



## IEEE ELECTROMAGNETIC COMPATIBILITY SOCIETY

3 October 2024

To: Members of the IEEE Electromagnetic Compatibility Society

Subject: Election of Members to the Board of Directors for a  
Three-Year Term 1 January 2025 – 31 December 2027

The IEEE Electromagnetic Compatibility (EMC) Society Bylaws provide that six new members shall be elected annually to the Board of Directors. The Nominating Committee submitted the names of the nine (9) nominees listed on the enclosed ballot and the associated biographical sketches for your consideration. On the ballot card, names are listed in alphabetical order. Candidates' information is also available on the EMCS website at: <http://www.emcs.org>.

This year's election continues to offer an electronic balloting option. If you would like to cast your ballot electronically you will need your IEEE Account username/password. If you do not remember your account information, you may retrieve it on the voter login page.

It's your choice - send in the paper ballot by mail using the envelope provided OR cast your ballot electronically by using the URL below to access the ballot through the Internet and cast your vote now.

**<https://eballot.app/ieee>**

Please vote for **UP TO SIX** candidates. Ballot cards or electronic ballots must be received at IEEE no later than **12 November 2024**. **Any returns received after this date will not be counted. The online voting site will close at 4:00 pm Eastern Time.**

You are strongly encouraged to take part in the election and cast your vote. By doing so – you exercise your right (and privilege) to shape the IEEE EMC Society leadership and the face of the Society for years to come.

All IEEE candidates and voting members shall adhere to the IEEE Policies and guidelines. There are general electioneering guidelines with Q&As available on the web at <https://www.ieee.org/about/corporate/election/election-campaign-resources.html>.

If you have any questions about the IEEE Electromagnetic Compatibility Society voting process, please contact **[ieee-emcvote@ieee.org](mailto:ieee-emcvote@ieee.org)** or +1 732 562 3904.

Thank you,

Vignesh Rajamani  
Nominations Chair  
Immediate Past President, EMC Society

## IEEE ELECTROMAGNETIC COMPATIBILITY SOCIETY ELECTION

### For Election of Members to the Board of Directors For a Three-Year Term 1 January 2025 – 31 December 2027



**RAMACHANDRA ACHAR** (S'95-M'99-SM'04-F'13) Prof. Ramachandra Achar received the B. Eng. degree in electronics engineering from Bangalore University (1990), M. Eng. degree in micro-electronics from Birla Institute of Technology and Science, Pilani (1992) and the Ph.D. degree from Carleton University in 1998. Dr. Achar currently is a professor in the department of electronics engineering at Carleton University. Prior to joining Carleton University faculty (2000), he served in various capacities at T. J. Watson Research Center, IBM, New York (1995), Larsen and Toubro Engineers Ltd., Mysore (1992 and IISc, Bangalore, India (1990). His research interests include signal/power integrity/EMC/EMI analysis, circuit simulation, parallel and numerical algorithms, microwave/RF algorithms and mixed-domain analysis. Dr. Achar is a practicing professional engineer of Ontario, a Fellow of Engineers Institute of Canada and IEEE.

#### IEEE/EMCS Activities:

##### COMMITTEE/BOARD:

- Nominated Member of BoD for EMCS (2023).
- Chair, EMCS Distinguished Lecturer (DL) program (since 2017).
- DL of EMCS (2015, 16), CASS (2010, 11).
- DL for EDS (since 2017) and EPS (since 2020). Delivered over 100 Invited Lecturers worldwide connecting EMCS and other societies of the IEEE with their membership.
- Member of TC-EDMS:TC-12 (since 2007) and previously of TC-CAD-1 and TC-SIPI:TC-10

CHAPTER: Chair of IEEE Ottawa EDS/CASS/SSCS Joint Chapter (since 2002), Founder and Chair of the IEEE HPCPS Conference (2012-2017)

CONFERENCES: EPEPS - past chair, EDAPS, SPI – TPC member (15+ years), TPC member of SIPI, ICCAD, IMS and 10+ other conferences at various times.

