unthinkable happen. Many assume that wills are for people who are old, rich, married or have kids. But everyone needs a will to spell out their wishes in case they die or can't make medical decisions for themselves. If you have children, make sure your will designates a guardian to care for them should something happen to both you and their other parent.


If you have children (or someone else who depends on you financially), life insurance is a must. If you were to die, you'd want to make sure they were secure. When you're in your 30s, you can get a great deal on term life insurance. You buy a policy that lasts for a certain amount of time -- say, until the kids are grown. For instance, we recently shopped for a 32-year-old nonsmoking male and found a $500,000, 20-year term life policy for as little as $275 a year.


As you become more established in life and in your finances, take the opportunity to give something back. Being charitable and socially conscious can be rewarding -- not to mention financially smart, considering the tax write-offs you get if you itemize on your returns. If the new responsibilities of your 30s have you feeling strapped, give of yourself, not of your wallet. Volunteer your time or talents for a cause you believe in. It doesn't cost a lot to make a difference.
A great way to begin sustainable living is to purchase or make natural cleaning products. Natural cleaning products clean, disinfect and deodorize the same way conventional cleaning products do except they use natural substances to accomplish this task instead of harmful chemicals and they are environmentally friendly. Natural cleaning products are readily available in most stores these days if you choose to purchase them. Be sure to look and see what the ingredients are instead of just looking at the front label. Some natural ingredients include baking soda (sodium bicarbonate), borax, cornstarch, lemon juice, mineral oil, vinegar and washing soda (sodium carbonate decahydrate). Some natural cleaning products are plant or vegetable based. If you choose to make your own, you will want to have the above items on hand as well as some pure essential oils if you wish to scent your homemade natural cleaning products.

Another advantage of natural cleaning products is that they don’t leave harmful chemicals behind. Approximately forty pounds of toxic chemicals are saved from the environment every time a single household switches to natural cleaning products. When purchasing scented natural cleaning products make sure the scent is from a plant or an essential oil, not a fragrance oil. Fragrance oils are not plant based and numerous chemicals are used in the making of the fragrance, as well as in the product, to get the scent to remain.
Tea Benefits for Women

Just three cups of tea a day can reduce the risk of breast cancer in young women. New research shows that the chances of developing a tumor drop by around 37 percent in women under 50 who drank tea at least three times daily. Older women who consumed similar amounts did not see a the same benefit; researchers theorized that the anti-cancer properties of tea may have a more potent effect on the types of tumors that tend to grow in younger women. Although the health benefits of tea are well known, they have long been considered to mostly affect heart disease. A study last year showed four cups a day could reduce your risk of a heart attack. However, other recent studies have suggested that tea can protect against skin cancer, ovarian cancer and even weak bones.
Food for Thought
“Chicken Saltimbocca”

- 6 (3-ounce) chicken cutlets, pounded to evenly flatten
- Salt and freshly ground black pepper
- 6 paper-thin slices prosciutto
- 1 (10-ounce) box frozen chopped spinach, thawed
- 3 tablespoons olive oil
- 1/4 cup grated Parmesan
- 1 (14-ounce) can low-salt chicken broth
- 2 tablespoons fresh lemon juice

Place the chicken cutlets flat on the work surface. Sprinkle the chicken with salt and pepper. Lay 1 slice of prosciutto atop each chicken cutlet. Squeeze the frozen spinach to remove the excess water. Season the spinach with salt and pepper. In a small bowl, toss the spinach with 1 tablespoon of oil to coat. Arrange an even, thin layer of spinach atop the prosciutto slices. Sprinkle the Parmesan evenly over each. Beginning at the short tapered end, roll up each chicken cutlet as for a jellyroll. Secure with a toothpick.

Heat the remaining 2 tablespoons of oil in a heavy large skillet over high heat. Add the chicken and cook just until golden brown, about 2 minutes per side. Add the chicken broth and lemon juice, and scrape the browned bits off the bottom of the pan with a wooden spoon. Bring the liquid to a boil. Reduce the heat to medium. Cover and simmer until the chicken is just cooked through, about 8 to 10 minutes. Transfer the chicken to a platter. Simmer the cooking liquid over high heat until it is reduced to about 2/3 cup, about 5 minutes. Season the cooking liquid with salt and pepper, to taste. Remove toothpicks from the chicken. Drizzle the reduced cooking liquid over the chicken and serve immediately.
SPACE COAST SECTION SWE MISSION

Our mission is to inform the community of opportunities open to women in engineering and to encourage women to enter and grow in engineering and the sciences.

Society of Women Engineers
Space Coast Section
P. O. Box 1297
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