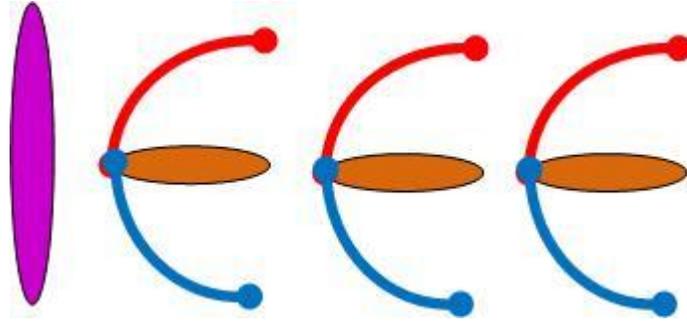




**October , 2017. Vol. 64, No. 8**



**Tranquil scene at Krucker's Restaurant and Grove in Pomona, NY where  
PES & IES held their annual outing**

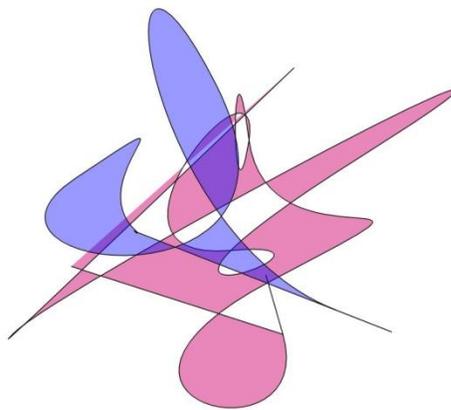


**The five essential entrepreneurial skills for success  
are concentration, discrimination, organization,  
innovation and communication**

*Michael Faraday*

**English physicist and chemist, Fellow of the Royal Society (FRS)**

**Born 22 September, 1791; died 25 August, 1867**



**Principal Officers**  
**IEEE New York Section 2017**

**Chair:**

**Wilson Milian**

**Vice chair (Chapter Operations):**

**Robert Pellegrino**

**Vice chair (Section Activities):**

**Charles Rubenstein**

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**Mohammad Farzad Haghi**

**Secretary :**

**Thomas Villani**

**Editor of NY Monitor:**

**Amitava Dutta-Roy**

**We advance technology for  
the benefit of humanity**

**Currently, the New York Section of IEEE comprises of the following active Chapters of the IEEE Societies:**

- Broadcast Technology Society
- Computational Intelligence Society
- Computer Society
- Communications Society
- Technology Management Society
- Engineering in Medicine and Biology Society
- Instrumentation and Measurement Society
- Power and Energy Society
- Industrial Applications Society
- Solid State Circuits/Electron Devices Societies
- Systems, Man and Cybernetics Society
- Vehicular Technology Society

**&**

**The following Affinity Groups as defined by IEEE**

- Consultants' Network
- Life Members
- Women in Engineering
- Young Professionals

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## QUICK DATE CHECKS FOR EVENTS

The following are the presumed dates for the 2017 Executive Committee meetings at IEEE NY Section

(unless otherwise notified in advance, always held on the second Wednesday of the month)

~~11~~ **January**

~~8~~ **February**

~~8~~ **March**

~~12~~ **April**

**No meeting in May due to  
Award Dinner Dance (6 May)**

**14 June**

**No meetings during the months of July and August**

~~13~~ **September**

~~11~~ **October**

~~8~~ **November**

**13 December**



**(Election of Section officers will also be held on 13 December at 5 pm)**

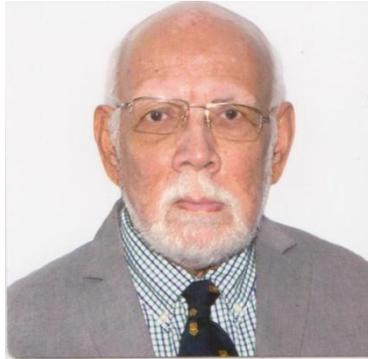
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Unless otherwise notified, all ExComm meetings are scheduled for 12:30 pm at the ConEd Building, 4 Irving Place, New York. All members of the New York Section are invited to participate in the ExComm meetings. However, for reasons of

security controlled by ConEd, the owner of the venue, all members desirous of attending any ExComm meeting must notify the Section chair. Thank you for your understanding

