EuCAP 2023, AP-S Chapter Activities, COPE Corner, and Distinguished Lecturers

EUCAP 2023 IN FLORENCE, ITALY

THE BIGGEST EUROPEAN AP CONFERENCE EVER

Report by: Juan R. Mosig

The European Conference on Antennas and Propagation (EuCAP) is the flagship conference of the European Association on Antennas and Propagation (EurAAP, https://www.euraap.org). This year, the 17th edition, EuCAP 2023, took place in Florence, Italy, on 25–31 March 2023 (*). More details and photos in specific sections (marked by an asterisk) can be found in the supplementary material that accompanies this article on IEEE *Xplore*.

Since their beginning in 2006, EuCAP conferences have attracted a crowd of about 1,000 participants. After the COVID-forced online editions of 2020 and 2021, the EuCAP 2022 conference, held in Madrid, Spain, in a hybrid format, had already almost gone back to the average numbers, despite the restrictions for physical meetings still existing in Europe. This was a clear proof of the solidity of EuCAP conferences, well established in the personal agenda of most members of our antennas and propagation community. The 2023 edition has confirmed this trend. Able to go back to a pure face-to-face physical style, EuCAP 2023 has broken all previous records. For this, the author, on behalf of the EurAAP Board, wants to thank the EuCAP 2023 chair, Prof. Stefano Maci (Figure 1), his cochairs, Prof. O. Breinbjerg and Prof. A. Freni, and all of the committees, organizing teams, cooperating universities, and volunteering individuals who contributed to the amazing success of this conference (*).

Also, thanks are given to the international associations that have implemented a lasting strong collaboration with the EuCAP conferences, through signed memoranda of understanding with EurAAP. Their names are well known in our community: the Antenna Measurement Techniques Association (AMTA), the European Microwave Association (EuMA), the IEEE Antennas and Propagation Society (AP-S), the Institution of Engineering and Technology (IET), the International Symposium on Antennas and Propagation (ISAP-IEICE), the International Union of Radio Science (URSI), and three newcomers, the European Conference on Networks and Communications (EuCNC), the Virtual Institute for Artificial Electromagnetic Materials and Metamaterials (METAMORPHOSE), and the European Space Agency (ESA), who signed its agreement with EurAAP during the conference (*).

SOME NUMBERS

EuCAP 2023 welcomed 1,712 (!) registered delegates from 65 countries, the absolute record in the EuCAP series.

FIGURE 1. EuCAP 2023 is presented by its chair, Stefano Maci, University of Siena, Italy, and by EurAAP Chair Stefania Monni, TNO, The Netherlands.

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The "big five" European countries (in our domain, France, Germany, Italy, Spain, and the United Kingdom) accounted for roughly half of the participants, with sizable contributions (around 10%) from both North America and the Asian Far East (*).

After a strict revision by a team of more than 1,000 reviewers and metareviewers, 1,046 papers were accepted. Of these, no fewer than 1,013 were actually presented. The papers' geographical distribution was very close to that of the registered delegates. They were presented both in oral sessions (72%) and as posters (28%). Of the total papers, 66% were unsolicited contributions, presented in regular sessions, while 34% were the outcome of no fewer than 55 convened sessions.

It is also interesting to look at the authors of the papers (there were more than 4,000 different names). Roughly, 59% came from academia, 23% were master's or Ph.D. students, and the remaining 18% were distributed among industry, government employees, and nongovernmental organizations.

EuCAP always classifies its papers into four traditional topics: antennas (53%), electromagnetics (21%), propagation (15%), and measurements (11%). But in the last editions, an additional and useful classification by "application tracks" has been introduced. This is not only very helpful to organize and distribute the papers in the 65 oral sessions, but it also provides some practical orientation to the attendees. It is worth mentioning that among the 11 predefined application tracks (*), the most popular was "MM-wave and THz cellular" (18% of the papers) followed by "Fundamental Research and Emerging Technologies" (15%).

To pamper this record-breaking number of delegates, EuCAP 2023 offered them a superb exhibition with no fewer than 50 international exhibitors, covering almost the full alphabet, from Airbus to Xphased (*). Add to this 12 short courses, 20 scientific and industrial workshops (both half and full day), a rich social program for both delegates and accompanying persons—and you will start to understand why EuCAP 2023 was the edition of all superlatives.

