



THE PULSE

OF LONG ISLAND



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As all who intended known, the IEEE Long Island Section's 2015 Awards Banquet was a big hit. We had 186 attendees, and the photos should be posted before any of us is too much older. I want personally to thank all those who supported the 2015 Awards Banquet, from the nominating committee to those setting out the commemorative cups and programs at each and every table—well done!

Please note that we have a new ExCom member, Jessica Donaldson of Northrup Grumman Aerospace Systems, who has taken the Chair position for IEEE Signal Processing Society, Long Island Chapter. Please join me in welcoming Jessica.

For that matter, volunteers are crucial to the success of our Section. If you have the time, wish to work with us and are not already involved, please take a look at our section's website on IEEE.LI and browse to the societies' and committees' pages to see the volunteer positions available. I also encourage you to attend the monthly ExCom meetings; the next one is to be held on April 27th at Telephonics in Farmingdale. There is no better place to discover what is happening in the section and how you can get involved in one of the societies. Just send me an email before you attend so I can get you name added to the attendance list.

2015 also marks the 11th annual Long Island Systems, Applications and Technology (LISAT) Conference, which is being held on Friday May 1, 2015 at Farmingdale State College of the State University of New York. Please see the announcement in this edition of Pulse, review the program at the link in our [Calendar](#) (IEEE.LI) or go to IEEE.LI/lisat and follow the registration link.

Thank you again for the opportunity to serve, and please reach out to me if I can help you in any way.

John F. Vodopia

Chair, IEEE Long Island Section

chairman@IEEE.LI



THE PULSE

OF LONG ISLAND

The Pulse of Long Island is produced by the **Long Island Section** of the **Institute of Electrical & Electronic Engineers**. It is published monthly except during July & August.

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LETTERS TO THE EDITOR:

Let Your Voice Heard

The Pulse of Long Island is a newsletter for the members of the Long Island IEEE Section. You can let your voice heard by writing to the Editor. How to bring more value to our members? Interesting new technology, or a project? An issue of interest to members of the IEEE Long Island, Long Island engineers and computer professionals, or Long Island technical community at large? Write to the Pulse. Let your letter be read, and your voice heard.



HOW TO CONTRIBUTE:

Send your letters or articles via email to pulse@ieee.li.

If selected for publication, the letter or article will be edited before being published.

CONTRIBUTION DEADLINE:

20th of a month for the next month edition.

CONTRIBUTIONS FROM LONG ISLAND TECHNICAL & ENGINEERING COMPANIES:

Publish your technology related **press release** (up to one page) at no cost.

Please send the press release as a PDF file attached to email to pulse@ieee.li, addressed to the Editor, with a Subject line "Pulse -PR" followed by your company name, and the responsible contact person's name, email and phone number in the email body.

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The IEEE Long Island Section Website

The IEEE LI Section website is regularly updated to reflect recent section activity and upcoming events. Each Society and Affinity Group has a dedicated page which describes their function and includes contact information.

Visit our site at: IEEE.LI.

Consultant's Network of Long Island

The Consultant's Network of Long Island maintains a referral service of engineering, computer, managerial & technical professionals. For more information, please visit their website at:

www.consult-li.com

Membership Development

For more information on membership with the Long Island Section of the IEEE, e-mail M. Nazrul Islam at:

membership@IEEE.LI

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 <p>TECHNOLOGY AND ENGINEERING MANAGEMENT SOCIETY (TEMS) Chair: Brian Quinn Email: tmc@ieee.li</p>	<p>The Long Island Section of IEEE has 17 Chapters. Each Chapter is a technical subunit of the Long Island Section, associated with an IEEE Society. The Chapters, as well as the Section, are always welcoming volunteers. If you would like to help with any of the Long Island Chapter's steering groups, please do contact the relevant Chapter Chair, Vice Chair, or one of the Section officers.</p>		

APRIL 2015

April 1, Wednesday
*Long Island Consultants
Network Meeting*

Circuit Studies

By John Dunn
Briarcliffe College
The Great Room
Bethpage, LI
7:00 PM - 9:30 PM

April 16, Thursday
Pace Meeting

**Apollo 13
45th Anniversary**
Astronauts Jim Lovell
and Fred Haise and
NASA Flight Director,
Gene Kranz

Cradle of Aviation
Garden City, NY
6:00 PM - 10:30 PM

April 16, Thursday
*IEEE AES / AIAA /AFA
Joint Section Meeting*

**Paving the Path for
Human Space Exploration:
The Mission to Outer Space**

By Lauri N. Hansen
Bethpage Public Library
Bethpage, LI
6:00 PM - Social Time
6:30 PM - Pizza
7:00 PM - Presentation

April 21, Tuesday
*Women in Engineering &
Educational Activities
Chapter Lecture*

**A Systematic Approach To
Personal Goal Development**
By Jessica Donaldson
Farmingdale State College,
Lupton Hall, Room 247
Farmingdale, NY
3:05 PM

April 23, Thursday
*Circuits and Systems
Society Meeting*

3D Integrated Circuits,

By Emre Salman
Telephonics
Farmingdale, LI
6:00 PM - Refreshments
6:30 PM - Lecture

April 27, Monday
EXCOM Meeting

Telephonics
Farmingdale, LI
5:45 PM - Dinner
6:15 PM - Meeting

April 30, Thursday
*Product Safety
Engineering
Society Meeting*

**Calibrated Risk
Acceptability in
Medical Devices,**
By Frank O'Brien
Telephonics
Farmingdale, LI
6:00 PM - Refreshments
6:30 PM - Lecture

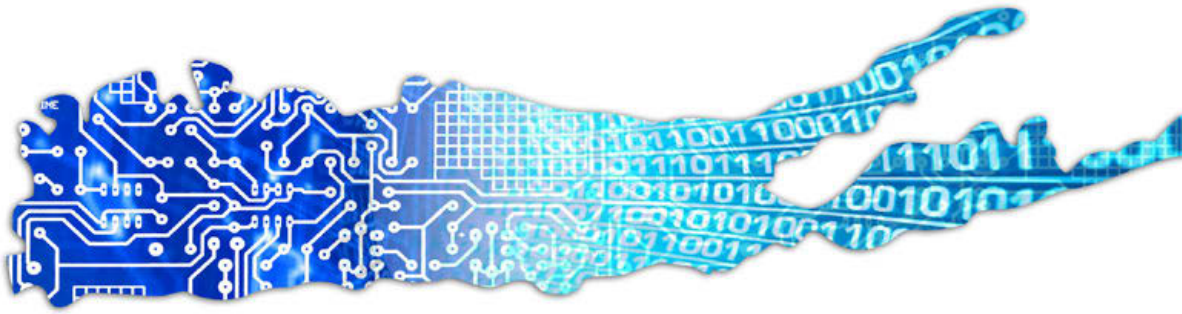
For more information about these meetings and lectures, please visit: <http://www.IEEE.LI/calendar>

MAY 2015

May 1, Friday
LISAT Conference
SUNY Farmingdale
Farmingdale, LI
8:30 AM - 5:00 PM

May 13, Wednesday
**Long Island Consultants
Network Meeting**
Briarcliffe College
The Great Room
Bethpage, LI
7:00 PM - Meeting

May 18, Monday
EXCOM Meeting
Telephonics
Farmingdale, LI
5:45 PM - Dinner
6:15 PM - Meeting



Long Island's Electrical and Electronic History

By Jesse Taub, IEEE Long Island Section Historian

We continue our survey of highlights from *Pulse* issues from 1983. The May issue announced the topic for the Section meeting. It was "Automation of Reasoning" by Dr. Larry Wos of Argonne National Laboratory. He described a program, AURA, which solved mathematical puzzles that he was attempting to use as an aid for planning and scheduling projects. This was a time when people working in the artificial intelligence field were very optimistic about its ability to take over many human mental functions. We still have a long way to go to outdo the human brain, but there has been progress - particularly in the robotics area.