It

is again time that I apologize for the delay in posting this edition. I must add that, with the limited resources at my disposal, I did not have much control over the circumstances that held me temporarily back from my obligation of providing you with the latest information on the activities of the NY Section. But it is said that “all is well that ends well.” With that spirit in my mind I humbly offer this edition to you. I can assure you that from December onwards the postings of NY Monitor will be in synch with the calendar. In this edition we have three important events to report. First, on 15 September the New York chapters of the IEEE Power & Energy Society and Industrial Applications Society organized their joint annual Outing at the Krucker’s Restaurant and Grove, Pomona, NY. We have a short report on that



event. Second, on 25 October the IEEE Foundation and Dr. Greg Olsen, IEEE Life Fellow and Astronaut invited some IEEE members to Olsen’s residence for a wine-tasting evening. Third, on 27 October a session of iSTEP/SPAC was successfully held at Fordham University Lincoln Center Campus. (For your reference, iSTEP = Integrated Student Transition to Engineering Professional and SPAC = Student Professional Awareness Conference.)

We also had three presentations that were more technical: one organized by Tappan Zee Sub-Section, one jointly by PES/IAS/LMAG and the last by the Systems, Man and Cybernetics Society’s (SMC) NY Chapter. We have included a short report on each. I sincerely hope that you will enjoy reading this edition of the NY Monitor.

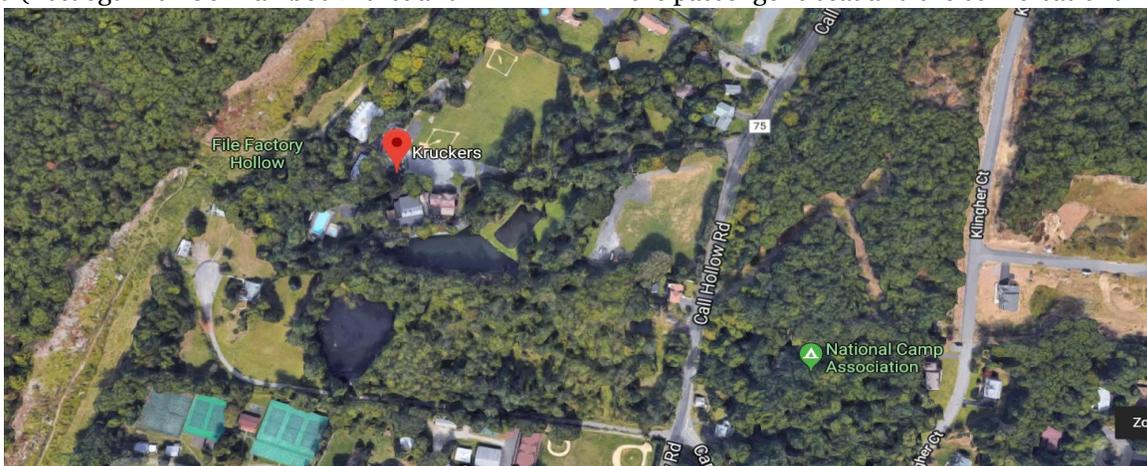


## Power and Energy Society (PES) and Industrial Applications Society (IAS) New York Chapters take their volunteers to an Outing

The NY Chapters of Power and Energy Society and Industrial Applications Society of the Institute of Electrical and Electronics Engineers (IEEE) on September 16 held their annual Outing at Krucker's Restaurant & Grove situated in a serene hamlet slightly off the Palisades, NJ. The outings are now traditional events of the Societies. Their purpose is an annual appreciation of the work of the volunteers who contribute their own time to keep the Societies ticking smoothly. We are told that probably the first appreciation meeting of this nature was held in 1944. It was then called the Committee Get-together Dinner. The first recorded Outing was held at Schmidt's (Scarsdale, NY?) on September 26, 1947. Anyhow, for the last two decades the Outing has always been held at Krucker's. The Krucker's facility includes areas for some game activities (bacci, baseball and volleyball etc), sheds where food (hotdogs with German bockwurst and

bratwurst sausages, delicious hamburgers. oysters and shrimp cocktail) may be served in the open, and a country-style restaurant with ample room for all attendees and more. Even without an Outing I would recommend the place for a family visit.