All of this was also facilitated by the generosity of the 20 sponsors (*) to whom deeply felt thanks must be given, starting with the two Platinum sponsors, Huawei and Microwave Vision Group.

ORGANIZATION DETAILS

The basic schedule of EuCAP conferences is now well established, although there is always room for innovation and improvement and the need to adjust to the material conditions of every venue.

The venue for the 2023 edition was Fortezza da Basso, a wonderful fortress built by Alessandro de Medici in 1534 and transformed into a congress and exhibition center by the city of Florence. It has a very convenient location in downtown Florence, a few minutes' walk from the main railways station. But above all, it was perfectly suited for EuCAP and its traditional program (*).

Monday morning started with the usual opening address, followed by a plenary session including three prestigious keynote speakers: Nader Engheta (University of Pennsylvania), Rashaunda Henderson (University of Texas at Dallas), and Marco di Renzo (CNRS and Supélec Paris) (*). A crowded Cavaniglia Pavilion (1,000 people) was the perfect frame for these events.

The main flow of the conference then moved to the two-floor Spadolini Pavilion. The traditional format of EuCAP includes 11 parallel sessions in the morning and late afternoon. In the early afternoon, between lunch and coffee break, the protagonists are the poster sessions followed by two semiplenary sessions. These sessions include only two presentations per day, resulting in a total of 12 invited papers given by top-notch speakers (*). The Spadolini upper floor provided ample room for the 11 parallel sessions. More importantly, the more than 8,000 m^2 of the lower floor were a delightful playground for a deep interaction among exhibition, poster sessions, invited papers, lunches, and coffee breaks. This was confirmed by all of the exhibitors, who systematically praised the arrangements and configuration of the venue.

In addition, Fortezza da Basso provided all of the additional rooms needed for workshops, short courses, and ad hoc meetings, with an appreciated touristic supplement: the possibility of visiting the historical areas underneath the modern venue. And last but not least, on Monday evening, the Fortezza hosted a very successful and animated welcome drink event (*).

Of course, several events took place outside this wonderful venue, and the first to be mentioned is the outstanding conference dinner. EuCAP 2023 was able to offer to the conference dinner participants a predinner cocktail in the Salone dei Cinquecento, undoubtedly the grandest and most imposing room in Florence's Palazzo Vecchio (Figure 2). It

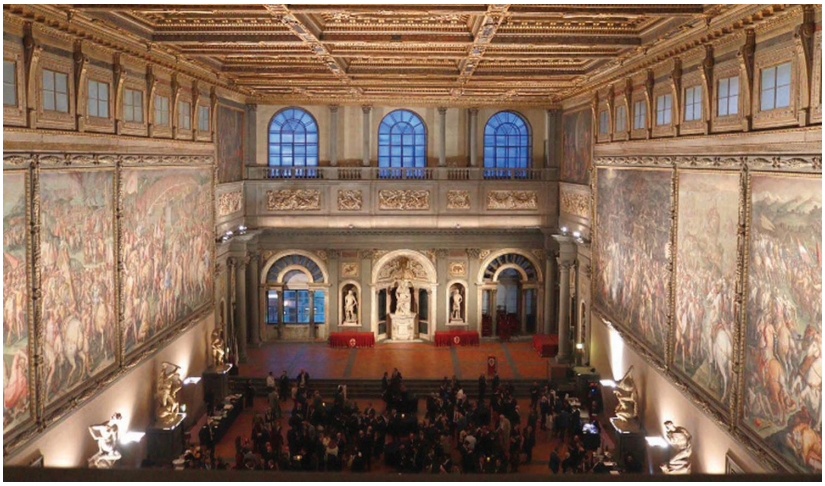

FIGURE 2. Cocktails preceding the conference dinner in the Salone dei Cinquecento, inside Palazzo Vecchio in downtown Florence.

was an amazing feeling to have a drink and chat with colleagues amid paintings and sculptures by the big names of the Italian Renaissance. Then, the participants moved to the no-less-imposing Santa Maria Novella church, where the conference dinner was held in its big Cloister refectory. This was the moment to celebrate the winners of the four prestigious EurAAP Awards (*) (see https://www.euraap.org/awards and consider applying for them): the Antennas, Propagation, Felsen, and Kildal Awards, whose 2023 recipients were, respectively, Guy Vandenbosch, Vittorio Degli Esposti, Christos Argyropoulos, and Daniel Martínez de Rioja.

