

IEEE ULTRASONICS, FERROELECTRICS, AND FREQUENCY CONTROL SOCIETY



IN THIS ISSUE

President's Message Interviews Conferences Publications Education Awards Student Membership UFFC-S Updates Keep In Touch **FOLLOW US**



PRESIDENT'S MESSAGE

Dear UFFC-S Members,

Welcome to the August 2021 UFFC-S Newsletter. I mentioned in our prior Newsletter that UFFC-S meetings have often been USA and Europe-centric in timings and that we needed to "share the pain" of time zone differences. As I wrote this Newsletter, being based in the USA, I originally wrote "Welcome to the Summer 2021 UFFC-S Newsletter", but not only are we a society that spans the globe east to



west, but also north to south, and it is important that all geographical locations feel part of UFFC-S. The great interest in our **Latin America Ultrasonic Symposium** this October has shown the vast pool of expertise and enthusiasm and I am grateful to the volunteers who are helping UFFC-S be the venue for this exciting work.

In our near-online only world, deliberate efforts in connecting with others are more important than ever, and our Mentoring and Networking Committee has been continuing with the mentoring program and multiple lecture events. If you have not already taken advantage of this, look <u>here</u> and consider being part of the next round of mentors or mentees. It is also all the more important we keep our members informed as to ongoing activities, and our website has undergone a major overhaul – which you can view <u>here</u>, we look forward to hearing your feedback.

Our symposia continue to attract record numbers of participants, and we had very successful ISAF (May) and IFCS (July) symposia. We've learned from 2020 and worked to expand our online tools, especially for interaction and networking. One of the biggest questions about our symposia is what they will look like in the coming years, and while the crystal ball is somewhat cloudy some things are certain; COVID, in one form or another, is here to stay. Even in the best-case scenarios, many parts of the world will not be fully vaccinated until 2023, while immunocompromised people and those close to them may have to choose not to travel – and these are people we cannot leave behind. Further, with online symposia, we are seeing greatly increased participation from lower-income countries, and companies sending ten or more staff (one sent 55 people to 2020 IUS!), we can see that the elimination of travel time and cost is opening up opportunities. The world of pre-2020 conferences is gone, and we must adapt to the future. As such, UFFC-S will be moving to a Hybrid model as the default for our flagship conferences (IUS, ISAF, IFCS) in 2022, with in-person attendance and online availability – as well as the ability to move fully online should the worst happen. This places an extra burden on the Symposia General Chairs, and so, in addition, to support from our professional conference organizers, Conference Catalysts, we are investing in digital tools to ensure that we can meet their needs. As mentioned, the exact nature of this future is uncertain, we will be adapting and learning as we go, and as always it will be shaped by the efforts of UFFC-S volunteers – if you want to participate, please apply <u>here</u>.

We are also continuing to streamline and professionalize our volunteer processes, making them as open and transparent as we can while looking for diversity in all forms. One of IEEE's best practices involves both term limits and a constant rotation of volunteers in positions. In keeping with this UFFC-S will be moving to a model where appointed positions automatically end at the transition of the President's (or Chair's etc) term. The successor can then appoint their new slate, which may or may not contain some of the prior volunteers. No volunteer should feel slighted by this, and we are always grateful for the service given. Along with our Volunteer Engagement Committee and our open calls for positions, we aim to make our society representative of our members, and as welcoming to new blood, as possible.

Lastly, this is your society, and UFFC-S elections are now open. This vote is for half our AdCom (our governing body) representatives and is incredibly important for the future of our society. Please be sure to vote here <u>https://eballot4.votenet.com/IEEE</u>, and if you don't like the options you see, make sure to get involved and stand yourself next year! Our volunteer representation makes UFFC-S everything it is, and we want to hear your voice.

As always, please stay safe and well, thank you for being a part of UFFC-S.

