Session Descriptions

OUR KEYNOTE SPEAKERS:

Ruth Horton

Creating a Climate for Sustainability

Program Manager, New York State Energy Research and Development Authority. Ms. Horton is a Program Manager with over 25 years experience managing energy-efficiency and transportation programs for New York State. Ms. Horton currently oversees alternative fuel deployment activities and market transformation programs for commercial/industrial customers for NYSERDA's Energy Efficiency Services Program. These activities provide financial incentives and technical information to organizations interested in adopting electric drive and alternative fuel technologies for their fleets, and to businesses to encourage the distribution and use of energy efficient building technologies.

Ms. Horton is a member of the State's Clean Fuel Vehicle Council which is working to make Governor Pataki's pledge of a 100% clean state fleet a reality. She also is current President of the Board of the Transportation Energy Partnership, a not-for-profit national organization which strives to develop a robust and sustainable market for alternative transportation fuels, clean and efficient vehicles, and advanced transportation technologies across the country.

Partha Ghosh,

Architecting a New Dynamic with Nature

Partha S. Ghosh & Associates, a global strategy & policy advisory firm. Based in Boston, Mr. Ghosh is a renowned strategist and an innovator of Business and Economic models and serves as an advisor to firms and governments world wide. Previously a partner at McKinsey & Company, he is founder/Managing director of the Strategy/Policy advisory firm Partha S Ghosh & Associates. In various leadership forums, he has chaired committees focused on state-of-the-art issues related to management and governance. On specific courses /projects he has been active at MIT and Harvard University on strategic management and policy design. Mr. Ghosh has two advanced degrees from MIT in (i) Chemical Engineering with emphasis on New Energy Systems & Biotechnologies, and (ii) Business Administration and a Bachelor of Technology in Chemical Engineering, at the Indian Institute of Technology (IIT) in Kharagpur.

SWE TRACK

11:00 am Strategic Planning

Developing a realistic schedule that supports project objectives and meets client expectations is one of the most challenging aspects of project management. This session will help you to understand and use techniques to engage your team in the processes used to develop a project schedule, regardless of the software tool used.

2:30 pm Collegiate Business Meeting

The collegiate business meeting will include brainstorming with other student members and a review of collegiate section business. The candidates for next year's Region F Collegiate Representative and Region F Newsletter Editor will also make short candidate speeches. Come prepared to share lessons learned--what does and doesn't work?--for student section membership, fundraising, outreach, and social activities. All collegiate section leaders and student members looking to improve their sections or get more involved in SWE should attend.

3:40 pm Fund Development Collegiate Sections

How does your section find the funds it needs? Explore new funding possibilities and use targeted messages aimed at the right resources. This workshop is geared toward collegiate sections and is recommended for any sections that struggle with fundraising.

4:50 pm Event Planning

Does your section want to sponsor a banquet or Girl Scout event, but doesn't know where to start? Or do you burn out your volunteers every time you host an event? Find out how to plan events such as speaker dinners, Girl Scout badge workshops, and social gatherings. You will gain tips for event planning and hear lessons learned from other sections.

PROFESSIONAL DEVELOPMENT

11:00 am Creating More Effective Graphs

This workshop will describe how to draw clear, concise, accurate graphs that are easier to understand than many of the graphs one sees today and help readers of graphs to read more critically and analytically so that they are not misled if they see graphs that are not properly drawn. The talk emphasizes common mistakes users often make that produce confusing or even misleading graphs and how to avoid these mistakes.

2:30 pm Technical Leadership Skills

The challenge our technical leaders are faced with today, is how to leverage their technical expertise to drive change and innovation while collaborating with multinational teams and clients. This challenge requires more than just business acumen and technical know how. It requires skills that can build strong client relationships as well as strong confidant teams. Whether you are in the workforce today, or about to enter it soon, these tips and techniques can assist in your growing your technical leadership abilities.

3:40 pm The Truth about Effectiveness

Let's face it, women are stress magnets – too many hats, too many demands, too little time. But what if you could spend your days not only feeling in control, but doing what you love to do? Traditional models for improving effectiveness usually offer some formula that can leave people feeling frustrated and disappointed. This workshop will explore a revolutionary approach to being effective. This is not a time management seminar – this is an opportunity to learn how to leverage your talents and strengths to gain control and create the experience of work you really want.

4:50 pm Power Plays for Women

Men and women play by a different set of rules to succeed in business. Men know the rules in business and women struggle to learn them. As women, we need to open our minds to how men think, act and win in the business world. If you want to level the playing field in the corporate world, you need to know how the game is played. Learn the rules and play their game. This session is for any woman that wants to project power, confidence and competence.