Finally, it is worth mentioning that, to compensate for the limited number of conference dinner tickets, the EuCAP organizers kindly offered an alternative to the delegates during the conference—in the form of no less than four get-together dinners.

Other traditional, very successful EuCAP outings in Florence were the two sold-out AMTA technical tours, to the Arcetri Astrophysical Observatory and the Galileo Museum (*).

SOME PERSONAL COMMENTS

This author was impressed by the consistently high technical and scientific level of the conference, from the keynote presentations to the posters. The workshops were also very successful and well attended. Three are worth mentioning: 1) the "History of Electromagnetics and Antennas" session, built around the historic Oersted experiment (whose 200th anniversary we should have celebrated in 2020) and including 10 well-known speakers (*); 2) an innovative workshop on "Disruptive Innovations: The Roadmap of the European Funding Agencies," where speakers shared the vision of main European Union agencies on disruptive technologies and explained which instruments are available to support innovative ideas (*); and 3) the brand-new EuCAP Perspective Workshop, providing a broad and multidisciplinary view on the current trends, ongoing initiatives, and industrial perspectives in a certain field; this year "Smart Wireless Environments" (*).

Another novel and successful event was the "EuCAP Job Corner," where students and young researchers were able to discover companies and job opportunities through the short talks of professionals belonging to the exhibition companies.

In summary, EuCAP 2023 was a most successful conference, and I would like to highlight two details that I believe strongly contributed to its success. The phone app was excellent. All attendees were able to set up their personal schedules, to be aware of late-notice changes, and to easily find their way. No more paper! Also, there were enough tables and chairs to enjoy relaxed lunches and coffee breaks and to take full advantage of the excellent Tuscan food (and wine) and the always-satisfying espressos and cappuccinos—nothing better for meeting colleagues, exchanging ideas, and discussing possible collaborations.

EuCAP 2023 ended early afternoon on Friday with the traditional closing ceremony, announcing the future edition (*). Get ready for EuCAP 2024 on 17–22 March 2024, in Glasgow, U.K.!

SUPPLEMENTARY MATERIAL

VIDEO

AP-S CHAPTER ACTIVITY

Committee Chair: Ajay Poddar
Report by: Mei Song Tong

NEW AP-S CHAPTERS

The following new Chapters have been formed:

1) Raghu Institute of Technology, Antennas and Propagation Society Student Branch Chapter, geocode SBC03240D, 16 February 2023
2) Kumaraguru College of Technology, Antennas and Propagation Society Student Branch Chapter, geocode SBC29751B, 22 February 2023
3) Bhusanayana Mukundadas Sreenivasaiah (BMS) College of Engineering, Antennas and Propagation Society Student Branch Chapter, geocode SBC04431G, 17 March 2023
4) Silchar, IEEE Kolkata Section, Antennas and Propagation Society Chapter, geocode CH11058, 18 March 2023
5) Vignan's Foundation for Science, Technology Research, Antennas and Propagation Society Student Branch Chapter, geocode SBC13631A, 23 March 2023
6) Wayanad, Antennas and Propagation Society Student Branch Chapter, geocode SBC11161B, 28 March 2023
7) Indian Institute of Technology Patna, Antennas and Propagation Society Student Branch Chapter, geocode SBC14591A, 29 March 2023.

If any of you reside in a location where you do not have access to an existing AP-S Chapter and are interested in establishing a new one, please feel free to contact Chapter Activity Committee (CAC) Chair Dr. Ajay Poddar (akpoddar@ieee.org) and the AP-S Chapter Region coordinators for guidance through the petition process. Start by researching your area, and then decide which route will best suit your needs and support a healthy, active Society/Technical Council Chapter environment (https://mga.ieee.org/resources-operations/geographic-unit/chapters/how-to-create-a-new-ieee-chapter).