Paul Reynolds President UFFC-S 2020-2021

Back to Top

INTERVIEWS

Interview with Newly Appointed Vice President of Ferroelectrics

Shujun Zhang - VP Ferroelectrics



What's your current occupation? Professor of Material Science and Engineering

Where are you based?

University of Wollongong, NSW, Australia

What excites you about the future of ferroelectrics?

This year marks the 100th anniversary of the first publication of ferroelectric on Rochelle salt crystal. We have witnessed many milestones and breakthroughs in the field of ferroelectric research. Ferroelectric materials are the basis supporting ultrasonic and frequency control applications in many ways. Ferroelectric will continue to be the driving force for emerging applications where multifunctional coupling and integration are the mainstays.

What opportunities led you to your current appointment to the UFFC-S AdCom?

I was elected AdCom member from 2016 to 2018. I'm a member of the Standing committee of Ferroelectrics and a TPC member for both Ferroelectrics and Ultrasonics (Group V: Transducer materials). I also serve as Associate Editor and Associate EiC for our society flagship journal IEEE T-UFFC. What do you hope to achieve in your current role? I would like to promote the collaborations between ferroelectric and ultrasonic/frequency control communities inside our UFFC-S, academic and industrial cooperation.

What's the best piece of advice you've ever received? Slow down, you will become faster.

Jacob Jones - Past VP Ferroelectrics



What's your current occupation? Distinguished Professor of Materials Science and Engineering.

Where are you based?

North Carolina State University in Raleigh, NC, USA. Raleigh is the State capital and is ranked as one of the best places to live in the U.S.

What excites you about the future of ferroelectrics?

I am excited to see new compositions and structures that exhibit ferroelectricity - e.g., the birth of ferroelectric hafnia research a decade ago and the current work on ferroelectric aluminum nitride. Discovery is exciting. There may be more new ferroelectrics to come as the community continues to think outside the box. In fact, the discovery of ferroelectric hafnia may have nucleated a paradigm shift within our discipline (referencing Thomas Kuhn's scientific philosophy here) - time will tell us if this is true.

What opportunities led you to your appointment to the UFFC-S AdCom?

For many years, I was a member of the Ferroelectrics Standing Committee or FerroCom. I served as Awards Chair for Ferroelectrics for several years and then was elected as Deputy Vice President for Ferroelectrics. All of these roles were within FerroCom. Wanting to serve my scientific community more, I served as an Elected AdCom member for two years before being appointed as Vice President for Ferroelectrics in UFFC-S.

Which of your achievements as VP Ferroelectrics are you most proud of? Looking back, I am happy that I was able to bring in new volunteers with diverse perspectives, energy, and ideas and to obtain broad input into decisionmaking. I believe it's the volunteers that define the society and, therefore, bringing in unique perspectives, developing their ideas, and eliciting their input in healthy discussion is very important. I also had the responsibility to fulfill this role through the shutdowns and constraints presented by a global pandemic. I am happy we were able to manage the difficulties during that time period while still "advancing technology for humanity" in virtual formats.

What's the best piece of advice you've ever received?

As a first-generation college student with a healthy dose of imposter syndrome, I resonate with this quote from comedian Ricky Gervais: "The best advice I've ever received is 'no one else knows what they're doing either." One just has to do their best given the uncertainties and tread forward.

CONFERENCES

IEEE 2021 ISAF-ISIF-PFM Joint Conference



The **IEEE ISAF-IFIS-PFM 2021** Joint Conference was held virtually from 16 May to 21 May. Over 700 people registered for the conference, more than what was expected based on previous regular in-person meetings, and 100 people registered for the tutorials. The registered attendees contributed to more than 160,000 *"pageviews"* in total during the week of the conference! The virtual platform will be available until 16 June so that the attendees can continue searching and watching presentations of interest and discuss with the authors using the "conversation" tab.