The map below will give you an idea where Krucker's is situated. The photographs show the serenity of the well tended ground surrounding the restaurant and facilities for recreation. These photos are followed by those taken of the participants in jolly good mood. Alcoholic beverages certainly helped. There also a sumptuous dinner, lobster and steak! Prizes were distributed to all individuals. Winning names were drawn at random. Thanks are due to all volunteers and organizers, especially, Arnold Wong, Sukumar Alampur, Paul Sartori, Harold Ruchelman, Sisenandi Tobias, Neil Weisenfeld and Bill Coyne. With Arnold as the pilot and in the passenger's seat and the conversations with



two other ride sharers Neil and Amarjit Rana made the road trip even more enjoyable for me. I look forward to the next year's Outing! The

photographs at this year's Outing were taken by Sisenandi and then organized for the Dropbox by Thomas Villani. —Amitava Dutta-Roy



You can see many other photos that were taken by our colleague Sisenandi Tobias. Dropbox arrangements by Tom Villani. [Click here to see these photos.](#)

\* \* \* \* \*

## **Power & Energy Society, Industrial Applications Society and Life Members Affinity Group joint presentation**

### **Battery Storage ROI Modeling**

The PES/IAS/LMAG invited **Gabriel Paoletti, PE**, who has 40 + years of experience of electrical power distribution to present a lecture on power distribution from batteries after a natural disaster such as hurricane Sandy strikes us. The ongoing threat of power reliability issues related to new hurricanes, cyber security and the aging electric grid, Microgrids and other sources of more reliable power have become a priority of many large commercial, multi-tenant residential, hospitals and other large power users. It is highly recommended to complete a detailed feasibility study when evaluating battery storage, renewable energy sources, Co-Gen and other potential components of a more reliable power system. While the benefits of these investments cannot always be clearly identified and measured in cost savings or ROI, an evaluation of the local utility tariffs can provide a starting point for potential savings, in particular related to the cost savings in On-Peak Demand Charges.

## Systems, Man and Cybernetics Society Chapter holds its IEEE Distinguished Lecture On 360 degrees Video Streaming

On 6 October **Dr. Yong Liu**, IEEE Fellow and professor at Electrical and Computer Engineering Dept, NYU Tandon School of Engineering gave as a Distinguished Lecturer on 360 degrees video streaming at Long Island University's Brooklyn Campus under the sponsorship of SMC NY Chapter.

Prof. Liu's talk said that Virtual Reality (VR) and Augmented Reality (AR) are expected to be the next-generation Killer-Apps on the Internet. The 360 degree video compression and streaming is one of the key components of Virtual Reality (VR) applications. In 360 video streaming, a user may freely navigate through the captured 3D environment by changing her desired viewing direction. It is found that only a small portion of the entire 360 degree video is watched at any given time. Streaming the entire 360 degree raw video is therefore unnecessary and bandwidth-consuming. On the other hand, only streaming the video in the user's current view direction will introduce streaming discontinuity whenever the user changes her view direction. In Prof Liu's research, a two-tier 360 video streaming framework with prioritized buffer control is proposed to effectively accommodate the dynamics in both network bandwidth and viewing direction. Through simulations driven by real network bandwidth and viewing direction traces, it has been demonstrated that the proposed framework can significantly outperform the conventional 360 video streaming solutions.



IEEE Day 2017 Celebration Distinguished Lecture - "Prioritized Buffer Control in Two-tier 360 Video Streaming" at LIU-Brooklyn, October 6, 2017,  
Dr. Yong Liu, NYU-Tandon School of Engineering, IEEE Fellow