AWARDS: Prof. Achar and his students received numerous IEEE, National, and International awards for their research and leadership, including Carleton University research achievement awards (2010 & 2004), NSERC doctoral medal (2000), SMC and CMC Awards (1997, 96), T-Advp and T-CPMT Best transactions paper awards (2007, 2013).

**Statement:** The candidate is very passionate about the fields that are of interest to the EMC society. Particularly, he has contributed immensely over the last 30 years to the field of signal, power, and EMI integrity in high-speed low power designs. This is still a budding area in many universities while the industry is in critical need of solutions for the challenges emerging in this field. Candidate will promote collaboration between industries and universities by working with experts and leaders, creating working groups and initiating new streams in related conferences. The candidate is currently (over the last four years) working with EMCS society closely as its DL program chair and has gained immense insight into its functioning as well as its importance to the EMC society as a tool to connect to its membership while enabling knowledge dissemination. The candidate plans to further strengthen this platform to improve the vitality of the society.



**FRANCESCO DE PAULIS** (GSM'08-M'12-SM'20) Dr. Francesco de Paulis is an Associate Professor at the University of L'Aquila and a Research Associate at the MS&T, Rolla (USA).

He is actively working in the fields of Signal and Power Integrity and Electromagnetic Compatibility since his graduate studies. He published more than 150 journal articles and conference papers in these fields.

Dr. de Paulis has been co-instructor of the Signal Integrity course at the University of L'Aquila since 2018, the promoter in 2020, and instructor of the Laboratory of Signal Integrity course at the same University.

Dr. de Paulis served as Associate Editor for the IEEE Transactions on Electromagnetic Compatibility (January 2017 - March 2019) and he is an AE of the IEEE Transactions on Instrumentation and Measurements since October 2023.

#### IEEE/EMCS Activities:

- Member of the TC10 – Signal and Power Integrity, and co-chair of the Sub-Committee 5 (PCB/Substrate Technology and SI Design)
- Reviewer and balloting member of the IEEE Standard P370 sponsored by EMC Society

## CONFERENCES:

- Session organizer and chair at EMC SI&PI Symposia in 2022, 2021, 2014, 2012, 2011.
- Convener of a Session on SI & PI at the URSI GASS 2023 held in Japan (co-sponsored by IEEE AP-S).
- Overseas member of the TPC of the APEMC 2024 for the RS9 – SI&PI
- Co-Chair 1st Global SI&PI University at EMC SI&PI Symposium 2024.
- LoC of EMC Compo 2024, Turin, Italy.

## AWARDS:

- DesignCon, Best Paper Award in 2024, 2012, 2011, 2010
- Distinguished Reviewer of IEEE Transaction on Electromagnetic Compatibility, 2022, 2021, 2020, 2016,
- Best Signal and Power Integrity Paper Award, at EMC Symposium 2020, 2016
- IEEE Transaction on EMC Paper Award Honorable Mention 2014
- IEEE EMC Society, Past President's Memorial Award in 2010

**Statement:** Being an IEEE EMC Society since my Master's Degree in 2008, I've been working in the fields of EMC and SI&PI. While recently getting more involved in the Society by serving as a member of TC-10 and chair of sub-Committee and contributing to the organization of the EMC conferences and events (APEMC 2024, EMC Compo 2024, the first Global SI&PI University at the 2024 annual Symposium), I seek to continue serving the EMC-S as a board member with the following major ideas in mind:

- to further promote SI/PI within the EMC community and continue to grow SI/PI within the EMC and SI&PI symposium
- working with other non-IEEE SI/PI conferences on agreements and promoting the EMC Society
- Work to grow the IEEE Transactions on Signal and Power Integrity into a primary source for scholarly publication in SI/PI