The Communications Society announced a talk, "A Digital Network Strategy" by Thomas Cox of Mobil Corp. This was the early days when digital communications were starting to overtake analog. The speaker described strategies for changing to digital.

The June issue described an all-day forum organized by our Section and Long Island Industry, "The Energy Problem in Perspective". Six speakers covered many topics including conservation, environmental, fission, fossil fuels, fusion, and solar. After more than 30 years, we are still debating them.

The AP Society presented a talk, "A Limited Scan Antenna Technique" by John Stengel of Sperry. The speaker described techniques for minimizing the number of phase shifters in a steerable array when the scan angle is limited.

No *Pulse* issues were published in July and August, much like today.

The September Section meeting featured a talk by Leonard Kahn of Kahn Communications, Inc. on, "The Birth of AM Stereo". We now take stereo for granted, but there still was room for innovation in the 1980's. That issue was proud to announce that Henry Bachman, a former Section Chair, was running for Executive Vice-President of the IEEE. Henry subsequently served as IEEE President.

Rod Lowman, our former Historian, was in charge of a committee that was planning an event to commemorate the 100th anniversary of the IEEE. He was asking for volunteers. I recall attending this gala event. Rod and his committee prepared a booklet that chronicled the Section's history that was already 37 years old at that time.

The Section's October meeting was held at the Sperry Lake Success facility. It consisted of a talk, "The Integrated Motorist Information System (IMIS)" and a demonstration at the IMIS Control Center. The speakers were Philip Zove and Kenneth Dodge. This was an ambitious project to notify motorists of traffic delays. I do not know how much of this was deployed, but the frequent traffic reports on radio and TV reflect the spirit behind this type of project.

Reading these issues shows that our Section and its chapters were dealing with cutting edge technologies. Developments in AI and alternate energy, which are still of great interest, were hot topics back then as well today. It should be a good message to young engineers that if you start your career in a relatively new field that has good potential, it is likely to be still important thirty or forty years later.

Once again, I thank Rod Lowman, our former Historian for saving these old issues and James Colotti, our Webmaster, for posting many of them.

CONTINUED FROM THE MARCH EDITION OF PULSE

This month we are continuing a four-part series on Evolution of American Engineering Education started in the March edition of Pulse. The article, co-authored by IEEE Long Island Section's member Marjaneh Issapour, was presented and published on ASEE's CIES 2015 in Palm Beach CA on February 4th of 2015. The original article has been edited for Pulse. The author's references shall be listed with the last published part of the article.

Evolution of American Engineering Education

PART II

By Marjaneh Issapour
and Keith Sheppard

INTRODUCTION

Throughout the history of American engineering education, change has been the only constant. The rapid expansion of engineering education started in the land-grant schools established under the provisions of the Morrill Act of 1862 (Marcus 2005). It was then that engineering found a firm place in academia, and a four-year curriculum was adopted as the standard for an engineering degree. However, different forms of formal or informal engineering education did exist prior to the Civil War. Initially, engineering was taught informally as skills handed down from practicing engineers who were mostly European immigrants. Later it was integrated into the curriculum at academies to train engineers to meet the regional economic need. The academies offered a more formal training as part of the high school education. Furthermore; there were several patterns of formal college-level engineering courses in the pre-Civil War era. Most historians have ignored different forms of practical engineering courses offered by the antebellum colleges (Reynolds 1992).

This paper gives an overview of engineering education in America from its inception to the present. Based on the major changes of format and the curriculum content of engineering education, the historical timeline can be divided into four major segments. These segments are: 1) the period prior to Morrill Act of 1862, 2) the post-Civil War and prior to World War II, 3) after World War II and 4) the most recent movements to integrate engineering in K-12.

ENGINEERING EDUCATION AFTER THE LAND-GRANT ACT

The creation of land-grant colleges, more specifically the Morrill Act of 1862 gave a tremendous boost to engineering education. The purpose of the land-grant colleges was:

Without excluding other scientific and classical studies and including military tactic, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life (Title 7 of the United States Code 2012, April 27).

After the Civil War, the country was expanding and building railroads, roads, bridges, and ships, all of which needed to be designed and built by engineers. The land-grant colleges made it possible for interested students to get a free education in an employable field (McGivern 1960). It was by far the most effective act that Congress had passed thus far, in terms of enabling states to offer free higher education. The number of colleges offering engineering went from a few (about four by some estimates) to about one hundred by the turn of the century (Baker 1900, McGivern 1960). In addition, women started enrolling in engineering land-grant schools. For example, Olive Dennis earned her civil engineering degree in 1920 from Cornell. She then worked more than 20 years at the Baltimore and Ohio Railroad (Bix 2004).

>> CONTINUED ON PAGE 9

Evolution of American Engineering Education

<< CONTINUED FROM PAGE 8

ENGINEERING EDUCATION AFTER THE LAND-GRANT ACT

In engineering programs, laboratory courses and practical training such as serving an apprenticeship was much more important than instruction until World War I (*Grayson 1993*). Graduates were expected to join the workforce immediately, and professors were expected to have industrial experience. The research done by a small percentage of engineering professors was strictly applied. A good engineering curriculum was aimed at preparing “good practical engineers” (*Marcus 2005*).

The years of 1862-1872 was the decade of growth for engineering education. In terms of curriculum, at classical colleges the engineering programs started having a distinct difference from science curriculum. A four-year curriculum became the standard for engineering education (*Baker 1900, McGivern 1960, Reynolds 1992*).

Starting in the 1880's and moving forward there was a shift away from shops and hands-on careers and a move toward higher education. This meant the inclusion of more science and math into engineering curriculum. Some engineering faculty, such as Robert Thurston (1885), head of Sibley College of Mechanical Engineering at Cornell University, modeled their curriculum after the European engineering schools. He reduced the hours spent in the machine shop to make time for “calculations” and basic courses in science. In addition, he emphasized research but even Thurston understood the value of practical knowledge and kept a balance between experience and research (*Marston 1900*), (*Marcus 2005*).

Some universities such as Columbia and Harvard changed slowly while keeping a balance between theory and practice. Engineering faculty believed that students needed to know why things worked as much as how they worked. The engineering textbooks started reflecting such a philosophy. For example, William H. Burr at Columbia University published textbooks on stress analysis and bridge design. He presented the basic principles underlying those subjects and provided students with mathematical tools for structural analysis (*Burr 1880, Burr 1883*).

Although Burr and some of his colleagues understood the utility of mathematics and the value of scientific study, industrial employers were seeking graduates who could start working on projects right away after being hired. Therefore, practical knowledge continued to matter as much, if not more than science. At that time, research was not part of the engineering faculty's normal schedule, and they were not active in professional societies. It was not until the turn of the century that the emphasis on practice over theory started to shift (*Seely 1999*).

In the 1920's engineering schools such as the California Institute of Technology, University of Illinois, Harvard and Cornell started a stronger theoretical approach to training engineers. European engineers spearheaded this transformation. Physicists such as George E. Hale and Robert Millikan, who was the first president of Caltech, were instrumental in this transformation. Caltech built a scientific and mathematical approach to aeronautical engineering (*Curry 1991*).