## IEEE FOUNDATION GET-TOGETHER AND WINE-TASTING

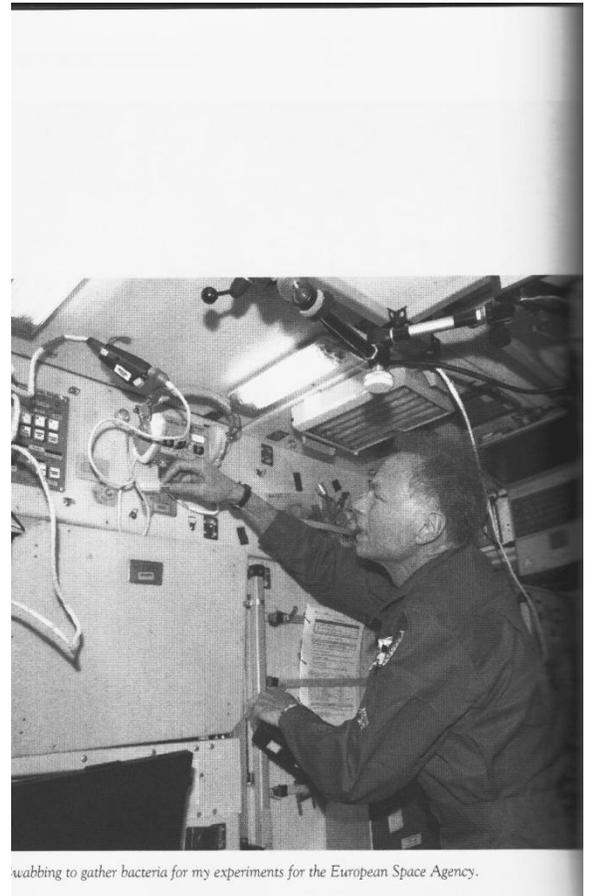
On 25 October the IEEE Foundation invited members of the NY Section, and the donors and supporters of the IEEE Foundation for a pleasant get-together at the residence of Dr. Greg Olsen in a high-rise building near Columbus Circle, New York. Olsen, an IEEE Life Fellow, entrepreneur was the third private citizen to go up in space and spend some time at the International Space Station. (Yes, he paid \$20 million of his own money for this trip!).

The purpose of this get-together was to make the work of the IEEE Foundation more visible. Not many members know that the IEEE Foundation funds several community outreach programs such as Engineering Projects in Community Service (EPICS). This global program encourages students to contribute their knowledge of engineering in collaborative projects in their communities. There are several ongoing projects that have been undertaken in IEEE Regions 1, 2, 8, 9 and 10. You can read about them in detail by clicking on <http://epics.ieee.org/program/projects-list/>. Another IEEE program deserves mention here is Mobile Outreach Vehicle or MOVE. Through this program IEEE mobilizes volunteers to engage in restoration of power or communications, after a natural disaster strikes a community as it happened with hurricanes Irma and Harvey. Mobile units are equipped with adequate equipment that can move to a stricken site without delay. Detailed reports on activities related to MOVE may be downloaded from <http://move.ieeeusa.org/category/move/>. The MOVE program reminds us that **we are not only engineers but also humanitarians**.

It is apt that Dr. Olsen decided to lend his own apartment to meet the members of the IEEE. Besides his

own academic achievements, entrepreneurship and space travel he is a philanthropist and motivational speaker for the young generation. He is also involved in functioning of the IEEE Foundation.

I have a copy of Olsen's book (with Thomas V. Lento) "By Any Means Necessary! An Entrepreneur's Journey into Space," 2009, ISBN: 978-0-615-34444-7. I would like to cite some excerpts from the book (that will show the extraordinary tenacity he possesses. (It is a very interesting book and I recommend that you read it.) The back cover of the book states:



"On October 1, 2005, Greg Olsen, a successful high-tech entrepreneur, climbed aboard a Russian Soyuz rocket and blasted off for the International Space Station. He was only the third private citizen to

make that trip. In this inspiring and entertaining book we learn how a self-described "average guy" went from an underachieving juvenile delinquent who almost didn't get into college, to a PhD scientist with 12 patents in electronics. We witness the entrepreneurial spirit, hard work, and occasional strokes of luck (or "grace," as he calls them) that propelled him to start and sell two companies, one of them for \$600 million in stock. And we accompany him as he overcomes health issues, a bout of debilitating despair, and the Russian medical bureaucracy to achieve his dream of becoming a space traveler. Along the way Olsen reflects on the mental outlook and work habits that made his success possible. It's a wild ride - one that will leave you with a new sense of optimism about human potential."

Inside the book he writes:

"I guess one of the attributes that have gotten me to where I am is tenaciousness. Even when I feel inadequate to the task before me, I somehow manage to push on with it. And in most cases, somehow manage to pull it off.

"So in another sense this book is dedicated to those who wonder what it takes to "succeed" or to "get Olsen said that he likes wine and one of his hobbies was to his own wine. This hobby led to a real-life investment. He was in South Africa working on a project. At that time he acquired a couple of vineyards there. But Olsen added that the production of these vineyards is only 10,000 bottles a year that helps only in their maintenance.

