

May 2025 IEEE BUFFALO NEW YORK JOINT CHAPTERS MEETING (JCM)

Networking and Professional Development Event Showcases Technical Presentations and Student Posters

BUFFALO, N.Y. — April 21, 2025 — The IEEE Buffalo Section invites professionals, students, and academics to the 2025 IEEE Buffalo Joint Chapters Meeting (JCM), to be held on **May 10, 2025**, at **SUNY Buffalo State University**, Technology Building, Room 160. The event offers a unique opportunity to meet and network with individuals across all engineering disciplines and to learn more about the exciting activities of the IEEE Society Chapters active in the Buffalo area. Attendees will have opportunities to:





- Six technical presentations from various IEEE Society Chapters.
- Student poster session with a Best Poster Award, with a **\$200 cash prize**.
- Professional networking with industry colleagues and peers (with **coffee & refreshments** served).
- Technical demo by **Rick Hollowell**, Copper Mountain Technologies: “*Vector Network Analyzers*”.
- **0.2 CEUs / 2.0 PDHs** for completing all technical sessions.

Event Registration: Participation is free of charge but requires prior registration. Register here: <https://events.vtools.ieee.org/m/479840>

EVENT AGENDA:

Time	Session
1:30 – 2:00 PM	Registration and Networking (<i>Coffee & Refreshments Available</i>)
2:00 – 2:10 PM	Opening Remarks
2:10 – 2:30 PM	Technical Demonstration by Rick Hollowell (Copper Mountain Technologies): “Capabilities of a Vector Network Analyzer”
2:30 – 4:50 PM	Chapter Technical Presentations:
2:30 – 2:50 PM	<i>John Schaff – Space Weather Effects on Satellites and Spacecraft</i>
2:50 – 3:00 PM	Coffee & Refreshment Break
3:00 – 3:20 PM	<i>Bihbu Sahoo – Analog and Mixed Signal Circuits and Systems for Emerging Applications</i>
3:20 – 3:40 PM	<i>Mustafa Demir – Modeling Team Interaction and Decision-Making in Agile Human-Machine Teams</i>
3:40 – 4:00 PM	<i>Joshua Joseph – High Impedance Fault Detection using Wavelet Transforms and ML Techniques</i>
4:00 – 4:10 PM	Coffee & Refreshment Break
4:10 – 4:30 PM	<i>Samuel Kassey – Advances in Tapered & Lensed Optical Fibers Technology</i>
4:30 – 4:50 PM	<i>Huamin Li – Interfacial Design of Two-dimensional Nanoelectronics</i>
5:00 – 6:00 PM	Student Poster Session (<i>with refreshments</i>)
7:00 – 9:00 PM	Optional Dinner —For the dinner at Pearl Street Bar and Brewery, please note that the section will cover the costs of professional members and elected student officers. Participants are encouraged to indicate their interest during registration.

JCM POSTER SESSION:

PARTICIPATION	JUDGING CRITERIA (Provided to Judges On-Site)
<p>To participate in the student poster session, UB students must email:</p> <p> knadol81@ieee.org</p> <p> <i>Subject line: IEEE Buffalo JCM</i></p> <p> Poster Guidelines: Posters must be printed and ready for push-pin mounting on stands sized to accommodate 3 ft x 4 ft displays (actual size may vary slightly).</p>	<p>Posters will be evaluated on:</p> <ul style="list-style-type: none"> • Clarity (20%) • Methodology (25%) • Visual design (20%) • Oral communication (20%) • Innovation and impact (15%)
<p> Best Poster Award (\$200.00)</p>	
<ul style="list-style-type: none"> • An award for Best Poster will be presented at the conclusion of the session. If posters fall into distinct categories (e.g., undergraduate vs. graduate), awards may be split accordingly. • BSU students have already confirmed participation, so no email submission is required. 	

SPEAKER BIOS:



Featured Speaker: Mr. Rick Hollowell is the Director of Sales for the U.S. and Canada at Copper Mountain Technologies. He brings over 30 years of experience in the microwave, RF systems, and test and measurement industries. During his career, he has held engineering, operations, and business development positions at various companies, including Macom, Radio Waves, Cobham, and Continental Resources. Since joining Copper Mountain in 2015, he has been responsible for leading technical training and conducting Vector Network Analyzers demonstrations across academic and industrial sectors.