In the 1930's some professors such as Westergaard of Harvard started pursuing research interests in addition to consulting for industries. Consulting for industries helped with attracting benefactors to fund the conducting of their academic research. It also had the educational benefit of integrating the most recent industrial trends into the courses. Examples of such research projects in civil engineering are the design of reinforced concrete paving slabs and the analysis of stress related to dams (*Marcus 2005, pages 168-170*).

Most of the engineering research of this era was sponsored by the affected industry or professional societies. Civil and Mechanical were the two most dominant engineering fields. Although, the theoretical approach gained momentum in the late 1930's, engineering research and integrating science and mathematics into American engineering curriculum did not become widely accepted till after World War II.

TO BE CONTINUED IN THE NEXT EDITION OF PULSE

IEEE NEW MEMBER WELCOME

THE LONG ISLAND SECTION WOULD LIKE TO WELCOME THE FOLLOWING NEW MEMBERS FOR 2015!

Kira Abigail Andrae
 Erick Arango
 Sing Man Kevin Cheng
 Ian James Christiansen
 Jessica Donaldson
 Fedrik Rebelo Durao
 Sandra Eavens
 Mustansir Faizullabhoy
 Ardith M Flory
 Brendan Anthony Fonte
 Li Geng
 Marek Kania
 Bum Sik Kim
 David Li
 Hao Li
 Tan Li
 Youxi Lin



Xiaowei Liu
 Renauldy Louis
 Eric Lu
 Paul Lester Lucas
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 Nicholas Joseph Riviezzo
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 Ashley Turato



would like to thank for its support:



NOMINATIONS SOLICITED FOR 2014 IEEE REGION 1 AWARDS

by JESSE TAUB, AWARDS CHAIRMAN

IEEE REGION 1 AWARDS

The purpose of the **Region 1 Awards Program** is to publicly recognize professional and technical excellence and major accomplishments and contributions made by **Region 1** IEEE members. There are six categories for the **Region 1 Awards**.

Region 1 of the IEEE gives awards to its members in a variety of technical, managerial and professional categories which are described below. Nominations forms and other instructions can be found on the IEEE website: www.ieee.org; type "**Region 1 Awards**" in the search box.

1A. NEW TECHNICAL CONCEPTS IN ELECTRICAL ENGINEERING

For significant patents, for discoveries of new devices or applications, and for significant reductions in components or processes.

1B. ELECTRICAL ENGINEERING PROFESSIONALISM

For personal, high level leadership in research and design performance in support of all phases of the Electrical Engineering Profession.

1C. PROMOTION OF SELF- DEVELOPMENT FOR PRACTICING ELECTRICAL ENGINEERS

By arranging courses, seminars, and tutorials to enhance the educational level and the competence of practicing electrical engineers.

1D. ENHANCEMENT OF IEEE IN INDUSTRY AND COMMUNITY SERVICE

For outstanding service to the IEEE at the Chapter, Section, Region, and national level, and for major contributions to the industry and to the community.

1E. ELECTRICAL ENGINEERING MANAGEMENT

For managerial excellence in organization, leadership, design, and development.

1F. ELECTRICAL ENGINEERING SUPPORT FOR STUDENT ACTIVITIES

For improving communications between the IEEE and a Student Branch or Student Group; or support and service to a Student Branch or Student Group; for service and leadership to the student community.

1G. THE WILLIAM TERRY DISTINGUISHED LIFETIME SERVICE AWARD

This award is intended to recognize those whose personal efforts have provided leadership, creativity, guidance, hard work, and inspiration in a wide range of IEEE activities over a long period of time.

Please send your nominations to Jesse Taub, the Section's Awards Chair at jjtaub@aol.com. They will be reviewed by the Section's Awards Committee. Nominations must be received on or before **May 15, 2015**. If you have any questions, please call **631-420-1564**.

IEEE computer society

Share Your Experience

PRESENTERS AND SPEAKERS NEEDED

Working on an interesting project? Or have an interesting topic to talk about? A startup ready to spread a word, or in need of beta testers with computer knowledge?

Computer Society Chapter invites you to present your project or your experience. For one of the upcoming meetings we'd like to mash technical and social, and have several presenters presenting interesting computer-related topics in a shorter timeframe, fostering conversation. This is an opportunity to meet each other, learn about our work and possibly identify opportunities for collaboration.

Contact IEEE Computer Society Chapter at computer@ieee.li with your suggested topic.

2015 IEEE REGION 1 MICROMOUSE COMPETITION



2015 IEEE REGION 1

ANNUAL STUDENT/YOUNG PROFESSIONAL, AND WOMEN IN ENGINEERING (WIE) CONFERENCE

April 10-11, 2015 • University of Vermont, Burlington, Vermont

TO REGISTER:

<https://meetings.vtools.ieee.org/m/31759>



THE CRADLE OF AVIATION MUSEUM & THE IEEE LONG ISLAND SECTION'S PROFESSIONAL ACTIVITIES COMMITTEE FOR ENGINEERS (PACE) ARE HAVING A JOINT DINNER & PANEL DISCUSSION ON:



THIS PRESENTATION IS PART OF THE CRADLE OF AVIATION MUSEUM'S LEGENDS OF AIR & SPACE LECTURE SERIES

APOLLO 13 45TH ANNIVERSARY

*with Apollo Astronauts Jim Lovell & Fred Haise
and NASA Flight Director Gene Kranz*

Thursday, April 16th, 2015 at 6:00 PM

ABSTRACT:

On Thursday, April 16th, the Cradle & PACE are honored to present a special evening with Apollo Astronauts Jim Lovell and Fred Haise and NASA flight director Gene Kranz, who is best known for his role in directing the successful Mission Control team efforts to save the crew of Apollo 13.

Apollo 13 lifted off on April 11, 1970 heading to a third moon landing at Fra Mauro. Two days into the mission there was an explosion in the Service Module which caused the dedicated men and women of NASA, Grumman and other companies to spring into action. The Grumman-made Lunar Module Aquarius became the "lifeboat" which served the crew until a plan could be devised to bring them back despite great challenges, the crew returned safely to Earth on April 17.

- Dinner will be at 6:00 PM followed by a Panel Discussion
- Sorry, no autographs will be permitted
- Admission to the event is \$125 per person
- Grumman employees pay \$50 and they can bring one guest at \$50

Location:

This lecture will be held at the Cradle of Aviation Museum, Charles Lindbergh Blvd in Garden City. Their website can be found at: www.CradleOfAviation.org

DIRECTIONS:

Meadowbrook Parkway to exit M4, follow signs to Museum Row/Coliseum which will put you on Charles Lindbergh Blvd, stay on Charles Lindbergh Blvd. to the second traffic light and turn right into the parking lot. For additional directions and map check: www.cradleofaviation.org/plan_your_visit/directions.html

REGISTRATION/COST:

The lecture is **FREE** but reservations are required. Call **516-572-4066 (M-F from 10AM- 4PM)** to reserve your seat. More info online at: www.cradleofaviation.org/plan_your_visit/event_calendar.html/event/2015/04/16/apollo-13-45th-anniversary-celebration-with-lovell-haise-and-kranz

IEEE SEMINAR COORDINATOR:

