Ultrasound Industry Perspectives: Career Development in Industry

Do you want to work in industry? Do you have a personalized career development plan? What are your strengths and career aspirations? Would you like to learn more about what it would be like to work in industry at a different stage of your career? You are welcome to join us in this interactive and inspiring panel discussion. We have five distinguished industry leaders to share their experience and offer guidance.

When: 11:30-12:30pm PST, 9/10 (Thursday)

Where: Virtual meeting, zoom link will be available on conference website

Who: Anyone who is interested in career development in industry

Dr. Oakley graduated from Syracuse University (BSEE) and worked in ultrasonics for Westinghouse Ocean Division. There he acted as designer and field engineer installing leak detection for the Alaska pipeline. He spent two years acting as a full-time volunteer as a house parent for emotionally disturbed children. He began work for Johnson and Johnson in 1979 as an Acoustic Engineer designing novel medical ultrasound probes. He completed his MS in Physics at the University of Denver. He transferred to Echo Ultrasound in Pennsylvania where he oversaw the world's first commercialization of 1-3 composite transducers and completed his Ph.D. at Penn State in Acoustics. He later became a principal in Tetrad Corporation, a startup company which develop ultrasonic imaging products for guidance of non-invasive surgery. He became an Associate of W.L. Gore and Associates after their acquisition of Tetrad. In 2010 he retired from industry and taught Engineering Physics at Cherry Creek High School for eight years.   He has numerous patents and publications in the field of ultrasonic probes and transducer materials and has been an Adjunct Professor at Penn State and the University of Colorado. He has been a long-time reviewer and Symposium organizer for the IEEE UFFC.


Samir Gupta is a VP of Engineering at Qualcomm working in multimedia R&D for over 25 years and has spent the last 10 years championing and developing ultrasonic technologies to augment the existing portfolio of capabilities multimedia technologies. He has invested significant resources to explore and promote the potential of Ultrasonics in consumer-friendly applications. Through multiple acquisitions and new initiatives, he has helped advance the state of the art in acoustics and ultrasonic devices and sensing. He continues to lead a broad research and product development team focused on mass production of ultrasonic solutions including the launch of the first ever ultrasonic fingerprint sensor in a mobile phone. He is a graduate of the

University of California at San Diego and University of Wisconsin-Madison and serves on the Electrical and Computer Engineering advisory board of the same.

Sophia Shi, PhD is enthusiastic about medical technologies and cross industry applications. She obtained her PhD on biomedical engineering from Purdue University where she focused on non-linear optical imaging, followed by postdoc training at Genentech (Roche Group) where she innovated MRI and photoacoustic imaging methods. She then joined L'Oreal technology incubator team, and launched products containing wearables with imaging processing technology. In her current role at Samsung Research America, she is a director of verification and validation team on digital health. She has two US patents and her publications have received over 1000 citations.
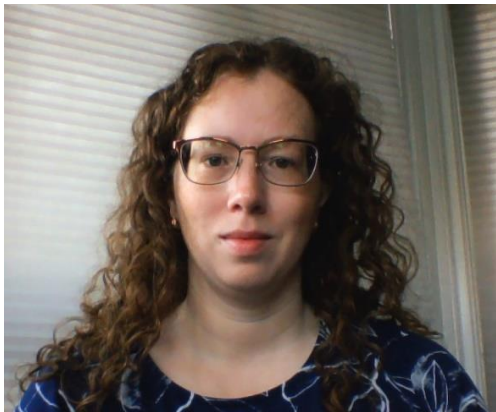
Holly S. Lay received her B.Sc. degree in electrical engineering and Ph.D. degree in engineering physics from Queen's University, Kingston, ON, Canada. She worked for 2 years at Sonovation Inc in Florida working on IVUS catheter and ultrasound fingerprint sensors before joining the Sonopill Programme as a Postdoctoral researcher working on ultrasound system integration from 2013-2018. She is currently an Ultrasound Systems Developer at FUJIFILM Visualsonics Inc, Toronto, Canada. She is a member of the IEEE UFFC Industrial Engagement Committee and is one of the instructors and 2020 co-host of the UFFC Special Topics Summer School on Waves and Transducers.

Aqsa Patel is a Lead Scientist at GE Global Research, Niskayuna, NY, USA. She earned her B.E degree from Osmania University (Hyderabad, India) and M.S. and Ph.D. degrees in Electrical Engineering from Center for Remote Sensing of Ice Sheets at the University of Kansas. She joined GE in 2016 as ultrasound systems engineer. Her research interests include enabling novel applications and probes on ultrasound scanners, 3D ultrasound imaging, image-guidance using ultrasound, and signal processing and algorithm development for ultrasound imaging. Dr. Patel has over 10 external publications in radar and ultrasound fields and has refereed over 15 peer-reviewed articles. She is a member of IEEE and serves as chair of the Industrial Engagement Committee, IEEE - Ultrasonic, Ferroelectrics and Frequency Control (UFFC) Society.