It is very important for an active Chapter to submit its annual report to be eligible to receive financial support for 2023 Chapter events (technical meetings, workshops, and special projects) and for Chapter chair travel grants to attend the annual Chapter Chairs Meeting at the AP-S flagship

and AP-S-supported regional conferences. As of 2022 May, there are 36 independent Chapters, 110 joint Chapters, and 75 Student Branch Chapters for a total of 221 Chapters (https://tblanalytics.ieee.org/). Many Chapters have organized numerous technical seminars, workshops, outreach drives, Committee on Promoting Equality (COPE) projects (http://aps-cope.org/), IEEE Special Interest Group on Humanitarian Technology (SIGHT) projects (https://sight.ieee.org/), and social events at the Chapter and Regional levels. We would like to welcome and express gratitude to the many new Chapter officers for their time and hard work for the benefit of IEEE Members.

AP-S CHAPTER REPORTS

IEEE NORTH JERSEY SECTION AP-S/MTT-S CHAPTER OUTSTANDING ENGINEER AWARD

Figure 3 is a photo of Nina Krikorian-Ezik receiving the North Jersey Section AP-S/ IEEE Microwave Theory and Technology Society (MTT-S) Chapter Outstanding Engineer Award plaque at the award banquet event, 7 May 2023, at Birchwood Manor, Whippany, NJ, USA. Nina Krikorian-Ezik is currently a manager of the Mission Solutions RF Design Group at L3 Harris in Clifton, NJ. She has 25+ years of experience in the aerospace and defense industry and has developed system-level radio-frequency (RF) architecture designs for software-defined radio in addition to developing RF hardware circuit designs, such as up/down converters, antenna interface modules, clock circuits, voltage control oscillators, filters, and antenna designs up to Q-band.

Figure 4 is a photo of Dr. Ajay Poddar, receiving a plaque from Dr. Hong Zhao, a professor at Fairleigh Dickinson University, NJ, and chair of the IEEE North Jersey Section, for serving as chair of the North Jersey Section from 2021 to 2022.

IEEE ULRICH L. ROHDE HUMANITARIAN TECHNICAL FIELD PROJECT AWARD

The SIGHT/IEEE Humanitarian Activities Committee (HAC) project has a call for proposals. The proposal, consisting of details of the project and budget, can be submitted to Dr. Jawad Siddiqui, AP-S SIGHT Committee chair, e-mail: jys.rpe@gmail.com. The submission deadline for the "IEEE Ulrich L. Rohde Humanitarian Technical Field Project Award" is 30 August 2023. The project selection process is in line with IEEE SIGHT and HAC Project Awards. The evaluation of proposals will be based primarily on technical content. After completion of the project, the awards committee will explore follow-up activities for low-cost production of the proposed technology, which is the key requirement for humanitarian needs.

It was an amazing feeling to have a drink and chat with colleagues amid paintings and sculptures by the big names of the Italian Renaissance.

IEEE AP-S CHAPTER STUDENT DESIGN CONTEST

There is additional funding available for supporting Student Design Contests (SDCs) cosponsored by local AP-S Chapters for the engagement of students and Young Professionals. The template for the SDC is in the category of Special Project, and it can be sent to AP-S CAC Chair Dr. Ajay K. Poddar, e-mail: akpoddar@ieee.org. The SDC and Special Project Form and preparation guidelines are posted on the AP-S Chapter webpage (https://www.ieeeaps.org/chapters/chapters). The selected SDC project will be published in *IEEE Antennas and Propagation Magazine* as a part of the "AdCom Corner" column report activities. Please contact your AP-S Chapter Activity Region Coordinator for clarifications and support related to financial support, travel grants, and other concerns. Please click the link for contact details of the AP-S Chapter Activity Region Coordinators: https://ieeeaps.org/committees/current-committee-members.