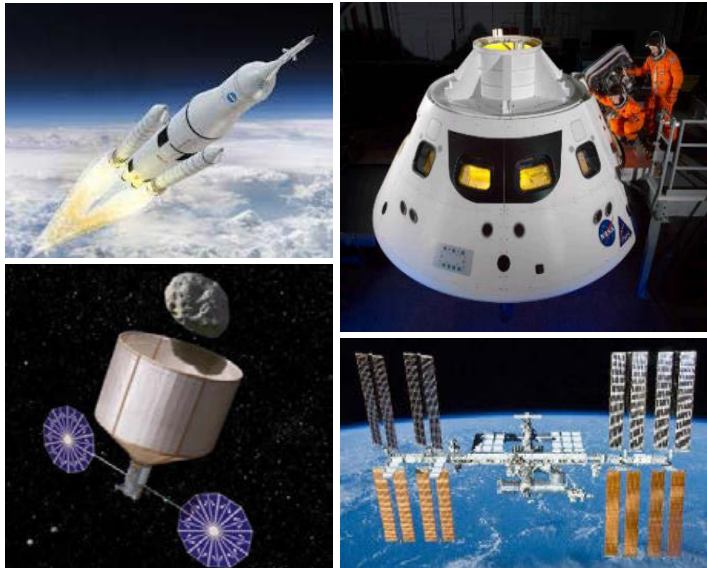
Mr. Nikolaos Golas, Chair PACE (Professional Activities Committee for Engineers), IEEE LI Section





IEEE AES / AIAA / AFA JOINT SECTION MEETING

PAVING THE PATH FOR HUMAN SPACE EXPLORATION: THE MISSION TO OCCUPY OUTER SPACE



DATE:

Thursday, April 16, 2015

PRESENTED BY:

Lauri N. Hansen

Director of Engineering,
NASA Johnson Space Center (JSC)

LOCATION:

Bethpage Public Library

47 Powell Avenue, Bethpage, NY, 11714

TIME:

6:00 PM - Social Time

6:30 PM - Pizza

7:00 PM - Presentation

COST:

Members & Guests: \$5.00

Students: Free

Lauri Hansen will discuss the challenges of human space exploration. The future of human exploration begins with earth reliant missions. These will utilize the ISS to learn how to safely execute deep space missions. In addition to research, this phase allows NASA to build international and commercial partnerships. The next step is the proving ground, which consists of cis-lunar missions, an ideal environment for testing capabilities required for long duration missions. The Orion multi-purpose crew vehicle and the Space Launch System rocket are instrumental in navigating the proving ground. These vehicles will enable missions like the Asteroid Redirect Mission, a robotic mission to redirect a near earth asteroid into a lunar orbit for a future crewed mission to explore. In order to be successful in the proving ground and become earth independent, NASA will be investing in advancing key technologies to assist human exploration. Human space exploration requires advancing spacesuits, robotics, propulsion, life support systems, and exercise devices. In order to make human exploration in deep space a reality we need to focus on earth reliant experiences, build technologies and capabilities in the proving ground, and develop planetary independence in deep space. The mission to occupy outer space begins now!

Lauri started at the JSC as a co-op student, and has held leadership positions there over the last 29 years. She has been: Deputy Manager of the ISS Vehicle Office during early ISS development; Manager, Engineering Project Management; Deputy Director of Engineering, and JSC Chief of Staff. In the Constellation Program, she was Director, Constellation Safety, Reliability and Quality Assurance, Project Manager, Altair Lunar Lander, and Director, Constellation Systems Engineering & Integration. She co-lead the Crew Survival Working Group and was the Deputy Director of Safety & Mission Assurance.

As Director of Engineering, Lauri manages an organization of approximately 3000 civil servants and contractors and is responsible for the technical engineering of the ISS program, the Orion Program, supporting the Commercial Crew Program, and developing technology and engineering domains necessary for human spaceflight to Mars. She is the recipient of numerous NASA awards.

RESERVATIONS REQUESTED RSVP BY

April 15, 2015 to: David Paris at:

davidparis@optonline.net or (516) 458-8593

Directions:

The library is west of Route 135 in Bethpage. Take Route 135 to Exit 8, then West on Powell Ave. for about 0.25 miles. The library is on the south side of the street. Park across Powell Ave., opposite the library.



**THE WOMEN IN ENGINEERING AFFINITY GROUP AND EDUCATIONAL ACTIVITIES
CHAPTER OF IEEE LONG ISLAND PRESENT THE FOLLOWING LECTURE:**

A SYSTEMATIC APPROACH TO PERSONAL GOAL DEVELOPMENT

DATE:

Tuesday, April 21, 2015

TIME:

3:05 PM

LOCATION:Farmingdale State College
Lupton Hall, Room 247**PRESENTED BY:**

Jessica Donaldson
Systems Modeling Simulation Engineer,
Northrop Grumman

COST:

This lecture is free and all are invited.
Refreshments will be served.

ABSTRACT:

Creating personal goals are often described as daunting and extremely time consuming however; it does not have to be. Each step we walk is accounted for in a directional heading of North, East, South, and West (NESW). Prior to the execution of our steps, there was a plan, a goal, a yearning to travel to a particular destination. This is where our direction is identified. Goals are constructed in a similar way. This systematic approach provides step-by-step guidelines to develop realistic personal goals. This interactive and innovative personal goal development presentation will change your life.

SPEAKER BIO:

Ms. Jessica Donaldson is a Systems Modeling Simulation Engineer for Northrop Grumman. As an engineer, Ms. Donaldson is responsible for leading development and integration system simulation frameworks and performance models. She heads collaborative efforts with multidiscipline teams to employ complex applications by simulating real-time operations and developing software that simulate the behavior of these systems. Ms. Donaldson is also the chair of Signal Processing Society, which is the Institute of Electrical and Electronics Engineers (IEEE) Long Island Chapter. Ms. Donaldson interest spans many fields, but her foundation is deeply rooted in academia. As such, she works closely with the West Point Leadership Ethics And Diversity in STEM (LEADS) program as well as volunteers in many Science, Technology, Engineer, and Mathematics (STEM) community related programs. Ms. Donaldson enjoys playing basketball, running, cooking and volunteering for veterans in her spare time.

Ms. Donaldson holds a bachelor's degree in mathematics with a minor in computer information science from the State University of New York (SUNY) Old Westbury. She has a master's degree in applied mathematics and statistics, with a concentration in operations research, from SUNY Stony Brook. Ms. Donaldson is candidate at The George Washington University in systems engineering.

LECTURE COORDINATORS:

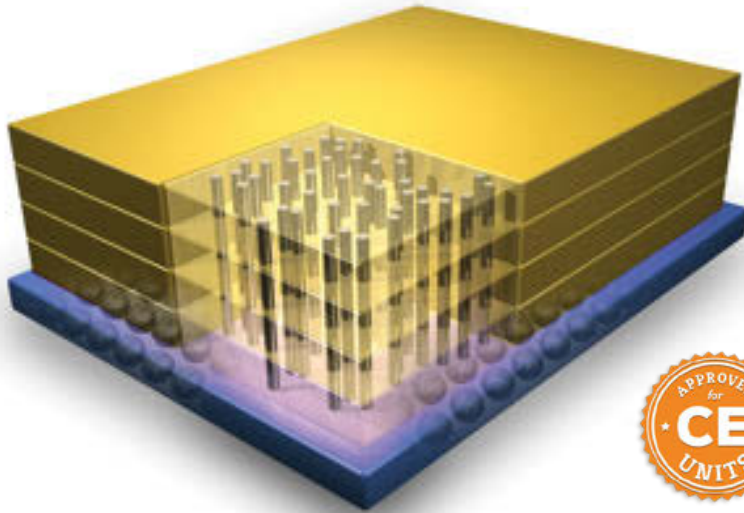
Mihaela Radu, Chair, *WIE Affinity Group, IEEE Long Island Section*

Marjaneh Issapour, Chair, *Educational Activities Chapter, IEEE Long Island Section*



THE LONG ISLAND CHAPTER OF THE IEEE CIRCUITS & SYSTEMS SOCIETY (CAS) IS PRESENTING A LECTURE TITLED:

3D INTEGRATED CIRCUITS



DATE:

Thursday, April 23, 2015

PRESENTED BY:

Emre Salman, *SUNY Stony Brook*

LOCATION:

Telephonics
815 Broad Hollow Rd., Farmingdale

TIME:

6:00 PM - Pizza , 6:30 PM - Presentation

COST:

This lecture is free and all are invited.
Pizza and soda will be served.