Highlights

The conference offered more than 700 papers, including the plenaries and tutorials, by speakers from more than 40 countries with pre-recorded videos through the on-demand virtual platform. This year's conference initiated the Ferroelectric Young Investigator Program and had more than 60 invited early-career speakers. These presentations were well received with many of them leading to ongoing discussions in the virtual platform. In addition to asynchronous presentations, several live events were held via Zoom, including:

- The plenary sessions with live Q&A
- A panel discussion on the 100th anniversary of the first ferroelectric's publication
- A memorial session for Professor Pim Groen
- The ferroelectrics awards ceremony
- The student contest awards ceremony
- Live Q&A sessions for tutorials
- A UFFC-S sponsored panel discussion on Women in Engineering (WIE)
- A panel discussion to meet with the EiC of T-UFFC
- The student pitch competition and
- Student networking events (Gather.town)

• As well as the closing ceremony



The **IEEE 2021 EFTF-IFCS** joint Conference was held virtually from 7 July to 17 July.

Conference organizers employed a dual virtual environment to foster the higher degree of interaction that is characteristic of in-person conferences. Attendees used the combined virtual platform of CONFLUX to access talks and Gather.town to engage with other attendees during live sessions, which included plenaries, award ceremonies, posters, and exhibit sessions. The live sessions were spread over three broad time zones (North America, Europe, and Asia) for global accessibility.

IEEE 2021 IUS



IEEE International Ultrasonics Symposium (IUS 2021) will be held as a Virtual Symposium between **11-16 September 2021**. Initially, IUS 2021 was intended to be held in Xi'an, China but the COVID-19 pandemic necessitated the move to a virtual conference.

The IUS 2021 preliminary technical program is now available on the <u>conference website</u>. There are 1170 papers scheduled (271 oral presentations and 899 poster presentations). oral and poster sessions will run Monday, 13 September through Thursday, 16 September with up to five parallel tracks each day. Pre-recorded video presentations will be available to the conference attendees for asynchronous viewing. There will be additional interaction options for presenters and the attendees via virtual networking and discussion rooms (Gather.town platform).

IUS 2021 Plenary Speaker is Dr. Katherine W. Ferrara, Professor of Radiology at Stanford University, School of Medicine. There are 29 **invited speakers** including three clinical talks and two special sessions. There are 15 **short courses** are scheduled for the first two days of the conference from 11-12 September. Additional events include Student Paper Competition, two industry panels ("Industry Leadership" and "From University Lab to Industry Mass Production"), Women in Engineering event "She Leads@IUS", a mentorship social mixer, and several student-oriented activities ("Student Social", "Student-Professional Networking", "Student Pitch Competition", and "Meet the UFFC-S Student Reps").

Please visit the IEEE 2021 IUS <u>conference website</u> for additional details, deadlines, and technical program updates. Conference <u>registration</u> is now open with special group rates and discounts.

IEEE 2021 LAUS



The first **IEEE Latin America Ultrasonics Symposium (LAUS)** will be held virtually on 4-5 October 2021. We received abstracts from Latin America (63%) and other institutions worldwide (21% North America, 9% Europe, 6% Asia/Pacific, and 1% Africa), welcoming international members interested in collaboration with Latin Americans. The abstract information also provides a glance of the research interests in the region, including Biomedical Ultrasonics (56%), followed by Transducers, Sensors, and Actuators (13%), Nondestructive Evaluation (12%), and Physical Acoustics (9%). The organizing committee is working diligently to accommodate as many talks as possible and provide an event that facilitates networking and exchanging ideas and technical content. We hope this event and other UFFC-S activities help forge collaborations where complementary expertise and local resources can maximize the impact and breadth of research done in Latin America. The UFFC-S is also eager to identify members interested in participating more actively in the society, including in Latin American and non-Latin American related activities.