I estimate that some thirty people attended the IEEE event. I could recognize some of the

ahead" or whatever they define as their goal in life. The secret is . . . there ain't no secret! You just have to put your head down and do it., in spite of the doubts, the setbacks, the failures, or how long it takes.

"Fittingly enough, my favorite mantras are DON'T GIVE UP and JUST DO IT!

"Besides, the wasn't a passive tourist trip just for personal pleasure. I was going to do experiments in space to help advance science. Plus the trip opened the door for me to give over 300 space talks to school kids, trying to get more of them into science and engineering careers.

"Was it luck that got me here? The truth is, luck does play a big role in life. And believe me, I've had more than my share.

"I guess that's what makes me an optimist. I have this inborn belief that somehow, someday, things will work out. I don't know how and I usually suffer the anxiety and depression that everyone feels when things don't seem to go well. But I just put my head down and keep on working Until I find a way to improve the situation."

attendees. Peter Mauzey, the member-at-large of the NY Section was there with his wife. I met Dr. Fred Mintzer, IEEE Life Fellow who, after a successful career at IBM, now dedicates all his time to the IEEE. He is a director of the IEEE Foundation, Editor-in-chief, IEEE Technical Community Spotlight and a member of the IEEE Collabratec Steering Committee and Dr. Emerson Pugh, the 1989 IEEE president was there and so

were Dr. John Kymissis, professor at Columbia University, and Rameshwar N. Bhargava, a Section member and entrepreneur. Mr. Stan Retif, Chief Development Officer of the IEEE Foundation and Daniel Delibarato represented the Foundation. Both Mintzer and Retif spoke about the work funded by the IEEE Foundation. Karen Kaufman,

Senior Communications Manager, IEEE Foundation took the photos that may be seen by clicking on [Wine-tasting event photos](#). We thank Kaufman for sharing the photos with us. Only one photo (Emerson Pugh and John Kymissis) was taken by me (Amitava Dutta-Roy).

## PES/IAS/LMAG PRESENTATION OF OCTOBER, 2017

Like a clockwork, thanks to our colleagues Arnold Wong and Nandi Tobias, the PES/IAS/LMAG offered their joint monthly offering with a very informative presentation on [Active Arc Flash Quenching](#) by Mike Bukovitz, PE. Bukovitz 35 years of experience with power

systems. He has worked for several multinational companies in 63 different countries. In this lecture he covered a wide range of topics from the basic concept of Arc Flash Quenching through its modern practices.

## FORDHAM U. COMPUTER & INFO SCIENCE DEPT HOSTS ISTEP/S-PAC MEETING AT ITS LINCOLN CENTER CAMPUS

What do we mean by the acronyms [iSTEP](#) and [S-PAC](#)? The first is an IEEE Region 1 program the full title of which is Integrated (**I**) Student (**S**) Transition (**T**) to Engineering/Technology (**E**) Professional (**P**). This program provides students, industry professionals, and the IEEE leaders the opportunity to share career experiences at one venue.

S-PAC is an IEEE program and provides students, industry professionals, and the IEEE leaders the opportunity to share their career experiences at one venue. The acronym is derived from Students (**S**) – Professional (**P**) Awareness (**A**) Conference (**C**). For practical reasons the two somewhat overlapping programs are usually held at the same time and at the same venue. They are organized at centers of learning. One such meeting/conference was held at Fordham University's Lincoln Center campus, thanks to Robert Pellegrino, the vice chair of chapter operations at IEEE New York Section and Dr. Frank Hsu, professor of Computer and Information Sciences at Fordham and chair of the NY

chapter of IEEE Computational Intelligence Society for organizing the event. Pellegrino opened the event with his keynote address and a talk on **Benefits of IEEE Membership for Students and Young Professionals and Introduction of the IEEE Organization**. Wilson Milian, Arnold Wong, Vincent DelGatto and Frank Stanton, all of the IEEE New York Section were the panelists at the event who spoke about their personal experiences as electrical engineers and also took part in the Q&A session following Pellegrino's talk. It was reported that some 20 students attended the event. The photographs below were taken by Simon Odie of the New Yrk Section.



Robert Pellegrino giving his Keynote speech



The panelists Wilson Milian, the chair of the NY Section and the panelist at iSTEP speaking to the audience



The attendees with Dr. Frank Hsu in the foreground

**T H E E N D**