CEU CREDITS:

Lecture has been peer-reviewed by content experts & is entitled to award IEEE Continuing Education Units (0.2 CEUs).

ABSTRACT:

During the past two decades, the performance (both speed and power) of integrated circuits has been limited by on-chip interconnects. Three-dimensional (3D) integration has recently received considerable attention to alleviate interconnect related challenges and enhance IC performance while potentially lowering the overall cost. Major companies in the semiconductor industry consider 3D integration as the most promising enabling technology once the planar CMOS hits the 7 nm wall in the near future. This talk will introduce different types of 3D integration technology, primary challenges, and will summarize the recent research results at the Nanoscale Circuits and Systems (NanoCAS) Laboratory at Stony Brook University.

SPEAKER BIO:

Emre Salman received the Ph.D. degree in electrical engineering from the University of Rochester, Rochester, NY, USA in 2009. Since 2010, he has been an assistant professor with the Department of Electrical and Computer Engineering at Stony Brook University, Stony Brook, NY, USA, where he is the director of the Nanoscale Circuits and Systems (NanoCAS) Laboratory.

LOCATION:

This lecture will be held at Telephonics located at 815 Broad Hollow Road in Farmingdale. Pizza and soda will be served starting at 6:00 PM, and the presentation will begin at 6:30 PM. (Please try to join us early and enjoy networking with your colleagues.) The lecture is scheduled to last 60-90 minutes. A photo ID is needed to enter the facility. Please enter the facility through the front entrance. Please leave your cell phone in your car because cameras are not permitted in the facility.

COST:

Attendance is free for all (IEEE members and for non-members). IEEE members are also entitled to free CEU credit. Non-members that want CEU credit will be charged twenty dollars (please bring check payable to the IEEE Long Island Section).

REGISTRATION:

Registration is required, and is available online only. Please visit the IEEE Long Island Website www.IEEE.LI, click on the calendar page, then the registration link and fill out the form.

LECTURE COORDINATORS:

James Colotti, *CAS Chairman for the IEEE LI Section* (cas@IEEE.LI)

Alex Doboli, *CAS Vice Chairman of the IEEE LI Section* (cas@IEEE.LI)

John Dunn, *Long Island Consultants Network* (ambertec@ieeee.org)



The Long Island Chapter of the IEEE Product Safety Engineering Society (PSES) and the Engineering in Medicine & Biology Society (EMBS) are presenting a lecture titled:



CALIBRATED RISK ACCEPTABILITY IN MEDICAL DEVICES

Thursday, April 30, 2014 at 6:00 PM

BY FRANK O'BRIEN, OBCM

This lecture is free and all are invited. Pizza and soda will be served.

WHO SHOULD ATTEND:

Safety engineers and engineers involved in the design, development and/or qualification of medical devices.

WHERE:

Underwriters Laboratories,
1285 Walt Whitman Rd., Melville 11747

WHEN:

Thursday, April 30, 2015
6:00 PM - Pizza, 6:30 PM -
Lecture/Presentation
The lecture is scheduled to last 60-90 minutes

LECTURE COORDINATOR:

James Colotti, Safety Chairman of the IEEE LI Section (safety@IEEE.LI)
John F. Vodopia, Esq., Vice Chairman for IEEE EMBS, LI Section (jvodopia@ieee.org)
Glenn Luchen, Safety Vice Chairman for the IEEE LI Section (safety@IEEE.LI)

ABSTRACT:

Medical device manufacturers are required to conduct risk management in accordance with ISO 14971 and IEC 60601. After a brief review of the overall risk management process, this presentation focuses on risk evaluation. FDA and EU guidance speak to the need that risk be reduced as low as possible, consistent with generally acknowledged state-of-the-art and international standards, which take into account economic & technological constraints. The future evolution of risk acceptability as technology advances, is also discussed.

REGISTRATION:

Registration is required, and is available online only. Please visit the IEEE Long Island Website www.IEEE.LI, click on the calendar page, then the registration link and fill out the form.

SPEAKER BIO:

Frank O'Brien has been testing medical devices since 1980. Frank has been on IEC committees drafting IEC 60601 standards, including the new 3rd edition of IEC 60601-1, its Amendment 1, the home care medical device collateral standard, IEC 60601-1-11, the light ion (e.g. proton) therapy equipment particular, and the medical robotic technology technical reference and surgical particular. Prior to forming OBCM in 2004, Frank was a Manager and Senior Staff Engineer at Underwriters Laboratories, where he evaluated 1000's of medical devices. Frank earned a BS degree from Clarkson University in Electrical and Computer Engineering, and an MS degree from Stony Brook University in Technology Management. Frank is a Professional Engineer in New York State.

DIRECTIONS: Take the Long Island Expressway, the Northern State Parkway or the Southern State Parkway to Route 110. Take the North Service Road of the LIIE west (from Rt. 110) to Walt Whitman Road, turn right (North) and UL is on the left (West side). The lecture is free and all are invited, however registration is required as is a photo ID to enter the facility. *Please park in the lot behind the building and enter in the back of the building.*



IEEE LISAT 2015

11TH ANNUAL IEEE LONG ISLAND SYSTEMS, APPLICATIONS AND TECHNOLOGY CONFERENCE



FRIDAY, MAY 1, 2015

Farmingdale State College

State University of New York
ROUTE 110, FARMINGDALE, NY



7:30 AM (sign-in) 8 AM start

THREE ALL-DAY PARALLEL TECHNICAL TRACKS

See LISAT website for updates regarding content: www.ieee.li/lisat

SYSTEMS

APPLICATIONS

TECHNOLOGY

TYPICAL TECHNICAL TRACKS WILL INCLUDE A BROAD SPECTRUM OF TOPICS

PAST PRESENTATIONS INCLUDED: Ad Hoc Networking, Wireless Sensor Networks, Ensuring Security in the Internet of Things, Eye Gaze Direction Classification, Synchronization of OFDM-Based systems, HW assisted Text Steganography, Infrared Photodetectors, Low power sensor network for Agriculture, Filtering Surveillance Targets, Wireless Spectrum Sharing, Measuring benefits of Music Therapy, Gerontechnology, Telehealth Technology, Using Quantum State Entanglement for Security Key, Quantum-based Encryption, Anatomical Feature-Guided MRI, Wireless Beam Forming for Dead Spots, In-circuit quality measurement of Capacitors

CEU/PDH TRACK (6-HOUR)

0.2 CEU (2 PDH) credits available for each of 3 topics in this track. Pick & choose the topics of your interest.

EXHIBITS HALL

See exhibits from local technology companies, universities, robotics-competition winners, & professional societies.