Our plenary sessions will highlight long histories of collaboration with institutions from Latin America and other parts of the world with joint talks with Dr. Mickael Tanter from Physics for Medicine, Paris, France, and Dr. Carlos Negreira from Universidad de la República, Uruguay, and Dr. Koen W.A. van Dongen from Delft University of Technology, Netherlands and Dr. Ana Beatriz Ramirez Silva from Universidad Industrial de Santander, Colombia. Finally, Dr. Ximena Wortsman from Universidad de Chile and Pontificia Universidad Católica de Chile will be presenting her clinical work developed in Chile. The keynote speakers were carefully selected to transmit our messages in line with UFFC-S inclusive efforts, where all forms of equity are promoted, and the participation of early-career researchers is recognized as key for the continued success of the initiative. Similarly, <u>industry participation</u> and entrepreneurship

are highly encouraged to boost innovations and meaningful technological developments in the context of Latin America. Finally, students are running for the student competition awards sponsored by Verasonics, including three awards of \$500 for students currently residing in Latin America and one award of \$500 open to all students.

Please visit our **IEEE UFFC-S 2021 LAUS website** for more information.

Record Participation at 2021 Symposium on Piezoelectricity, Acoustic Waves, and Device Applications

Contributed By: Ji Wang, UFFC-S Representative for SPAWDA



The <u>15th Symposium on Piezoelectricity, Acoustic Waves, and Device</u> <u>Applications</u> (15th SPAWDA 2021) was held on 16-19 April 2021 in Zhengzhou, Henan province.

This major technical conference is held in collaboration with IEEE UFFC-S, the Chinese Society of Theoretical and Applied Mechanics (CSTAM), and the Acoustical Society of China (ASC). The conference was organized by Professor Jiangong Yu and the team at Henan Polytechnic University. More than 450 researchers and engineers in the field of piezoelectric and acoustic wave devices from universities, research institutes, and businesses attended the conference which is a record number of participants and institutions.

Due to the COVID-19 pandemic, the SPAWDA was postponed from last year. The theme of the conference focuses on cutting-edge and hot technical issues such as thermal-mechanical-electric-magnetic multi-field couplings and multiscale mechanics of piezoelectric, ferroelectric, and magnetoelectric materials and devices with emphases on applications in technology innovation and product development. Targeting piezoelectric acoustic wave devices, novel piezoelectric semiconductor materials, ultrasonic nondestructive testing, and biological electromechanical systems, and other emerging technology developments for critical applications, this year's conference attracted major universities and institutions in the field. Technical personnel participated from nearly 30 high-tech enterprises, such as Huawei, TXC, Timemaker, Sunny Optics, and Sonol Instruments, as well as some leading research institutions. The conference accepted 251 abstracts and organized a program including 9 plenary talks, 17 invited talks, 135 oral presentations, and 90 student paper competition entries. Unfortunately, there was no international participation for this Spawda conference due to the impact of COVID-19.



Professor Ji Wang of Ningbo University made brief remarks in the opening session as the representative of the IEEE UFFC-S. He stressed that the IEEE UFFC-S is continuing to support the SPAWDA, and the well-organized conference will expand the global network of the IEEE community.

Ten plenary speakers covered broad subjects of research activities related to the conference themes including piezoelectric devices, wave propagation, ultrasonics, medical devices, and sensors. The participation of some wellknown and leading domestic companies in the conference showed the importance of the conference themes and the growing interest in the fields in research. In the critical areas of carbon neutrality, piezoelectric acoustic wave technology also showed its great potential for reducing technology's impact on the global environment through key contributions such as sensors and catalysis.

According to the tradition, ten outstanding student papers were honored with honorary certificates and awards at the banquet. After the awards ceremony, Professor Ying Yang from Nanjing University of Aeronautics and Astronautics announced that the next SPAWDA will be in Nanjing later this year.