**PATRICK DEROY** (S'10-GSM'11-M'13-SM'22) is a Principal System EMC Engineer at Analog Devices Inc. within the Automotive Cabin Experience (ACE) business unit. Patrick's primary role at ADI is within the A2B Applications Team, leading the design-for-EMC initiative on next-generation A2B transceivers and supporting customers on released transceiver products. Additionally, he provides EM simulation support / EMC + SIPI consulting to other product lines within the ACE Business Unit (such as DSP, E2B, GMSL), leveraging his 14+ years of experience with 3D EM simulation tools. Patrick is a core team member of ADI's Automotive EMC Council, a Producer of SAE J2962-3 (Communication Transceivers Qualification Requirements - Ethernet), and attendee of the Joint SAE EMC, CISPR-D USTAG, and ISO TC22 SC32 WG3 USTAG meetings. Within IEEE EMC Society, Patrick is currently serving as the Young Professionals (YP) Representative on the BoG, Boston Chapter Chair and is active within TC-9 (Computational EM) and TC-10 (SI/PI). Patrick earned his B.S. ECE and M.S. EE degrees from the University of Massachusetts (UMass) Amherst.

## IEEE/EMCS Activities:

COMMITTEE/BOARD: TC-9 and TC-10 volunteer/paper reviewer 2019 – present, YP Rep 2020 – present

CHAPTER: Boston Chapter, served as Webmaster, Vice Chair, currently Chair (2021-present)

CONFERENCES: IEEE EMC+SIPI Symposium 2012–2024 (have attended every year during this time period), EMC Europe 2018 & 2021, 10+ papers/presentations, including 2 upcoming at EMC+SIPI 2024.

**Statement:** As an avid IEEE EMC Society (Senior) member, volunteer and symposium participant for the past decade+, I've grown a significant appreciation and passion for the work the Society does. Through the education offered and its networking opportunities, I have improved my own professional career and leadership skills. In recent years I've become involved at the local level (Boston Chapter) and within TCs (9 and 10), as well as the Young Professionals initiative. I've met role models, colleagues and friends from all around the world through my participation and can't imagine my professional career without it. I'm ready to increase my contribution further and am excited by the prospect of serving on the Board of Governors. I believe I'd bring a unique perspective and am willing to be an active contributor to this leadership group. I'm grateful for the consideration and it would be an honor to receive an accepted nomination.



**ALISTAIR DUFFY** (M'94-SM'04-F'15) is Professor of Electromagnetics at De Montfort University (DMU), UK. He holds visiting chair positions at Harbin Institute of Technology (China), Xi'an Jiaotong University (China) and a visiting professor at EPFL, Switzerland (2022). As a researcher he has focused on computational electromagnetics including validation of computational electromagnetics and electromagnetic measurement, mostly on EMC and including the FSV method. He holds both a PhD and DSc. He has supervised more than 20 doctoral graduates and published more than 300 papers and articles. His work with industry includes currently supporting two EMC related companies in the UK. Within DMU he most recently was the Director of the Institute of Engineering Sciences and previously was Associate Dean for Research and Innovation.

### IEEE/EMCS Activities:

- IEEE Board of Directors / Technical Activities Board. Director for Division IV “Electromagnetics and Propagation” (2023/2024)
- Technical Activities Board Finance Committee (2022 - ), including Chair of the Financial Health ad hoc (financial watchdog)
- IEEE Board ad hoc on IEEE in 2050 (2023 - )
- EMC Society Board of Directors (Board of Governors) – President (2020 – 2021), Immediate Past President (2022 – 2023), VP Conferences (2017 – 2018). Other ongoing roles - Chair SDECom, Global Symposium Coordinator.
- Chair EMC Society UK&I Chapter (2022 – 2023)
- IEEE Fellow (2015)
- EMC Society Honored Member (2024)
- IEEE International Symposium on EMC + SIPI (Chair: 2020 and 2021; Exhibitions and Sponsorship Chair: 2022 – 2024). Vice Chair EMC Europe 2027.
- Chair of the Society’s Special Committee SC3 on “AI and Machine Learning for EMC + SIPI”
- Chair of the Society’s Standards Continuity Group on “Computational Electromagnetics”

