



# IEEE Rochester Section

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May 2021 Newsletter

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## Message from the Chair

Dear Colleagues,

Madeline Loui, the 2020 IEEE Rochester Section scholarship recipient, received the Love Family Foundation Scholarship. This annual scholarship is awarded to a single Georgia Tech graduating senior with an outstanding scholastic record. Congratulations Madeline, and good luck with your future studies in MIT's EECS Ph.D. program!



In April, the Rochester Section Young Professionals (YP) Affinity Group (AG) co-sponsored a YP Career Panel with the Connecticut and Melbourne Section YP AGs. The panel included YP engineers representing academic, industry, and entrepreneurial career paths and was well attended by members from all 3 sections.

Mark your calendars for the virtual 2021 Western NY Image and Signal Processing Workshop (WNYISPW) on Friday, October 22. This virtual edition of the WNYISPW is a joint effort by the Rochester Signal Processing (SPS) and Engineering in Medicine and Biology Societies (EMBS). Paper/Poster submission opens on August 12 and closes on September 13.

The next IEEE Rochester Section virtual ExCom meeting will occur on June 1st, from noon until 1 pm via WebEx (vTools# 255225). As more IEEE members and the general population are vaccinated against COVID-19 and restrictions are reduced for gathering places, the Rochester Section plans to move ExCom meetings to a hybrid format where ExCom members can gather in person or attend virtually.

Stay healthy, and best regards,

## Register Now for the 2021 STRATUS Conference



*Ken Stuart, NUAIR*

The emergence of low-cost and easy-to-use Unmanned Aerial Systems (UAS), commonly referred to as drones, has led to an explosion of their use for numerous applications. These new platforms have enabled new imaging and earth remote sensing technologies and applications previously unavailable due to the high cost of manned aircraft or satellites.

This event is the 4th conference of STRATUS that will bring together academics, industry representatives, and domain specialists to share perspectives on this rapidly evolving topic. Keynote speaker Peter Webley's research focuses on natural hazards, especially volcanic eruptions, the application of unmanned aircraft systems to hazard mapping, and the use of remote sensing data from the ground to space and back to develop change detection algorithms. Keynote speaker Ken Stuart is an experienced industry veteran in wireless telecommunications and cloud-based software, responsible for setting the overall vision and product strategy at NUAIR. This conference is virtual only without in-person attendance. Registration is now open for the 2021 STRATUS Conference. For more information, visit <http://stratus-conference.com/>



*Peter Webley, University of Alaska Fairbanks*

## 2021 Scholarship Recipient -- Giovanna Baris

Congratulations to 2021 scholarship recipient Giovanna Baris, who is a graduate of Liverpool High School in N.Y., She is pursuing a BS in electrical engineering. In 2019, she began an 18-month co-op at the National Grid in Syracuse, N.Y. During her time there, Giovanna led an initiative to reduce the company's carbon footprint by 80% in 30 years. Her professional experience also includes working as a teaching assistant at RIT, physics coach at Syracuse University, and dispatcher at SUNY-ESF. After graduation, Giovanna would like to be part of Engineers Without Borders. She also plans to work in the power industry and encourage a transition to renewable and sustainable energies.



## Terra Rochester Finger Lakes Science and Engineering Fair

Thirty-one students from our area participated in the Terra Rochester Finger Lakes Science and Engineering Fair, which was supported by the IEEE Rochester section through the efforts of section members as well as financially. Diversity marked this group of competing students – 61% are non-Caucasian, including 26% African-American, 13% Asia/Pacific Islander, and 13% Multiracial; 63% are female. Organizers said “With the key national need to increase diversity among the technical professions, these students’ obvious strong interest in science, technology, engineering, mathematics (STEM) is encouraging.” The competition started March 20<sup>th</sup>, and the award ceremony was held on-line on April 10<sup>th</sup>.



Amy Feng

The award ceremony also recognized entrants from the Terra Northeast Regional Science and Engineering Fair and the Twin Tiers Regional Science Fair. The students from grades 5 through 12 competed in categories ranging from Environmental Engineering to Computational Biology and Informatics. The Grand Award went to Amy Feng of Pittsford NY, who can take her project on *Structural Changes of the SARS CoV-2 Spike Protein in Varying Salt Concentrations* to the Regeneron International Science and Engineering Fair. Over 60 awards were given after a motivating and inspiring keynote by Shayla Rivera, aerospace engineer and professor in the Texas A&M University College of Engineering.

## Rochester Engineering Society Virtual Symposium

Don't miss the virtual RES Symposium! Our Section member and IEEE Fellow Kelly Robinson will provide an *Introduction to Static Control for Roll-to-Roll Manufacturing*. The other electronics and power sessions are *ATS Fundamentals* (William Schneeloch, Kinsley Power Systems) and *Bitcoin Energy Use – the Unreal Electricity Consumption of Virtual Cryptocurrencies* (Bill Bishop, P.E., Pathfinder Engineers). This is a great opportunity to earn professional development hours credit in the comfort of your home or in your office. Register today at <https://www.roceng.org/event-4190456/Registration>.

## IEEE Rochester Section Events

Please check the events to ensure they are as scheduled below. Visit [events.vtools.ieee.org/m/vtools/#](https://events.vtools.ieee.org/m/vtools/#) for details about any of these events.

Event	Vtools #	When	Where
Diffraction Gratings: What Can't They Do?	267246	April 28 <sup>th</sup> , 15:30 – 16:30	Online
<u>EXCOM Meeting</u>	255224	May 4 <sup>th</sup> , 11:50 – 13:00	Via Webex
<u>STRATUS – GeoHazards and Extreme Events</u>		May 17 <sup>th</sup> – May 19 <sup>th</sup>	Online
Rochester Engineering Society Virtual Engineering Symposium		May 18 <sup>th</sup> - 20 <sup>th</sup> . and June 8 <sup>th</sup> - 10 <sup>th</sup> .	Online
<u>EXCOM Meeting</u>	255225	June 1 <sup>st</sup> – 11:50 – 13:00	Via Webex