EDUCATION

IEEE UFFC-S Special Topic School Waves and Transducers

Contributed By: Koen W.A.Van Dongen

2021: IEEE-UFFC-S Special Topic School Waves and Transducers

12-22 October 2021 https://wt.imphys.tudelft.nl/



Acoustical imaging is based on two fundamental pillars: waves and transducers. The waves are essential to probe the interior of the object of interest, e.g. the earth, a solid structure, or a human body, whereas the transducers are essential to generate and receive the acoustic waves. The **IEEE-UFFC-S Special Topic School Waves and Transducers** is built around those two pillars.

The lectures will be taught at an advanced physics and engineering level (Ph.D. or equivalent). The course will cover topics related to wave propagation (ranging from acoustic field equations to full-waveform inversion), and materials and transducers (ranging from piezo-ceramics and piezo-crystals to miniaturized high-frequency matrix transducers for integration with electronics).

By combining oral lectures with simple hands-on practical work using computers, instrumentation, and piezoelectric materials, the students will gain a significant understanding of the foundations of medical ultrasound, nondestructive testing, and other related applications.

The course will be held fully online with all lectures in English. Materials for the hands-on practical work will be mailed to the attendees. The school is primarily for (Ph.D.) students from Canada and Latin America. To ensure individual contact between lectures and students, **the maximum number of attendees is 30**.

This Special-Topic School will be generously supported by the IEEE UFFC-S and is primarily for students from Canada and Latin America. More information

on the school can be found here, or by contacting Dr. Koen W.A. van Dongen.

We Look forward to seeing you in October!

Prof. Sandy Cochran, University of GlasgowProf. Dr. Christine Demore, University of TorontoDr. Holly S. Lay, FUJIFILM VisualSonics, Inc.Prof. Weibao Qiu, Shenzhen Institutes of Advanced TechnologyDr. Koen W.A. van Dongen, Delft University of Technology

Latin America Webinar Series

We would like to invite you to attend the third webinar in the <u>UFFC-S America</u> <u>Latina em/en Foco Webinar series</u> from the <u>IEEE UFFC-S Latin America</u> <u>Outreach Initiative</u> featuring the topic: "Acoustic Vortex Beams - From Particle Levitation in Air to Cell Manipulation."

The webinar will take place on **30 August 2021** at 2:00 PM EDT (UTC -4:00) and will feature the following two talks:

<u> Talk 1</u>

Joao Luis Ealo Cuello

"Electroactive Diffraction Gratings: An Efficient Alternative for High-Quality Airborne Ultrasound Vortex Beam Generation"

<u>Talk 2</u>

Glauber Silva

"3D Printed Acoustofluidic Devices for Biospectroscopy Applications"

Registration for this webinar is completely free and will be limited to the first 300 attendees.

Register Here

After registering, you will receive a confirmation email containing information about joining the meeting.

PUBLICATIONS

ULTRASONICS, FERROELECTRICS, AND FREQUENCY CONTROL

A Brief Update from the T-UFFC Editor-in-Chief

Contributed By: Peter Lewin, T-UFFC Editor-in-Chief

Continuing our efforts to promote and maximize the reputation of T-UFFC, the Editorial Team focuses on the exploration of new multi-pronged approaches to advance the high quality and attract new authors by pointing out the interdependence between the three clusters of the UFFC-S and T-UFFC.

Monthly issues are now being emailed directly with hyperlinks allowing immediate easy access and each article is associated by a representative image. The more active use of social media is also being considered with Dr. Helen Mulvana spearheading these efforts. In addition to all the papers being a click away, the monthly cover image is now described by an extended, self-standing caption, written in language that nurtures, promotes, and facilitates interdisciplinary collaboration. The caption text clearly defines the objective of the paper, presents the motivation of the work, and is followed with a salient description of the research approach supported by one of the several images shown. A separate image summarizes the key results, and the extended caption concludes with one or two sentences outlining the take-home message. In short, the expanded caption augments understanding and interdependence between the three clusters of the UFFC-S (Ultrasonics, Ferroelectrics, and Frequency Control) by using relatively jargon-free language.