Mr. John Schaf has been in the aerospace industry for 37 years, primarily focusing on advanced computing for satellites, spacecraft, missiles, and Guidance, Navigation, and Control systems. His work includes designing and testing microelectronic circuits that can withstand the harsh conditions of both natural and man-made radiation environments in space. He earned his Bachelor's and Master's degrees in Electrical Engineering from the University at Buffalo and has held positions at various aerospace companies across the United States. For the past 32 years, Dr. Schaf has been with Moog Inc.



Dr. Bibhu Datta Sahoo joined the University at Buffalo's Department of Electrical Engineering as a Professor in Fall 2023. He holds a B.Tech in Electrical Engineering from IIT Kharagpur, an M.S.E.E. from the University of Minnesota, and a Ph.D. in Electrical Engineering from UCLA. Sahoo has experience designing analog and digital circuits at Broadcom and RF integrated circuits for CMOS TV tuners at Maxlinear Inc. He has been a faculty member at IIT Kharagpur and Amrita University, focusing on mixed-signal circuit design, analog computing, and machine-learning hardware. He has received the Analog Devices Outstanding Student Designer Award and the Best Paper Award at the 2013 CICC. He has also served as an Associate Editor for the IEEE Transactions on Circuits and Systems II and

the IEEE Open Journal of Circuits and Systems, and he is the IEEE CASS Distinguished Lecturer for the term 2025-2026.



Dr. Mustafa Demir is an associate research scientist at the Biodesign Institute's Center for Applied Structural Discovery and a faculty associate teaching statistics at Arizona State University's Ira A. Fulton Schools of Engineering. He is also a scientist at Texas A&M University's Wm. Michael Barnes '64 Department of Industrial and Systems Engineering. Dr. Demir earned his Ph.D. in Simulation, Modeling, and Applied Cognitive Science from ASU in 2017, focusing on team coordination dynamics in human-machine teaming. With over 12 years of research experience, he specializes in optimizing sociotechnical systems and developing human-centered AI systems. He has published around 100 academic works, achieving an h-index of 27, and his interests include advanced statistical modeling and operations research. He is a Senior Member of IEEE and a member of the Human Factors & Ergonomics Society and ACM.



Mr. Josh Joseph holds a Bachelor of Science (BS) and a Master of Science (M.S.) in Electrical Engineering from the University at Buffalo, The State University of New York. He is pursuing a PhD focused on high-impedance fault detection using wavelet transforms with machine learning techniques. A member of the IEEE and a registered professional engineer in New York, Josh has been with National Grid since 2018, serving as a Senior Commissioning Engineer and Senior Protection Operations Supervisor. He is now a Lead Engineer in PTO O&M Services, where he develops standard test templates, creates and maintains procedures and standards, and provides technical expertise to support National Grid's protection and telecommunications operations.



Dr. Samuel Kassey is the Chief Technical Officer, Senior Vice President, and co-founder of LaseOptics Corporation, with over 29 years of experience in fiber optics engineering. He holds a Ph.D. in Fiber Optics Engineering from Corllins University, USA, and an M.S. in Physics with a specialization in Fiber Optics and Optical Communications from Jawaharlal Nehru Technological University, India. Kassey has held various roles throughout his career, beginning as a scientist with the Government of India in 1995 and later moving to the United States as a visiting scientist at the University of Utah in 1998. He has published numerous scientific articles, achieved O-1 status from the INS in 2000, and is recognized as a Senior Member of IEEE and OPTICA. His research focuses on manufacturing and integrating lensed and tapered fibers, coupling with high-power semiconductor laser diodes and waveguides, and innovations in biomedical devices. In 2024, he got the IEEE Region 1 Award for Technology Innovation.



Dr. Huamin Li earned his Ph.D. from Sungkyunkwan University, Korea, and conducted postdoctoral research at the University of Notre Dame, USA. He joined the University at Buffalo (UB) in 2017, where he leads research on 2D materials and their applications in nanoelectronics (<https://ligroup.eng.buffalo.edu/>). Dr. Li is an Editor for *IEEE Access*, *Nano Express*, *Materials Research Letters*, and *Moore and More*. Additionally, he is a Technical Committee Member, Region 1 Young Professionals (YP) Representative, and YP Ambassador for the IEEE Nanotechnology Council (NTC). His contributions have been recognized with numerous accolades, including the NSF CAREER Award, Young Investigator, Exceptional Scholar, and Early Career Research Awards from UB, as well as the IEEE Region 1 YP Award.