FIGURE 3. Nina Krikorian-Ezik receives the IEEE North Jersey Section AP-S/MTT-S Chapter Outstanding Engineer Award plaque at the award banquet event on 7 May 2023. From left, Dr. Adriaan J. de Lind van Wijngaarden, chair of North Jersey Section IEEE Information Theory Society Chapter; Dr. Ajay K. Poddar, chair of IEEE AP-S CAC; Nina Krikorian-Ezik, L3 Harris Clifton, NJ; Dr. Hong Zhao, chair of IEEE North Jersey Section; and Dr. Anisha M. Apte, IEEE AP-S CAC Region coordinator. Venue: Birchwood Manor, Whippany, NJ, USA.

SUPPLEMENTARY MATERIAL

COPE CORNER

Committee Chair: Weng C. Chew
Report by: Anisha Apte

SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS IN NORTH AMERICA

Members of the AP-S COPE North America subcommittee: David R. Jackson (chair), Charlotte Blair, Niru Nahar, Jose Schutte-Áine, and Karl Warnick.

The AP-S COPE North America subcommittee is providing a brief overview of the stimulating discussions that arose from a presentation by the AP-S COPE North America subcommittee to the AP-S COPE Committee on 1 April 2023, on the subject of science, technology, engineering, and mathematics (STEM) education in North America. The main purpose was to stimulate discussion and suggestions for furthering STEM in North America and determining how AP-S COPE can help.

BACKGROUND AND NEED FOR STEM INVOLVEMENT IN NORTH AMERICA

We first note that the United States placed 11th out of 79 countries in science, when testing of U.S. students was administered in 2018. Also, the United States was not among the top five math-scoring countries in 2018, and the scores of U.S. math students have remained roughly constant since 2003. Furthermore, in a recent report that lists the top 10 countries with the most educated populations, only one country in North America, Canada, was among the list, ranking at number 9. Clearly, much effort is needed to improve STEM education in the United States, with a disproportionate number of students in underserved, underrepresented, and marginalized communities being especially in need of improved education in the STEM areas. An improvement of STEM education in the public K-12 system in the United States, especially within marginalized communities, can only serve to increase the overall educational level and quality of life for all U.S. citizens. According to the U.S. Department of Education website, "Research shows how a sense of belonging in rich and rigorous classrooms is directly correlated to students' long-term academic success." Moreover, "the Department's Civil Rights Data Collection continues to demonstrate that students of color and students with disabilities are disproportionately excluded from learning opportunities in STEM," said U.S. Deputy Secretary of Education Cindy Marten. Furthermore, she says "Today, we are saying unequivocally to all students and educators that they belong in STEM and that they deserve to have rigorous and relevant educational experiences that inspire and empower them to reach their full potential as productive, contributing members of our nation's workforce."

FIGURE 4. Dr. Ajay Poddar receives the plaque. From left, Kenneth Oexle, chair of North Jersey Section Award Committee; Russell Pepe, member of North Jersey Section Award Committee; Prof. Durgamadhab Misra, chair of North Jersey IEEE Electron Devices Society/IEEE Circuits and Systems Society Chapter; Dr. Adriaan J. de Lind van Wijngaarden, chair of New Jersey Section IEEE Information Theory Society Chapter; Dr. Ajay Poddar, chair AP-S CAC; Prof. Hong Zhao, chair of IEEE North Jersey Section; Har Dayal, cochair of Engineering in Medicine and Biology); Naresh Chand, chair of North Jersey Section Photonic Society Chapter; Howard Leach, chair of North Jersey Section History Committee; and Kirit Dixit, chair of North Jersey Section IEEE Society on Social Implications of Technology Chapter. Venue: Birchwood Manor, Whippany, NJ, USA.

HOW CAN AP-S COPE HELP?

Many engineering colleges at universities in the United States and in electrical and computer engineering departments in particular, already have existing STEM-related programs and host STEM-related events. Often they are in the form of special camps or theme-related events to help engage young students in STEM activities. These activities can be very beneficial, especially when they involve outreach to marginalized communities. To give two specific examples, Brigham Young University hosts a "Chip Camp" for youth in seventh and eighth grades. The University of Houston hosts a STEM Technology Camp for grades 3–8. Many other such programs exist throughout the country. The AP-S community can help advocate for such programs and participate in them, as appropriate. This could also be an excellent opportunity for Members of IEEE student branches to become further involved in outreach.