Communication efforts were also intensified by earlier pro-active solicitation of high-quality review papers and Special Issues.

In the just-published July issue, a long-overdue review paper on PVDF ultrasonics sensors for in-air applications is presented. There are also contributions in five T-UFFC categories, namely Medical Ultrasonics, Transducers and Transducer Materials, Bulk and Surface Acoustic Waves, Ferroelectrics, Frequency Control.

In the near future, the Special Issue on the advances in Histothotripsy, including mechanisms, hardware, and applications will be published and other Special Issues are being solicited.

Yet another effort to encourage collaboration between the Society clusters and motivate researchers in the field of ferroelectrics to consider T-UFFC as their preferred publication vehicle with respect to ferroelectrics materials applications was prepared by organizing a "Meet EiC of T-UFFC" live session at the justconcluded ISAF meeting (May 2021) in Sydney. The T-UFFC Team is grateful to Shujun Zheng (General Chair) for finding a globally acceptable time slot in the busy conference schedule and to Kerstin Bonicard of Conference Catalysts, LLC, for her able assistance with technical support. Alfred Yu, the meeting facilitator opened the session by presenting four thoughtful, open-ended, and probing questions that fostered lively and robust discussion with the panelists who are all highly recognized scholars in the field of Ferroelectrics: Barbara Malic, Susan Trolier-McKinstry, Ahmad Safari, and Shujung Zheng. The major goal of the discussion was to present the symbiotic relationship between Ferroelectrics and Ultrasonics groups; as an example – over four decades ago the need to substantially increase the diagnostic power of ultrasound imaging sparked a variety of activities in the field of Ferroelectrics to design high coupling coefficient materials for future generation ultrasound imaging probes. These activities resulted in the advent of now-ubiguitous composite piezoelectric materials that paved the way for harmonic imaging to offer unprecedented resolution and new, highly efficient therapeutic ultrasound applications. The editors look forward to holding similar sessions at future meetings of Frequency Control and Ultrasonics.

We are working to apply diversity, equity, and inclusion principles to the membership of the Editorial Board. To this end, we will soon share the proposed guidelines that aim to make the process fully transparent and consider new criteria, including a more clearly defined duration for service on the Editorial Board. The guidelines will also point out the necessity of Associate Editors (AE) to be proactive while developing a network of trusted, high-quality

reviewers and the need to understand the importance of minimizing the submission-to-publication time while retaining the high quality of the reviews for the reputation of the Journal. Also, one of the indispensable virtues expected of the AEs will be their willingness to nimbly step in and serve as a reviewer in case the "regular" reviewers are unavailable. Finally, the alacrity of the AEs to proactively propose and solicit Review Papers and Special Issues will be a vital skill to consider.

AWARDS

2021 Society Awards

Contributed By: Jan Brown, UFFC-S Awards Chair



2021 Achievement Award

Award Recipient: David J. Wineland Citation: For sustained efforts with NIST colleagues in the development of advanced atomic clocks based on trapped and laser-cooled atomic ions.

2021 Distinguished Service Award

Award Recipient: S. Lori Bridal

Citation: For outstanding and sustained service to Society operations, symposia management, and enhancing communications within the IEEE UFFC-S community.



Back to Top

STUDENT MEMBERSHIP



Student Social

Students attending IEEE 2021 IUS are invited to participate in the <u>Student</u> <u>Social</u>! Meet other students in a casual setting and network with future colleagues. There will be two opportunities for you to join!

Social 1: Tuesday, 14 September at 2:15 AM (China Standard Time) / Monday, 13 September at 2:15 PM EDT (UTC -4:00).

Social 2: Wednesday, 15 September at 4:45 PM (China Standard Time) / 4:45 AM EDT (UTC -4:00).



STUDENT-PROFESSIONAL NETWORKING



Open to all students—connect with leaders in ultrasonics from academia and industry!

