



IEEE Rochester Section

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<http://rochester.ieee.org>

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Message from the Chair

Dear Colleagues, I am happy to report the outcome of the recent IEEE Rochester Section Elections. I will serve as the Chair, Dave Krispinsky will serve as the Vice Chair, Bill Fowlkes and Ray Ptucha will continue as the Treasurer and Secretary (respectively). Each will serve a 2yr term in office in accordance with the IEEE MGA bylaws. I look forward to continuing the work we have done thus far over the last 2 yrs and in working with Dave Krispinsky our new Vice Chair. We will continue to run many of the successful activities we have done in the past such as the Western Area NY Image Processing workshop, the Sectional Joint Chapter, and Summer meetings. It is meetings like these that have led to Rochester having the highest retention rate of members amongst the 22 Sections that constitute Region 1. Last year, 25 members were elevated as Senior members of the IEEE in 2015. This is a remarkable increase in Senior member elevations in comparison to the last several years and I hope to continue this trend over the next two year. If you are not a member of the IEEE, now is the time to join! 2016 promises to be a year filled with many opportunities and I look forward to continuing our success in Rochester as the largest engineering society.

Two Undergraduate Student Scholarships of \$1,500 each.

Are you a student, or are you a parent of a student that is in an ABET-accredited engineering school within the US? All local IEEE student members and students of parents who live in Monroe, Genesee, Livingston, Ontario, Orleans, Wayne, or Wyoming counties of New York are eligible to apply for our scholarships. You are encouraged to send application to the Rochester Engineering Society (RES). The applicant must meet the following qualifications: **1). Be a junior undergrad student in engineering, engineering technology, science, or technology program with good standing.** **2). Have a GPA is at least 3.0 or greater.** **3). Plan to continue your engineering education within the ABET accredited school after the award.** **4). Not be a previous recipient of this scholarship.**

More information on how to apply, visit www.roceng.org/page-1702084

Rochester Engineering Society's Engineering Post

Save the date: March 24 at 6:30 PM.

There will be a meeting for the Rochester Engineering Society's Engineering Post on **March 24 from 6:30 – 8:30 PM**. The Post consists of 25 high school junior students with an interest in pursuing engineering as a career. The presentation will show and tell what an engineer in industry does during a regular day. Speakers for this event will include IEEE member Lyle Tague and Kodak engineer Pat Kline. For further details please contact **Richard Repka**, Post leader, at rrepka10@gmail.com or **Dave Krispinsky** at dgkite@rit.edu

A piece of history

By far, the most versatile of our Founding Fathers was Benjamin Franklin. And he accomplished so much socially, diplomatically, and politically that it's easy to overlook his scientific accomplishments, or even to wonder if, out of national pride, we might have inflated his achievements as a scientist. But the fact is that, along with everything else, old Ben was a world-class scientist, including in the area of electrical research – especially research into not only the properties of lightning, but protection against it. Of course, Franklin's apocryphal kite experiment is most famous, but his research into lightning rods likely had the greatest impact – although no statistics were kept at the time, it certainly seems likely that his work in this area saved lives, not only in America, but throughout the world.

While Franklin's theorizing about the importance of lightning rods was spot-on, nobody could quite agree on whether they should be rounded, blunt, or pointed – Franklin advocated a pointed shape while the British felt that rounded was better. Surprisingly, this question has still not been answered conclusively! Some recent research by Charles B. Moore (in 2000) suggests that the optimum shape is somewhere in between – a moderately rounded shape seems to promote the formation of an electrical field that will best attract lightning strikes. In this case, Franklin gets full credit for discovering the electrical nature of lightning and for being the first to figure out how to protect our buildings from its effects. As for the shape issue? Well, he was close but not perfect – but we can hardly fault an 18th century scientist for not finding the perfect answer to a question that wasn't answered until the 21st.

2016 Rochester IEEE Joint Chapters Meeting

We are looking for speakers to give one hour presentations at the annual IEEE JCM in the following areas:

- Aerospace & Electronics Systems/Communications
- Education
- Computer/Computational Intelligence
- Geoscience & Remote Sensing
- Electromagnetic Compatibility/Product Safety Engineering
- Photonics
- Microwave Theory & Techniques/Antennas & Propagation
- Signal Processing
- Power Engineering/Industry Applications
- Engineering in Medicine & Biology

We welcome any other IEEE societies that's not listed here to participate as well. The date has not been set but typically is at **the end of March**.

IEEE Society Chairs: Please encourage your members to participate. For further information or if you or you know a colleague who might want to present, please contact Dave Krispinsky dgkite@rit.edu

2016 Engineering Symposium in Rochester - April 26 at the Hyatt downtown

I am looking for speakers to fill the IEEE track for the **12th annual Engineering Symposium in Rochester**. Any discipline in EE is welcome. For Professional Engineer speakers a total of 3 Professional Development Hours (PDH's) will be issued. The all-day event which typically attracts over 430 participants, includes 37 accredited courses where 7 PDH's can be obtained for Professional Engineers. It also accrues revenue for the Rochester IEEE section. If you or if you know a colleague that would like to present at the 2016 ESR, please contact Dave Krispinsky dgkite@rit.edu For Symposium info please visit www.engineeringsymposiumrochester.com



U of R River Campus hosted an **Engineering in Medicine & Biology Society Chapter Seminar** on January 27 at 5:30PM. Dr. Lawrence A. Ray and Dr. Richard Simon were speakers. The topics related to computed tomography, 3D images CT system. For detail visit www.Carestream.com