TIME	ACTIVITY
7:30 - 8:00	SIGN IN (ALSO VIP BREAKFAST)
8:00 - 9:00	OPENING CEREMONY
8:45 - 9:15	BREAK - RH EXHIBITS AREA
9:15 - 10:45	SESSIONS 1: TECHNICAL TRACKS, PE PROF DEVELOPMENT & PRODUCT APPLICATIONS TRACKS
10:45 - 11:00	AM BREAK - RH EXHIBITS AREA
11:00 - 12:15	SESSIONS 2: TECHNICAL TRACKS, PE PROF DEVELOPMENT & PRODUCT APPLICATIONS TRACKS
12:15 - 1:15	LUNCH - RH EXHIBITS AREA
1:15 - 2:45	SESSIONS 3: TECHNICAL TRACKS, PE PROF DEVELOPMENT & PRODUCT APPLICATIONS TRACKS
2:45 - 3:00	BREAK - RH EXHIBITS AREA
3:00 - 4:30	SESSIONS 4: TECHNICAL TRACKS, PE PROF DEVELOPMENT & PRODUCT APPLICATIONS TRACKS
4:30 PM	END OF CONFERENCE

PRODUCT APPLICATIONS TRACK

PRESENTATIONS ON TOPICS OF INTEREST TO APPLICATION ENGINEERS SUCH AS:

- Power supply conversion technology
- Wireless Technologies including: WiFi, Zigbee, Bluetooth
- Interconnect technology, Custom magnetic design, Circuit protection
- IoT (Internet of Things), 3D Printing

REGISTRATION AND OTHER INFO AT LISAT WEBSITE:

IEEE.LI/lisat



IEEE

IEEE
Signal Processing Society



IEEE International Symposium on Biomedical Imaging

APRIL 16th - 19th, 2015, BROOKLYN, NY USA

Conference Chairs

Elsa Angelini

Telecom ParisTech, France
Columbia University, USA

Jelena Kovačević

Carnegie Mellon University, USA

Program Chairs

Sebastien Ourselin

University College London, UK

Jens Rittcher

Oxford University, UK

Organizing Committee

Stephen Aylward, Kitware

Dana Brooks, Northeastern U.

Qi Duan, NIH

Elisa Konofagou, Columbia U.

Jan Kybic, Czech Tech. University

Erik Meijering, Erasmus MC

Wiro Niessen, Erasmus MC

Ricardo Otazo, NYU

Dirk Padfield, GE Healthcare

Gustavo Rohde, Carnegie Mellon

Badri Roysam, U. of Houston

Ivan Selesnick, Polytech NYU

Dimitri Van De Ville, EPFL

Simon Warfield, Harvard

Ge Yang, Carnegie Mellon

Contact

d.bernstein@ieee.org

The IEEE International Symposium on Biomedical Imaging (ISBI) is a premier interdisciplinary conference encompassing all scales of imaging in medicine and the life sciences. The 2015 meeting will continue its tradition of fostering knowledge transfer among different imaging communities and contributing to an integrative approach to biomedical imaging across all scales of observation.

ISBI is a joint initiative from the IEEE Signal Processing Society (SPS) and the IEEE Engineering in Medicine and Biology Society (EMBS). The 2015 meeting will open with a morning of tutorials, followed by a scientific program of plenary talks, invited special sessions, challenges, as well as oral and poster presentations of peer-reviewed papers.

High-quality papers are requested containing original contributions to mathematical, algorithmic, and computational aspects of biomedical imaging, from nano- to macro-scale. Topics of interest include image formation and reconstruction, computational and statistical image processing and analysis, dynamic imaging, visualization, image quality assessment, and physical, biological, and statistical modeling. We also encourage papers that elucidate biological processes (including molecular mechanisms) or translational ramification through integration of image-based data. Accepted 4-page regular papers will be published in the symposium proceedings & included in IEEE Xplore.

To encourage attendance by a broader audience of imaging scientists (in particular from the biology, radiology, and physics community) and offer additional opportunities for cross-fertilization, ISBI will again propose a second track featuring posters selected from abstract submissions without subsequent archival publication.

IMPORTANT DATES

JUNE - SEPT. 2014: Tutorials, Special, Sessions & Challenges Proposal Submission

AUGUST 1 - NOV. 10 2014: 4-Page Paper Submission

NOV. 20 - DEC. 20 2014: 1-Page Paper Submission

Venue: ISBI 2015 will be held at the **Marriott hotel at the Brooklyn bridge**, located on Adams street, next to the historical Court House building, with premier shopping, dining, and attractions in the heart of the Dumbo district. A short walk will take you to eight subway lines, a city bike station or a yellow cab to explore Brooklyn or to reach Manhattan just 1.5 miles (2 subway stations) across the East river for memorable nights in the Big Apple.

biomedicalimaging.org/2015



Center for Corporate Education

 AT STONY BROOK UNIVERSITY

OSHA - SAFETY OVERVIEW

APRIL 9, 8:30 AM - 4:30 PM



Quality Management

OBJECTIVE:

There are a multitude of Occupational Safety and Health Administration, OSHA, regulations that businesses are required to comply with in the United States. Every year OSHA publishes a list of regulations that received the most citations. Several of these regulations consistently appear on this list. This seminar will provide details on these regulations and supply the information an employer would need to implement them.

LEARN TO AVOID THE MOST COMMON OSHA SAFETY VIOLATIONS

Danger to employees aside, failure to comply with OSHA safety regulations can be expensive. This workshop will prepare you to identify and remediate the most commonly cited occupational safety violations identified each year by OSHA. You will learn the details of these regulations and gain the information need to properly implement them. This valuable seminar includes an introduction to OSHA, information on the eight most commonly violated regulations, and a general overview of those related to electricity in the workplace.

WORKSHOP INCLUDES:

Introduction to OSHA, Hazard Communication Standard (Including latest revision: GHS): 29CFR1910.1200, Powered Industrial Trucks (Forklifts): 29CFR1910.178, Lock Out/Tag Out: 29CFR1910.147, Confined Space: 29CFR1910.146, Personal Protective Equipment/PPE/Respirators: 29CFR1910.132, Electrical: A General Overview, Portable Fire Extinguishers :29CFR1910.157, Walking/ Working Surfaces/Fall Protection/Ladders: 29CFR1910.22,,23,,25,,26

WHO SHOULD ATTEND:

Executives and managers from small-to-medium-size businesses and general industry

CLASS LOCATION:

Classroom 109. Research & Support Services Building in Stony Brook Research & Development Park Located on Development Drive off of Stony Brook Road.

COURSE PARTNERS:

Advanced Energy Research and Technology Center

COURSE FEE: \$325.00

REGISTER AT:

<http://naples.cc.sunysb.edu/secct/cetclasses.nsf/emo>

ABOUT THE INSTRUCTORS:

Ginger Blanda, BS Chemistry/Bus Administration, is both an experienced Environmental Health and Safety Manager and Quality Assurance Professional. In addition to documenting several procedures related to OSHA compliance and quality systems, Ms. Blanda is a certified ISO9001/ ISO14001 Auditor, a trained cGMP auditor, a Certified DOE Accident Investigator and a Green Belt in Lean Manufacturing/ 6 Sigma.