Student-Professional Networking

Students attending IEEE 2021 IUS are invited to participate in the <u>Student-</u> <u>Professional Networking</u> event—connect with leaders in ultrasonics from academia and industry!

Wednesday, 15 September at 3:30 AM (China Standard Time) / Tuesday, 14 September at 3:30 PM EDT



Present your research in 60 seconds (+ a single slide) and win a **cash prize!** BEST OVERALL: \$100 US HONORABLE MENTION (*2): \$50 US

STUDENT PITCH COMPUTITION

Student Pitch Competition

Students attending the IEEE 2021 IUS have the opportunity to participate in the **<u>Student Pitch Competition</u>**! Deliver a live 60-second pitch on your research, supplemented by a single slide, and win a cash prize!

Thursday, **16 September** at 3:15 AM (China Standard Time) / Wednesday, **15** September at 3:15 PM EDT (UTC -4:00).



Meet the UFFC-S Student Reps

Students attending the IEEE 2021 IUS are invited to <u>Meet Your Student</u> <u>Representatives</u>! Ask them anything you want to know about the society or their personal experience and let us surprise you with our special guests!

Thursday, 16 September at 10:00 PM (China Standard Time) / Thursday, 16 September at 10:00 AM EDT (UTC -4:00).

Note: If you cannot access Google Forms to register, please register with your name and the event name by emailing <u>uffc4students@gmail.com</u>.

UFFC-S UPDATES

New Distinguished Lecturer for Frequency Control



Michael Tobar, University of Western Australia, Australia

Lecture Title: Precision Experiments with Photons, Phonons and Spins and Application to Tests of Fundamental Physics

Term: July 2021 - December 2022

Ongoing Calls for Volunteers

UFFC-S is seeking dedicated volunteers to offer their time and service in the following areas below. To apply please visit <u>here</u>.

For more information, please contact the UFFC-S Operations Manager at <u>uffc-</u> <u>admin@conferencecatalysts.com</u>.

UFFC-S New Website



New UFFC-S website has arrived!

We're excited to share the new and improved website with you! Visit www.ieee-uffc.org to see the new site.



We are pleased to announce the launch of the new <u>UFFC-S website</u>. With goals of a simpler, more efficient design, the new website is aimed at easing navigation with accessibility in mind from the beginning.

Please visit www.ieee-uffc.org to see the new site.

Summary of June AdCom Meeting

The second Administrative Committee (AdCom) meeting of 2021 was held on 6 June via Zoom.

Paul Reynolds, President of IEEE UFFC-S 2020-21, led the meeting. The Society is working toward organizational strategies for hybrid conferences due to the impact of the COVID-19 pandemic. Inclusivity and accessibility are key points within the Society's strategic plan.

UFFC-S Professional Networking and Mentoring Program

Contributed By: Harriet Lea-Banks, UFFC-S Networking & Mentoring Committee Member





IEEE UFFC-S PROFESSIONAL NETWORKING & MENTORING PROGRAM

The UFFC-S Professional Networking and Mentoring Program is a new pilot initiative, so far pairing 64 mentors and mentees from 17 countries. Since March the program has held one virtual kick-off event and three virtual workshops, welcoming between 30 to 60 participants from a diverse range of backgrounds. Attendees have been evenly distributed between undergraduate or graduate level, postdoctoral level, and senior society members.

Previous workshop hosts have included Alaina G. Levine (1 May 2021 and 10 July 2021) and Sreeja Nair (19 June 2021), on topics such as 'Crossing the Career Chasm' and 'Networking for Nerds'. Two more workshops are scheduled: Zhen Xu will lead a panel discussion on grant writing (7 August 2021), and Niels Tekke will discuss 'Personal Profile, Professional Path' (4 September 2021). The pilot program will conclude with a virtual social mixer at IUS 2021. We look forward to seeing you at our upcoming events!