Session Descriptions

TECHNICAL

11:00 am Alternative Fuel Vehicles
This workshop will provide and overview of Alternative Fueled Vehicles including electric, biofuels, natural gas, hybrid, and fuel cell vehicles, both current and future models. This is a rapidly changing field; and it is often difficult to separate fact from fiction. The recently enacted Energy Bill of 2005 offers many opportunities for developers and users of AFVs; as well as the necessary infrastructure to support them. We will cover the economics of AFVs, and how they will fit into fleets of the future.

2:30 pm Practical Forensic Science
The increasing popularity of such television series as CSI, Law and Order, Crossing Jordan and the multitude of others included in the "forensic" genre has brought attention to the forensic and law enforcement industries. This presentation will discuss the reality of the forensic industry versus the perception brought to you by the media. Who determines what that bag of powder really is? How impaired was that driver? How do scientists extract and interpret DNA? Was that check really forged? What happens in a courtroom? The many facets of forensic science will be defined and detailed along with the variety of career options available and the typical educational requirements for such positions.

3:40 pm Earthquakes and Tsunamis
In December 2004, the world was reminded of the tremendous potential for devastation due to earthquakes and tsunamis. This session will investigate the natural Earth processes that lead to these events. Topics include plate tectonics, seismology, earthquake and tsunami causes, and specific details from the December 2004 and March 2005 Southeast Asia events.

4:50 pm New Orleans Levee Failures
Professor Tom Zimmie of RPI spent a week in New Orleans as part of an expert team investigating levee failures in the aftermath of Hurricane Katrina. "There is not one simple answer as to why the levees failed," Professor Zimmie said in a prepared statement. Professor Zimmie will discuss the New Orleans levee system and the levee failures with illustrations and photos.

SUSTAINING A HEALTHY YOU

11:00 am Smart Women are Rich Women
As smart women you have the capacity to take control of you financial future by making intelligent money related decisions. Learn about what a benefits package has to offer from insurance to retirement plans. Get information about estate planning basis (wills and heath care proxies) different investment options such as stocks, bonds, and mutual funds. In addition, find out how to plan for retirement and protect your nest egg through 401k's, IRA's, and other savings plans. This financial information will empower you to be confident about taking care of yourself financially.

2:30 pm Organic Gardening
The term "Organic" means many different things to different people. This session will provide a definition and overview of "organic" as it is generally understood by most gardeners. Topics that will be discussed include maintaining soil fertility, managing pests organically, trap crops, biological controls, companion planting, organic fertilizers, beneficial insects and making and using compost.

3:40 pm Transition to Workplace and Community
During this one-hour session, the panel of three engineers will share their experiences of transitioning into a new workplace. With the goal being to provide information that can help ease the transition as much as possible into a new workplace and community. The panelists have from less than a year of work experience to over fives years and are from varying engineering disciplines. During the session, the panelists will provide tips and advice for the audience, not only about entering the new workplace but also the community. Attendees will leave the session with a package of "workplace essentials", tidbits of information that would make any transition easier.

4:50 pm Healthy Eating
Confused about your options? Atkins, South Beach, Weight Watchers, Jenny Craig – there are a multitude of options geared to help with weight loss or encourage healthy eating. Here is a chance to get a handle on understanding what you eat and drink, your uncontrollable cravings and how shop for healthier eating.

SUSTAINABILITY

11:00 am GE Ecomagination
Ecomagination: From compact fluorescent light bulbs to solar water purification and biofuel power for rural villages in developing countries to the largest hydro turbines in the world and advanced aircraft engines, how GE is committing to solve some of the world's most pressing challenges. This session will describe GE's ecomagination program, the history of "Imagination at Work", and focus on unique products and the customer case studies that demonstrate the environmental and business impact of these technologies at work.

2:30 pm Sustainable Design and Remanufacturing
To meet the increasingly difficult environmental standards of today, a product needs to be analyzed throughout every step of its life-cycle from design to disposal. Designers are now beginning to focus on the environmental impacts a product have at all stages of its life-cycle. This presentation discusses the latest development in the sustainable design area and a key enabling technology; remanufacturing.

3:40 pm Technology to Change the World
We will examine the growth of the BigBelly™ solar-powered trash compactor, an innovative combination of well-established technologies. We will discuss the difference between technology development businesses in the clean energy sector and technology application. The business experience is profoundly different, with the BigBelly trash compactor serving as an example of applying relatively off-the-shelf technologies to a renewable energy business development effort.

4:50 pm Sustainable Design – Fuel Cell Systems
Fuel cells are highly touted for being a clean form of energy production. Simply stated, a fuel cell converts fuel into electricity, heat and water. During its operating life a highly efficient fuel cell system will decrease green house gas emissions, and decrease fuel consumption. However, the entire life cycle of the fuel cell system needs to be considered in order to provide a truly sustainable product. The challenge is to implement a product design that improves efficiency at a system level, while concurrently considering the life time of every individual component.