Mark Marco, BSIE, MBA, CSP, is a Certified Safety Professional, CSP with over 20 years experience. Mr. Marco is currently employed at Brookhaven National Laboratory as a Safety & Health Professional. He has managed an ISO 14001 Implementation Team, is a Certified ISO 14001 auditor and a Professional Member of the American Society of Safety Engineers.



Center of Excellence
WIRELESS AND INFORMATION TECHNOLOGY
 AT STONY BROOK UNIVERSITY

A worldwide crossroads of applied research and facilities in wireless, information technologies, and telemetry.

APRIL 21, 2015 • 8:30 AM - 2:30 PM

ENTREPRENEUR'S TOOLKIT WORKSHOP

A TECHNOLOGY-AGNOSTIC WORKSHOP TO MAKE FOR STRONGER BUSINESSES

THE NEW YORK CENTER OF EXCELLENCE IN WIRELESS & INFORMATION TECHNOLOGY (CEWIT) AT STONY BROOK UNIVERSITY



CEWIT in collaboration with the Sensor CAT is delighted to present the next in our series of "how to" Workshops for entrepreneurs, early phase companies, inventors, and anyone thinking of becoming an entrepreneur.

AGENDA

8:30 AM*	Registration, Networking, Continental Breakfast
9:00 AM-9:15 AM	Welcome. Dr. Yacov Shamash
9:15-9:30 AM	<i>Overview of Workshop and NYSTAR-SBU Aid to Companies</i> , Lawrence Weber
9:30-10:00 AM	<i>Which Type of Corporate Entity is for You?</i> , Gavin Grusd
10:00-10:30 AM	<i>Protecting Your Edge: Your Intellectual Property</i> , Anthony Bennett
10:30-10:45	Networking Break
10:45-11:15 AM	<i>What is the Profile of a Fundable Company?</i> , Lori Hoberman
11:15-11:45 AM	<i>Seed Funding, Crowd Funding</i> , Alon Kapen
11:45 AM - 12:15 PM	<i>Considerations Pursuant to Licensing Contracts</i> , Neil Kaufman
12:15 - 12:45 PM	Lunch, Networking
12:45-1:30 PM	<i>Panel: Ways to Succeed Without Securing Investment Funds</i> , Russell Artzt & Andrew Hazen
1:30-2:00 PM	<i>How to Form Your Exit Strategy</i> , Gary Kane
2:00-2:30 PM	<i>StartUP NY</i> , Leslie Whatley

CEWIT AND THE SENSOR CAT

A powerful synergy is created by collaboration of two major Centers at Stony Brook University, the Center of Excellence in Wireless and Information Technology (CEWIT), and the Center for Advanced Technology in Diagnostic Tools and Sensor Systems (Sensor CAT). A synergy helping you and your company, fueled by the inspiration and inventions of world class researchers, and New York State funds to enable us to apply their efforts to aid companies.

CEWIT & the Sensor CAT are both brought to you by:



SENSOR CAT:

A portal to Stony Brook University technology faculty members, adding financial and logistical resources to company-faculty collaborations. Whether it is helping a startup company to build its prototype, or helping a large international fill-out its product patent portfolio, CEWIT and the Sensor CAT stand ready to work together with companies to meet their mutual strategic objectives!

Date: April 21, 2015

Time: Starts at 8:30AM

Place: CEWIT Building at Stony Brook University.

Cost: Free

Register At: www.cewit.org/newsevents/EntrepreneursToolkit.html



37TH ANNUAL INTERNATIONAL CONFERENCE OF THE
IEEE Engineering in Medicine and Biology Society
 MiCo - Milano Conference Center - Milan, Italy, August 25-29 2015



37th Annual International Conference of the IEEE Engineering in Medicine & Biology Society Biomedical Engineering: a Bridge to improve the Quality of Health Care and the Quality of Life

MiCo, Milano Conference Center, Milano, Italy
 August 25-29th, 2015

The 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBS) will take place in **Milano**, Italy, in the period August 25th-29th, 2015. It will be a remarkable event as it is the first time that Italy will host a conference of the world's largest member-based scientific Society in Biomedical Engineering (BME): at the same time, it will be a unique opportunity to come in touch with the actual BME activities all over the world.

The Theme of the Conference is: **"Biomedical Engineering: a bridge to improve the Quality of Health Care and the Quality of Life"**, thus remarking the central role of BME in the improvement and innovation of health care (with a direct impact on the quality of life) but also focusing on how to reach and maintain a "wellness" status through proper and advanced technologies, devices and protocols.

The Conference will take place in **MiCo - Milano Congressi**, recently rebuilt (2011) and located in downtown Milano, among the largest conference facilities in Europe and worldwide, catering for up to 18,000 people in 70 or so fully appointed conference rooms.

THEMES

- Biomedical Signal Processing
- Biomedical Imaging and Image Processing
- Bioinstrumentation, Biosensors and Bio-Micro/ Nano Technologies
- Bioinformatics and Computational Biology, Systems Biology and Modeling Methodologies
- Cardiovascular and Respiratory Systems Engineering
- Neural and Rehabilitation Engineering
- Cellular and Tissue Engineering and Biomaterials Biomechanics and Robotics
- Therapeutic and Diagnostic Systems, Devices and Technologies & Clinical Engineering
- Healthcare Information Systems & Telemedicine
- Biomedical Engineering Education and Society
- Technologies for Active Ageing and Wellbeing

SUBMISSION DEADLINES

CALL FOR PAPERS (4 Pages)

- January 15th, 2015** – Paper Submission Start
- March 31st, 2015** – Paper Submission Deadline
- May 15th, 2015** – Author Notification
- June 1st, 2015** – Author Final Submission

CALL FOR PAPERS (1 Page)

- March 31st, 2015** – Paper Submission Start
- May 26th, 2015** – Paper Submission Deadline
- June 15th, 2015** – Author Notification
- June 30th, 2015** – Author Final Submission

PROPOSALS FOR SPECIAL SESSIONS

Workshops, Tutorials, Invited Sessions, Mini-Symposia and Special Sessions

February 15th 2015 – Proposals Deadline

embc.embs.org/2015/



37TH ANNUAL INTERNATIONAL CONFERENCE OF THE
IEEE Engineering in Medicine and Biology Society
 MiCo - Milano Conference Center - Milan, Italy, August 25-29 2015

BIOMEDICAL ENGINEERING:
 A BRIDGE TO IMPROVE THE QUALITY OF HEALTH CARE AND THE QUALITY OF LIFE

8th INTERNATIONAL CONFERENCE ON ETHICS IN BIOLOGY, ENGINEERING & MEDICINE



**April
24-26
2015**

www.downstate.edu/orthopaedics/bioethicsconf2015

Call for Abstracts

The program committee is seeking abstracts submission of paper relevant to this conference, which will be evaluated for inclusion in the final agenda as Oral presentations.

Selected papers will be published in the Ethics in Biology, Engineering, and Medicine: An International Journal.

An approximately 200-300 word single-spaced abstract, text only, should be typed in font size No. 12. It should be typed on 8 1/2 x 11-inch paper with one-inch margins. The preferred way is to E-mail your abstract, followed by a hard copy. In your cover letter, please identify the corresponding author with complete mailing address, telephone number, and E-mail address.

