



Almanack



[IEEE Philadelphia Section Website](http://www.ieee.org/philadelphia)

Membership in the Following Counties

Pennsylvania: Bucks, Chester, Delaware, Montgomery and Philadelphia.

New Jersey: Burlington, Camden and Gloucester

November						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
						*Veterans Day *UAV Operator Training Endicott, NY
12	13	14	15	16	17	18
		*ADCOM *11th Intern. Conference Villanova U.	*11th Intern. Conference Villanova University	*11th Intern. Conference Villanova University	*11th Intern. Conference Villanova University	*UAV Operator Training Endicott, NY
19	20	21	22	23	24	25
		*IEEE Section Night		Thanksgiving		
26	27	28	29	30-Nov	1-Dec	2-Dec
				*2017 IEEE WIE Forum East Baltimore, MD	*2017 IEEE WIE Forum East Baltimore, MD	*2017 IEEE WIE Forum East Baltimore, MD



INSIDE THE ALMANACK

MESSAGE FROM THE CHAIR

Message from the Chair.....4

PAST EVENTS

How to Influence Middle School Students in STEM.6
IEEE WIE Phila. Hosted two Tours.....7
IEEE WIE Speaker Series..... 8
IEEE R2, Young Professionals and WIE RISE..... 9
Maker Fair 2017.....10

UPCOMING EVENTS

2017 IEEE WIE Forum USA East..... 13
IEEE CAS – Temple University.....14

VOLUNTEER OPPORTUNITIES

IEEE Research - Product Design Engineers.....16

AREA INSTITUTIONS / COMPANIES

DREXEL ECE..... 17
EATON – Powering Business Worldwide.....17

IEEE PHILADELPHIA SECTION

IEEE Philadelphia Section Notes..... 18
IEEE Philadelphia Section Sponsorships.....19

EDUCATIONAL PROGRAMS AND POSITIONS

Temple University-Computer & Systems Security. 24
Temple University-Non-Tenure Track Position.....25

UPCOMING EVENTS / ITEMS OF INTEREST

UAV / DRONE Operator Training.....26
Women in Engineering Forum USA East.....27
11th Int. Conf. on Ubiquitous Computing.....28
SPMB 17 – Temple University.....30

ALMANACK

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IEEE Section Night

Meetings are conducted on the 3rd Tuesday of the Month, eight times per year, January through May and September through November.

ADMINISTRATIVE COMMITTEE (ADCOM)

Meetings are conducted on the 2nd Tuesday of the Month: January through June and September through December. Members are welcome to attend the meeting only. Reserve a seat by calling the office the Friday before the meeting. **Phone: 484-270-5136.**

IEEE SECTION NIGHT

Philadelphia Section

Meeting

Tuesday, November 21, 2017

Sponsored by Computer(C), Electronic Devices/Components and Manufacturing Technology (ED/CPMT) and Engineering in Medicine and Biology (EMB) Societies Chapters.

Note: In the event of bad weather please call the Sheraton after 1:00 PM the day of the meeting:

215-387-8000

Ask the front desk if the meeting has been canceled.

When:

Tuesday, November 21, 2017

Dinner at 6:00 PM,

1st Speaker at 7:00 PM.

2nd Speaker at 8:00 PM.

Where:

Sheraton University City,

3549 Chestnut St,

Philadelphia, PA 19104

(215) 387-8000

- Meal Cost: \$25 (students \$15). The meal cost is \$40 but it is subsidized by the IEEE Philadelphia Section.

- You can attend the talks only for free (with no dinner), however, we ask that you register.

- Parking is paid by the IEEE Philadelphia Section, make sure you have your parking ticket stamped at the meeting.

[Registration Link](#)

PROFESSIONAL DEVELOPMENT HOURS (PDH)

PDH Certificates are free for IEEE members. For non-members, the cost is \$9 per certificate. You can pay during registration or by check at the meeting.



First Talk

Patent Basics

Michael A. Fisher, Ph.D., J.D.

Patent Attorney at Dechert LLP

Abstract: You've come up with a new invention and want to protect it. You'll need to know not only the process for getting a patent, but also how to figure out whether your idea is patentable or even worth patenting. This talk will provide an overview of patent issues for engineers, including what rights a patent gives (and does not give) you, why you might want a patent, what kinds of inventions can be patented, how to get a patent, and how to figure out whether your invention is valuable enough to justify the expense of patenting it.

Biography: Michael A. Fisher, Ph.D., J.D., is a patent attorney at Dechert LLP. He draws on his electrical engineering background to represent clients in complex patent and trade secret lawsuits involving medical de-



vices, electronics, computer hardware and software, semiconductors, and other technologies. He also devotes part of his practice to patent and software licensing, IP enforcement strategy, and analyzing the validity, scope, and enforceability of patents. In addition, he has experience handling trademark and copyright disputes.

Prior to his legal career, Dr. Fisher worked as a research and development engineer in the areas of solid state electronics, equipment-control software, and micromechanical devices. He is the named inventor on two patents (U.S. Pat. Nos. 5,929,440 and 5,956,003) relating to an infrared imager and a flat-panel computer display.