Some universities may also have a special office that pertains to diversity,

equity, and inclusion. Working with such offices may be beneficial when planning outreach to marginalized communities, especially when the university is located in or near a marginalized community.

Another way in which AP-S members can get involved with STEM activities is to interact directly with local schools. Members of the AP-S community are experts in electromagnetism, and, as we all know, this area makes for some fascinating demonstrations in the classroom.

Figure 5 shows a Tesla coil and a Van de Graaff generator being demoed for a third-grade class. These kinds of demos are something that AP-S students and students in a local IEEE student branch can easily do, and the students in the classroom will really enjoy it. This is an excellent way to enhance outreach to our local schools. This type of outreach can possibly be coordinated through existing STEM programs that are already in place at our universities.

Another possible way in which AP-S members can get involved in STEM activities at local schools is by working with teachers to help them implement electromagnetism-related classroom projects for their students. Again, this type of activity could possibly be done in conjunction with STEM programs that are already in place at our universities.

By getting more involved, we can all help to advance STEM activities, and our youth will surely benefit. The AP-S COPE North America subcommittee welcomes further suggestions!

AP-S COPE-SPONSORED TERRA NORTH JERSEY STEM FAIR

The Terra North Jersey STEM Fair (TNJSF) is a high school student competition in all STEM fields, in which students, individually or in groups, present a wide variety of projects. Most of the projects are investigative in nature, posing and attempting to answer some question or problem, either through experimentation and design or in a theoretical sense. All areas of science, math, and engineering are included. The fair accepts entries from 10 counties of Northern New Jersey: Bergen, Essex, Hunterdon, Middlesex, Morris, Passaic, Somerset, Sussex, Union, and Warren. The home page for the TNJSF is https://tnjsf.zfairs.com.

The mission of the TNJSF is to support, encourage, and recognize student involvement in scientific research, with the belief that students can only truly appreciate the creative nature of the scientific process if they have actually experienced it themselves. In addition, the TNJSF endeavors to provide resources that further this overarching goal, including giving students various opportunities to interact with professional scientists and engineers. The opportunity to partake of the TNJSF itself as well as the other resources offered is intended to be open to all high school students in the Northern New Jersey Region.

The AP-S sponsors IEEE North Jersey Section Young Engineer Awards for projects in engineering, biomedical engineering, and computer science that demonstrate the use of sound engineering principles. A team of judges from AP-S COPE and the IEEE North Jersey Section has selected nine students (see Table 1) as recipients of the IEEE Young Engineer Award. The awardees were presented with an award check and a certificate of achievement during a personal visit to each of the schools by the IEEE North Jersey Section Chapter officers.

AP-S EPICS COLLABORATION

Another meeting of the COPE was held on 11 May 2023. The main agenda of this meeting was a presentation by Ashley Moran (seen in the top left corner in Figure 6) on the topic Engineering Projects in Community

FIGURE 5. David Jackson having fun in a third-grade classroom, demonstrating a Tesla coil and a Van de Graaff generator.

TABLE 1. RECIPIENTS OF THE IEEE NEW JERSEY YOUNG ENGINEER AWARD.

Category	Student	School
BE.01	Ryan Kwon	Bergen Catholic High School
CS.01	Divya Krishna	Edison High School
CS.05	Zayn Rekhi	Millburn High School
CS.08	Ryan Rong and Curtis J Zhou	The Peddie School
EN.07	Charles Jiang and Diego Pasini	The Pingry School
EN.10	Abhay Bhaskar	Middlesex Academy of Science, Mathematics, and Engineering Technology
EN.11	Kai Song	Tenafly High School

Service (EPICS) in the IEEE program to see if there may be a way for EPICS to partner with AP-S and COPE.

The meeting was initiated by Dr. Ajay Poddar and began with a formal introduction of the COPE members to the speaker. The goals of EPICS in IEEE and some stories about the impact their student lead projects have had on their communities were presented.