**Statement:** I have the privilege of being a past president of the EMC Society and currently serving as a Director of the IEEE (representing the Societies and Councils broadly linked by “electromagnetics and propagation”). As such, I have amassed a body of experience and ideas associated with the Society and the wider IEEE, as well as knowing many of the decision-makers across the Institute. Hence, I believe there is much more I can contribute to the Society to advance its products and services and to support further modernisation. Should I be entrusted with a seat on the Board of Governors, and while I will look to impact across the Society, I believe that in particular, I can work with the relevant VPs to: improve and expand the Society’s conference (and related) activities, the reach of standards activities, streamlining and optimizing Society governance, and further raising the profile of the Society.



**YUICHI HAYASHI** (S’08-AM’09-M’12-SM’19) received the M.S. and Ph.D. degrees from Tohoku University, Sendai, Japan, in 2005 and 2009, respectively. He is currently a Professor at the Nara Institute of Science and Technology. His research interests include electromagnetic compatibility and information security. He has been promoting research related to electromagnetic information security, such as “Developing Countermeasure Techniques for Hardware Security to Enhance Difficulty in Measuring EM Information Leakage” and “Investigating the Mechanism of Information Security Degradation Due to Intentional Electromagnetic Interference and Developing Countermeasures.” He also established and chaired a subcommittee on electromagnetic information leakage in EMCS TC-5. To expand the field, he has organized over 20 sessions and workshops at EMCS conferences, promoting its significance. He has also presented over 100 papers at EMC symposiums.

### IEEE/EMCS Activities:

#### COMMITTEE/BOARD:

- 1) Chair, IEEE EMC-Society Technical Committee 5, Subcommittee EM Information Leakage,
- 2) Secretary, IEEE EMC-Society Technical Committee.

CHAPTER: IEEE EMC Society Sendai Chapter.

#### CONFERENCES:

- 1) General Co-Chair, International Symp. on EMC, Okinawa (2024),
- 2) Steering Committee, 2019 International Symp. on EMC, Sapporo (2019)

#### AWARDS:

- 1) IEEE International Symposium on EMC Best Paper Honorable Mention (2023),
- 2) IEEE EMCS Technical Achievement Award for Contribution to Threat Analysis of EM Information Security and Application of EMC Countermeasure against Threats (2021),
- 3) Richard B. Schulz Award for the Best EMC Transactions Paper - Honorable Mention (2020),
- 4) IEEE Asia Pacific Electromagnetic Compatibility Young Scientist Award (2016),
- 5) IEEE International Symposium on Electromagnetic Compatibility Best Symposium Paper Award (2013).

**Statement:** Yuichi Hayashi is one of the founders of the technical subcommittee on electromagnetic information leakage in TC-5, spearheading discussions on the application of EMC measurement and mitigation technologies to security, advocating for the integration of security and EMC fields, and contributing significantly to the advancement of EMCS. To raise awareness in the field of electromagnetic information security, he has been instrumental in organizing special sessions, workshops, and tutorials at international conferences hosted or co-hosted by EMCS, playing a pivotal role in their success. Furthermore, he has served as a member of the steering committee and co-chair at international EMC conferences held in R10, a role that is expected to become increasingly significant. Moreover, he has developed unique educational programs on electromagnetic information security, actively promoting the education of engineers and students within this field, thereby potentially contributing to the educational programs within the EMCS..



**MARK MIFSUD** (M'12-SM'15) received his Bachelor of Engineering (Electrical) in 1989 from RMIT University in Melbourne, Australia. He was employed at the Australian Department of Defence and eventually became the head of their EMC laboratories. He also spent time on secondment in the UK, working at laboratories at the UK Army School of Signals, TUV Product Services, and the Motor Industry and Research Association. He subsequently became the Melbourne Manager of EMC Technologies, a position he held for 10 years. He subsequently joined Nova Systems as a leading consultant where he worked on several Defence projects. In 2020, he was offered a position at Boeing Defence Australia as a capability lead, and he has since become a Boeing associate technical fellow. Mark is a Chartered Professional Engineer.