Second Talk

Undergraduate educational programs

Abstract: The two speakers come from two different biomedical engineering programs, one from Drexel University and one from Temple University, and they will speak about their undergraduate educational programs and how IEEE and EMBS can facilitate the educational process. The speakers will describe the capstone senior design pro-

cess as well as work integrated educational procedures which enhance undergraduate engineering education. It is hoped that the conversation which develops can facilitate interactions between the engineering community and these two educational programs to generate a greater authentic engineering education in the Philadelphia community.



Biography: Dr. Donald L. McEachron is a Teaching Professor and the Coordinator for Academic Assessment and Quality Improvement at the School of Biomedical Engineering, Science and Health Systems at Drexel University.

He obtained his bachelor's degree in Behavior Genetics from the University of California, Berkeley, and doctorate in Neuroscience from the University of California, San Diego. Dr. McEachron returned to graduate school obtained a Masters in Information Systems from Drexel University in 2006.

He has varied research interests and has published in human evolution, neuroendocrinology, chronobiology, behavioral neuroscience and education. He most recent book is *Chrono-bioengineering: An Introduction to Biological Rhythms with Applications, Volume 1*, published as part of the Synthesis Lectures series on biomedical engineering by Morgan-Claypool. Dr. McEachron is a member of ASEE, BMES, and IEEE and has made numerous presentations on assessment and curriculum design at national and international meetings.



Peter I. Lelkes, PhD is, since January 1, 2012, the Laura H. Carnell Professor and Founding Chair of the Department of Bioengineering in the College of Engineering at Temple University and the Inaugural Director of the Institute for Regenerative Medicine and Engineering (TIME) at Temple University's School of Medicine. At

Temple University, Dr. Lelkes is also a Professor of Mechanical Engineering (Dept. **Mechanical Engineering**), **Regenerative Endodontics** (School of Dentistry), and Cancer Biology (Fox Chase Cancer Center). From 2000-2011 he was the Calhoun Chair Professor in the School of Biomedical Engineering, Science and Health Systems at Drexel University in Philadelphia.

Dr. Lelkes obtained his PhD in Biophysics in 1977 from the Technical University (RWTH)



Aachen, Germany. From 1977-1983 he was a postdoctoral fellow and then staff scientist in the Department of Membrane Research at the Weizmann Institute of Science, Rehovot, Israel, working on membrane fusion, exocytosis, and mechanisms of neurosecretion. In his first foray into tissue engineering, Dr. Lelkes began to study heterotypic interactions between endocrine cells and endothelial cells as Visiting Scientist in the Laboratory of Cell Biology and Genetics, NIDDK (NIH) from 1983-1988. From 1988-2000, as Director of the Laboratory of Cell Biology in the Department of Medicine, University of Wisconsin, Dr. Lelkes developed a new program in vascular biology and biotechnology, focusing on the endothelialization of bioartificial cardiovascular devices. From 2000-2011 he was the Calhoun Chair Professor for Cellular Tissue Engineering in the School of Biomedical Engineering, Science and Health Systems at Drexel University in Philadelphia where he initiated a program in lung tissue engineering.

Currently, Prof. Lelkes directs an interdisciplinary program in tissue engineering and regenerative medicine, focusing on nanotechnology-based biomaterials and soft tissue engineering (lung and skin), and employing developmental biological principles to enhance the tissue-specific differentiation of embryonic and adult stem cells. Dr. Lelkes has organized several Keystone conferences and published more than 200 peer-reviewed papers, edited several books, authored more than 65 book chapters and made more than 500 presentations nationally and internationally.

Dr. Lelkes and his colleagues designed and implemented a successfully bioengineering educational program that currently includes ca. 180 undergraduates and 40 graduate students. In the short time of its their existence, the BioE graduate program has the highest ranking of all engineering programs in Temple/s College of Engineering, while the undergraduate program just successfully passed the first ABET accreditation visit and is expected to be fully (and retroactively) accredited.

Dr. Lelkes' basic and translational research has been support by federal (NIH, NSF, NASA, DOE) and state funding agencies (NTI and PA Dept of Commerce, Tobacco Settlement Funds) and private Foundations, including the Coulter Foundation. At Drexel Dr. Lelkes served as Director of the Surgical Engineering Enterprise, one of the major of initiative of the strategic plan of Drexel University's College of Medicine. In addition, Dr. Lelkes has been the team leader for tissue engineering at the Nanotechnology Institute of Southeastern Pennsylvania (NTI) and served as the Co-Director of PATRIC, the Pennsylvania Advanced Textile Research and Innovation Center, focusing on BioNanoTextiles and Stem Cell Biology.

Dr. Lelkes has received numerous honors and awards, nationally and internationally. Amongst them a Forchheimer Visiting Fellowship at the Hebrew University, Jerusalem, Honorary Professorships at The University of Applied Sciences Aachen, Germany and the Changchun Institute of Polymer Chemistry and Physics, Chinese Academy of Sciences, and a Distinguished Vis-



iting Fellowship of the Royal Academy of Engineering at Imperial College, London, UK. In 2011 he was inducted as a Fellow of the AIMBE (American Institute for Medical and Biological

Engineering) and received the 2012 Ben Franklin Key Award from IEEE, the Institute of Electrical and Electronics Engineers.

In his “free-time” Dr. Lelkes is an active chamber musician and likes to hike in the mountains.