All EPICS projects tie back to one of the four pillars of community improvement: access and abilities, environment, human services, and education and outreach. EPICS project teams partner with nonprofit organizations in their community to bring engineering solutions to underserved populations. With these highlights, the different ways in which EPICS could partner with AP-S COPE, given their shared goals, were discussed.

IEEE adopted the philosophy of EPICS from Purdue University by creating the EPICS in IEEE Committee in 2009. EPICS in IEEE empowers students to work with local service organizations to apply technical knowledge to implement solutions for a community's unique challenges. Prof. Weng Chew, the AP-S COPE chair and a professor at Purdue University, stated that he will be discussing with Bill Oakes at Purdue University about a joint collaboration effort in line with COPE's mission. Prof. Yahia Antar, past AP-S president, invited Ashley to give a presentation to the AP-S AdCom on Sunday, 23 July 2023, at AP-S URSI in Portland, OR, to help AP-S AdCom and committee members in understanding the AP-S COPE EPIC initiatives. Dr. Anisha Apte and Dr. Jawad Siddiqui recommended that Ashley also give a presentation during the Chapter chair meeting or during the SIGHT/IEEE Member and Geographic Activities meeting on Thursday to reach out to the local Chapter officers attending these meetings, which she has gladly accepted. We look forward to this collaborative effort in addressing the shared vision of IEEE EPICS and AP-S COPE.

Members of the AP-S community are experts in electromagnetism, and, as we all know, this area makes for some fascinating demonstrations in the classroom.

AP-S COPE FUNDING REQUEST DEADLINE FOR 2023: 31 JULY 2023

AP-S COPE aims to fund projects that provide good use of IEEE expertise exhibiting a strong technological component, with clear engagement with the community, indicating that the proposed solution is both desired and feasible. There should be established relationships, ideally documented, with stakeholders who will be involved in the project and implementation with a clear, detailed, and credible Project Assessment Matrix, Project Implementation Plan, and Budget. The team should demonstrate combined experience to credibly execute the project and identify and address potential risks, and the project should have real, tangible impact. If a proposal is missing the mark on two or more of these areas, it might not be ready for funding.

AREAS OF FOCUS

AP-S COPE is prioritizing immediate impact on poverty mitigation and inequality reduction through the following project areas:

- upgradation of a marginalized population
- STEM education for a marginalized population
- information and communications technology for an underserved population
- sustainable power sources for an underserved population
- water, sanitation, and hygiene for an underserved population.

Projects must be successfully completed and submitted to AP-S through final reporting indicating the status of

FIGURE 6. Screenshot of the AP-S COPE Zoom meeting held on 11 May 2023.

the project and utilization of funds at the end of each calendar year. Expense vouchers should be submitted as supporting documents for audit. An "APS COPE Project Budget Template 2023" spreadsheet should be submitted for budget proposal during application and an expense report on completion of the project. Fund utilization should be clearly indicated. Each AP-S Chapter/Joint Chapter/Student Branch Chapter may submit multiple proposals. Proposals are subject to review and scrutiny, and the total project funding will not exceed US$3,000 for any calendar year. For additional funding, teams are encouraged to submit proposals to AP-S SIGHT and AP-S CAC.

AP-S Chapter officers/members can fill out and submit the IEEE AP-S COPE - Special Project Funding Request Form 2023 using the online submission link. Please use the link given next to the Google Form to submit your project proposals under the COPE mission: 2023 AP-S COPE Special-Project Funding Request Application (Google Form: https://forms.gle/T6rQJNV2v7E7a73Q8).

If Google Forms is not available in your Region, you may use "AP-S Special Project Request Form" (MS Word, PDF) or "2023 AP-S COPE (Committee on Promoting Equality) Special Purpose Fund Request Form" (MS Word), found on the IEEE AP-S website (ieeeaps.org). Chapter officers can submit their write-ups, photos, and videos of COPE events to be uploaded to the COPE website (aps-cope.org) and/or to be published in *IEEE Antennas and Propagation Magazine* in the "AdCom Corner" column.

It was one of my main ambitions and goals when applying for the Distinguished Lecturer program to deliver interesting lectures in the Middle East and Central Asia.