**IEEE/EMCS Activities:**

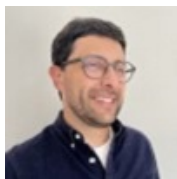
COMMITTEE/BOARD: Past Chair of APEMC International Steering Committee.

CHAPTER: Chapter Chair

CONFERENCES: General Chair of APEMC 2020 EMC Symposium.

AWARDS: IEEE EMC Society Sustained Service Award

**Statement:** Mark has been involved in EMC leadership positions for the majority of his career. Mark is past chair of the APEMC International Steering Committee. Vic Chapter IEEE EMC Society since 2010, IEAust EMC Society Chair 2010-2022 and General Chair for 2020 APEMC Symposium. Mark is also a Fellow of the Institute of Engineers Australia (EA) as well being designated an EA Engineer Executive (Equivalent of Chartered Engineer for Engineering Managers). He has been actively involved Region 10 EMC activities, acting as an advisor to various Symposium committees and paper reviewer. He is also well known for practical EMC experience in the UK and USA. His 33 years of industry experience and knowledge of Region 10 precinct will be invaluable in provide the Board of Directors a unique perspective of the needs of IEEE EMC Society Members.



**NICOLAS MORA PARRA** (GSM'07-M'14-SM'18) received a B. S. degree in Electronics Engineering in 2007 and a M.Sc. degree in Electrical Engineering with a major in High Voltage Engineering in 2009, both from the Universidad Nacional de Colombia-UNAL (National University of Colombia) in Bogota. He joined the EMC Research Group of the UNAL in 2007. In 2009, he joined the EMC Lab at the Swiss Federal Institute of Technology (EPFL). He received his Ph. D degree in Electrical Engineering from EPFL in 2016. From 2015 to 2019, he worked as an R & D Engineer for Montena Technology. In 2020, he joined the Directed Energy Research Center of the Technology Innovation Institute in Abu Dhabi, where he was the Senior Director of Electromagnetic Effects. In 2023, he joined the Research and Extension Directorate of the UNAL Bogota. In 2024, he was appointed Assistant Professor in the Electrical and Electronics Department of the Faculty of Engineering at UNAL Bogota.

In 2011, he received the Frank Gunther Award from the Radio Club of America and the Young Scientist Award from URSI. From 2013-2016, he was the president of the Colombian Association of Researchers in Switzerland. In 2015, he received the Young Scientist Award from the Summa Foundation. He was appointed Distinguished Reviewer of the IEEE Transactions on Electromagnetic Compatibility in 2015, 2016, 2018, 2019, and 2020. He was the chair of the joint EMC / AP / MTT chapter of IEEE in Switzerland between 2016 and 2019. 2016, he received the Best Paper Award from the EMC Europe 2016 Wroclaw Symposium. In 2018, he received the HPEM Fellow award from the Summa Foundation, and in 2019, the Motohisa Kanda Most Cited IEEE Transactions in EMC Paper Award. Since 2021, he has been Associate Editor of the IEEE Letters on Electromagnetic Compatibility Practice and Application. Since 2022, he has been an Associate Editor of the IEEE Transactions on Electromagnetic Compatibility. He was elected IEEE EMC Distinguished Lecturer for the period 2022-2023. In 2023, he joined the Board of Directors of the IEEE EMC Society as a representative of R9.

**IEEE/EMCS Activities:**

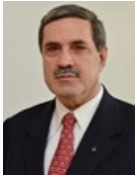
COMMITTEE/BOARD: BoG member / R9 Membership

CHAPTER: Joint IEEE EMC/MTT/AP Chapter chair in Switzerland 2016-2019

CONFERENCES: Attended the IEEE Int. Symposium on EMC in 2013 (Denver), 2014 (Raleigh), 2019 (New Orleans), 2021 (Virtual), 2022 (Spokane).