SUGGESTED TOPICS FOR PRESENTATIONS

- * ETHICS IN BIOENGINEERING
- * ETHICAL ISSUES IN BIOMEDICAL RESEARCH
- * ETHICS IN NANOBIOENGINEERING
- * ETHICS IN GENETIC ENGINEERING and CLONING
- * ETHICS IN STEM CELL RESEARCH
- * RESPONSIBLE CONDUCT IN RESEARCH
- * ETHICS IN SYNTHETIC BIOLOGY
- * ETHICS IN MEDICAL RESEARCH
- * MEDICAL ETHICS & HEALTH POLICY
- * ETHICAL ISSUES IN TISSUE ENGINEERING
- * NEUROETHICS
- * PRIVACY AND BIOINFORMATICS
- * ETHICS IN BIOBANKS
- * ETHICS IN GLOBAL HEALTH
- * ETHICS IN DENTISTRY

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DOWNSTATE
Medical Center

ICEBEM' 2015

Conference Chair:

Subrata Saha, PhD
SUNY Downstate Medical Center
EBM@downstate.edu
Office- (718)-613-8652
Fax - (718)-270-3983

Keynote Speakers:

Arthur L. Caplan, PhD
New York University, New York
Mildred Z. Solomon, Ed.D
The Hastings Center, New York

Invited Speakers:

George Khushf, PhD
University of South Carolina
Kenneth R. Foster, PhD
University of Pennsylvania
Wade Robison, PhD.
Rochester Institute of Technology

Registration:

(Before March 1st, 2015)
Registration Fee*: \$200
One-Day Registration
(does not include banquet): \$150
Student Registration:* \$70
Guest Banquet Ticket: \$50

(After March 1st, 2015)
Registration Fee*: \$250
One-Day Registration
(does not include banquet): \$200
Student Registration:* \$90
Guest Banquet Ticket: \$50

Conference Site

SUNY Downstate Medical Center
450 Clarkson Avenue
Brooklyn, NY 11203



Center of Excellence
WIRELESS AND INFORMATION TECHNOLOGY
 AT STONY BROOK UNIVERSITY

The 12th International Conference and Expo on Emerging Technologies for a Smarter World (CEWIT 2015)

CEWIT 2015

**OCTOBER 19 & 20, 2015,
 MELVILLE MARRIOTT, MELVILLE, NEW YORK**



Coming Soon:
 Open Call for Papers
 and Posters

We are pleased to announce the return of the CEWIT Conference to Long Island after a very successful 2014 event that welcomed over 500 attendees from 14 countries in 15 unique industries to the two-day program featuring 3 renowned keynotes, 55 academic and industry experts in 8 breakout sessions, an additional 13 distinguished intellectual property lawyers and venture capital professionals in 3 panels, 4 parallel big data and data science tutorials, and over 65 high quality poster presentations.

CEWIT2015 will continue its reputation of hosting the premier international conference on the development and application of emerging technologies in infrastructure, healthcare, and energy, bringing together academic research and industry innovations at a single forum.

Originally known as the International Conference on Cutting-Edge Wireless and Information Technologies, this conference is organized by the New York State Center of Excellence in Wireless and Information Technology (CEWIT) located at Stony Brook University in New York. Mark Your Calendars!

FOR **CEWIT 2015** CONFERENCE INFORMATION, CALL FOR PAPERS AND TO REGISTER, VISIT:

www.cewit.org/conference2015

TELEPHONICS' SKY SEARCH-2000M COMPLETES CHINA MONOPULSE SECONDARY SURVEILLANCE RADAR CERTIFICATION TESTING

Telephonics Corporation has announced that its Sky Search-2000®M, an Air Traffic Control (ATC) system, has completed Monopulse Secondary Surveillance Radar (MSSR) certification testing in China & has received the official certification from the Civil Aviation Authority of China (CAAC). The rigorous, comprehensive and lengthy assessment analyzed Telephonics' MSSR performance and aircraft reporting ability for civil ATC applications in Chinese airspace.

“ As China continues to add airports and expand as well as enhance their capabilities to enable greater capacity, integration of state-of-the-art technology that further increases the safety and efficiency of China’s airspace becomes of utmost importance. Telephonics is pleased that certification testing of the Sky Search-2000M system has been successfully completed, leading us one step closer to reaching this critical goal. ”

JOSEPH J. BATTAGLIA

President and Chief Executive Officer of Telephonics.

Telephonics' Sky Search-2000M has a complete suite of civil mode interrogation capabilities including Selective Identification Feature (SIF), Mode S & Multi-Channel Passive Automatic Dependent Surveillance-Broadcast (ADS-B), providing optimum control in China's increasingly congested airspace. The system's open architecture design & versatility enables easy integration with Telephonics' certified AeroTrac® Air Traffic Management system, which has also received a two-year service extension. Sky Search-2000M also integrates easily with any other manufacturers' air traffic automation system. This new certification allows Telephonics to provide advanced MSSR systems to this growing market in the future.





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Commercial/Military Product Design
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fred@fredkatzconsulting.com www.fredkatzconsulting.com

Fred Katz (631) 724-7702 Electronics Consultant
President

Memberships: IEEE Senior Life Member, IEEE LI Consultants Network, LI Metal Workers, Mensa Society, NYS Professional Inventors, Suffolk County Inventors

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MARTIN KANNER AE, EE, MEE

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The intention of the SusTech conference is to explore the comprehensive nature of sustainability and to emphasize the role of technology in achieving a sustainable lifestyle for humanity. The topic listings below are meant to indicate the breadth of the area and are definitely not to be considered exhaustive.

- **Agriculture** (e.g., control and production of fertilizers, soil, water conservation, irrigation, fisheries)
- **Alternative Energy** (e.g. solar, wind, tidal, fuel cells, energy harvesting, nuclear, thermal)
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- **Transportation Electrification** (e.g. electric vehicles, aviation, motors, drive controls, batteries, sensors, environmental and power distribution impacts)
- **Smart Grid** (e.g. communications, control, power electronics, industrial and home applications, energy storage, demand control response)
- **Sustainable Electronics** (e.g. sustainable manufacturing, components, global materials supply, hardware life cycle, nanotechnology & health/environment, reuse and repair of consumer electronics, materials harvesting from electronic waste, Open repair manuals and on-line repair and electronics sustainability resources, best practices)
- **Quality of Life** (e.g. EM spectrum allocation, global warming, autonomous vehicles, health & medical electronics, global education & human resources, risk management, remediation, purification, public policy)

Tutorials, Workshops and Papers are solicited for both oral and poster presentation from industry, government and academia (including students), covering relevant research, technologies, methodologies, tools and case studies. Posters sessions this year will be limited to undergraduate students.

In addition, we are seeking proposals for tutorials and workshops on Certifications & Standards (e.g. verification, standards, regulations, compliance).

SusTech will feature contributed papers and distinguished invited speakers in each track. Full papers will be published in the Conference Proceedings. Conference content that meet IEEE quality review standards will be submitted for inclusion into **IEEE Xplore** as well as other Abstracting and Indexing (A&I) databases. Topics with policy implications are welcome, in both technologies for sustainability and sustainable technologies.

Undergraduate Student Poster Contest. Prizes to be awarded. Submit an abstract of the poster in IEEE format. Abstracts in PDF should be submitted via the website or to donahoe@ieee.org. A full paper is not required for the conference, only the poster. Rules on the website. Submit poster abstracts by May 15 . Notification of acceptance June 1.

Full details including information for authors are found on the conference website at: sites.ieee.org/sustech/conference/.

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CONFERENCE SCHEDULE:

Abstract deadline:	March 9	General Chair: Dan Donahoe (donahoe@ieee.org)
Final paper deadline:	May 15	SusTech Program Chair: Ed Perkins (e.perkins@ieee.org)
Acceptance notification:	April 15	

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