DISTINGUISHED LECTURERS

Committee Chair: Kwai Man Luk

I am delighted to report that our Distinguished Lecturers, including Prof. Reyhan Baktur, Prof. Yongxin Guo, Prof. Debatosh Guha, Prof. Zhongxiang Shen, Prof. Ahmad Hoorfar, and Prof. Levent Sevgi, have arranged or planned their talks, both online and in person, over the past few months. AP-S Chapters are always most welcome to invite our present and past Distinguished Lecturers to visit your locations and meet your colleagues and students.

One of my major tasks recently is the selection of the MTT-S and AP-S Inter-Society Distinguished Lecturer, working with Prof. Luca Pierantoni, the MTT-S representative. This is a new initiative proposed by Prof. Ke Wu. The call for nomination of the AP-S Distinguished Lecturers serving the period from 2024 to 2026 has been announced. Members are welcome to nominate outstanding candidates or themselves for this important position in our AP-S. The deadline for nomination is 31 August 2023.

REYHAN BAKTUR'S MIDDLE EAST LECTURE TOUR

Reyhan Baktur, IEEE APS Distinguished Lecturer (2022–2024)

I returned from a one-week lecture tour in Egypt on 17 December 2022. This concluded a Middle East lecture trip that included lectures across Turkey and Egypt. It was one of my main ambitions and goals when applying for the Distinguished Lecturer program to deliver interesting lectures in the Middle East and Central Asia. I hoped that, with my cultural background, students, especially female students, could find a resemblance and kinship and would be inspired to engage in graduate studies in the antennas and propagation field. When I received an invitation to visit Egypt in December, I was on board in no time.

Earlier in June, I was asked to deliver lectures at three top universities in Turkey. In addition to the in-person Middle East lectures, I also delivered eight online lectures to Chapters in the United States, Canada, India, and

FIGURE 7. After the lecture at the Higher Institute of Engineering and Technology in Dumyat.

FIGURE 8. At Mediterranean University, Turkey.

France. This report presents a retrospective highlight of my visit to Egypt and Turkey.

My lectures in Egypt started with the Air Defense College in Alexandria on 13 December 2022. The lecture focused on CubeSats and their development cycle, from concept to orbit. The topic was chosen in consideration of the curriculum and interest of the host institute, which is active in organizing the International Conference on Telecommunications.

The second lecture was on 14 December 2022, at the Higher Institute of Engineering and Technology in Dumyat, which is a young yet quite vibrant engineering school. The lecture focused on optically transparent antennas and had almost 300 people in attendance. I was very happy to see responses and reactions from students and was pleased to see a good portion of female enrollment in the program. After the lecture, students walked me around their innovation design laboratory, where many student-led projects are in progress. The projects include energy harvesting, robotics, and artificial intelligence-based sensing. In addition to my lecture, I talked to the students and young faculty about IEEE, for example, on becoming members and the paper formats of IEEE conferences. I could see the interest and ambition in those bright young eyes, and I hope our Society will keep on growing.

On 15 December 2022, I delivered my last lecture at The Innovation Hub, Silicon Waha, in New Borg El-Arab City. The lecture was open to engineers and students in nearby institutes. The hub is quite fascinating with its fabrication facility and outreach nature. The audience included a high school student working on his design project at the facility.

My lecture in Turkey started at Bosphorus University in Istanbul on 6 June 2022, where two lectures were delivered on the same day, followed by visits to the antenna laboratory and robotics facility. Two more lectures followed at Middle East Technical University on 8 and 13 June, where the presentations were attended by entrepreneurs of small businesses in addition to students and faculty.

My last stop in Turkey was at Mediterranean University on 20 June. It was heartwarming to see many students at the last lecture even though their final exams were over by then. The lecture turned into an interactive flipped-classroom style activity, where we wrote down background equations with students' initiatives and generated some interesting future project ideas. I was given a tour to see a few graduate research projects after the lecture.

I value all of my experiences and interactions with the audiences in my Middle East lecture tour. I think the presentations are well received as reflected by the feedback I got. I look forward to a fruitful new year.

Figures 7 and 8 are photos of some of the attendees from my 2022 Middle East lecture tour. Additional photos are provided in the supplementary material.

SUPPLEMENTARY MATERIAL