<u>UFFC-S Professional Networking and Mentoring</u> <u>Program Workshop 2</u>

Contributed By: Harriet Lea-Banks, UFFC-S Networking & Mentoring Committee Member



On Saturday, 19 June 2021, the UFFC-S Professional Networking and Mentoring Committee welcomed participants to the second UFFC-S mentoring workshop – the second in a program of five workshops and panel discussions this summer. Hosted by Sreeja Nair, an Outbound Product Management Leader at Qualcomm, the session focused on *"Crossing the Career Chasm: Managing your Career as a Product"*.

"It's not just what you know, but who knows what you know" – Sreeja challenged participants to develop their technical skills as well as increase their visibility to get ahead in their careers. Just as in product development, where "communicating value is as important as creating value", Sreeja guided participants through techniques to develop their personal brands and to identify version 2.0 of their careers.

UFFC-S Professional Networking and Mentoring Program Workshop 3

Contributed By: Harriet Lea-Banks, UFFC-S Networking & Mentoring Committee Member



On Saturday, 10 July 2021, the UFFC-S Professional Networking and Mentoring Committee welcomed participants to the third UFFC-S mentoring workshop – the third in a program of five workshops and panel discussions this summer. Participants were hosted by the author, entrepreneur, and President of Quantum Success Solutions, Alaina Levine.

In her workshop 'Virtual Networking for Nerds: How to Network and Find Collaborators from Afar', Alaina guided us through the fundamentals of networking – not a single conversation but an ongoing dialogue, sparked by genuine scientific and professional curiosity. We were encouraged to offer value without expecting immediate returns, and reminded of the important interplay between innovation, diversity, and networking when looking for the next steps in our career: **"90% of jobs are hidden or don't exist yet!"**.

UFFC-S Professional Networking and Mentoring Program Workshop 4

Contributed By: Harriet Lea-Banks, UFFC-S Networking & Mentoring Committee Member



On Saturday, 7 August 2021, the UFFC-S Professional Networking and Mentoring Committee welcomed participants to the fourth UFFC-S mentoring workshop – the fourth in a program of five workshops and panel discussions this summer.

This workshop was hosted by Professor Zhen Xu from the University of Michigan, with two excellent talks given by Dr. Houston Baker (Program Director, National Institute of Health) and Dr. Ruyan Guo (Program Director, National Science Foundation). They shared guidance and advice on the application process and current funding opportunities from their institutes.

Join us next month for workshop IV – '*Personal Profile, Professional Path*' with Niels Tekke (**4 September 2021**) – open to all and free to attend.

KEEP IN TOUCH

Please Tell Us Your Stories!

Please contact any of the members of the UFFC-S newsletter team if you have news to share with the UFFC-S membership. We will get news onto the website as it occurs and include selected items in the quarterly highlight newsletters. Finally, in addition to the usual notices and updates we share, we're keen to promote good news and successes from across our society. If you or those you work with have received an award, successfully defended their Ph.D. thesis, secured funding for an exciting new initiative, please get in touch! You can see all our news items on our web pages or by following our social media accounts.



<u>Lori Bridal</u>, Newsletter Editor in Chief <u>Erdal Oruklu</u>, Ultrasonics Editor <u>Julia Glaum</u>, Ferroelectrics Editor Wei-Chang Li, Frequency Control Editor Helen Mulvana, Publicity Chair Arun Thittai, Newsletter Deputy Editor-in-Chief Derek Chan, Newsletter Deputy-Editor-in-Chief

Social Media

We're very keen to build our social media presence both to promote our society and to share news items with our community. Please add our pages to your networks and promote our posts so we can continue to reach as wide an audience as possible.



Back to Top

Copyright © 2021 Ultrasonics, Ferroelectrics, and Frequency Control Society, All rights reserved.

IEEE Privacy Policy

Want to change how you receive these emails? You can <u>update your preferences</u> or <u>unsubscribe from this list</u>.





M Forward