AWARDS: Distinguished Reviewer of the IEEE Transactions on Electromagnetic Compatibility in 2015, 2016, 2018, 2019, and 2020. Motohisa Kanda Most Cited IEEE Transactions in EMC Paper Award in 2019.

**Statement:** I joined IEEE 17 years ago after I finished my EE degree. At that time, there were very few IEEE activities related to EMC in Colombia and I had the pleasure to attend the inauguration of the Colombian IEEE EMC Chapter as a Student Member. I have earned some experience while working for the Swiss EMC Chapter and been actively supporting the TEMC and LEMCPA as a reviewer, and more recently as an AE. I have decided to return to Colombia and trust I can support the EMC society in expanding in R9.



**PETRE-MARIAN NICOLAE** (AM'95-SM'99-AF'11-SM'12) is the coordinator of the research laboratory “Electromagnetic compatibility” within INCESA Research Center, Craiova University. He served as Director of Fundamental Electrotechnics Dept., Director of Electrical and Energetic Doctoral School Dept. - Faculty of Electrical Engineering, Craiova University. He has worked on electromagnetic compatibility, power quality, energy efficiency, power converters/electrical drives for transportation systems, power systems, superconductivity/cryo-electrotechnics, applied mathematics in electrical engineering. He proposed, developed and implemented new study programs (bachelor's, master's and doctorate), new courses and laboratory work for students. Research contracts: 69, Director - 44 (obtained on a competition). He developed 9 new technological solutions, 10 physical models (experimental models, functional models, prototypes). He is the main author of two patents (both won gold medals at International Invention Salons).

**IEEE/EMCS Activities:**

**COMMITTEE/BOARD:**

- 2023: Chair at the first International Workshop “IEEE 2023 Power Quality and Electromagnetic Compatibility at Low Frequency (PQEMC-LF)”, Craiova, Romania (June 28-30)
- 2014-present: Member of Technical Advisory Committee at IEEE EMC Society
- Chair (2017-2020)/Vice-Chair (2014-2017, 2020-present) of Technical Committee (TC) 7–“Low frequency EMC”, IEEE EMC Society

**CHAPTER:**

- Committee Member within IEEE PES Romanian Section
- Member of IEEE EMC Romanian Chapter

**CONFERENCES:** Organizer of Special Sessions/Workshops/Tutorials at International Conferences organized by IEEE: EMC+SIPI (2018, 2019, 2020, 2021); EMC Europe (2018, 2019, 2020, 2024); APEMC (2018); ICHQP (2014).

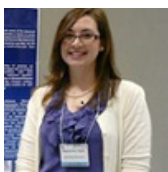
**AWARDS:**

- 2020 IEEE PES Chapter Outstanding Engineer Award “For contributions to power quality concepts” by the IEEE PES Romania Chapter.
- The “John Howard Memorial University Grant Award” received from IEEE EMC Society (2012).
- Senior Member IEEE (since 1999).
- The Romanian Academy Prize (in 2000).
- Gold Medal at International Exhibition on Inventions of Geneva, Switzerland (April, 13-17, 2016)

**Statement:** We all know that the global electricity industry is facing new challenges due to the increasing penetration of renewable energy sources, new mobile technologies, simultaneously with the expansion of the frequency range of the operation of electrical/electronic equipment. This creates new EMC/EMI issues with a strong impact on equipment and living organisms. The EMC Society's strong leadership helps set the stage for discussing these challenges. My goal is to make sure we succeed together through activities that include:

- Improving access to information, tools, and services to facilitate more efficient use of your time in the technical and related activities you support.
- Active engagement with government/industry organizations to accelerate application of what you create.
- Access to educational activities that favour professional advancement in the EMC field.

But electing such leaders starts with you and your commitment to vote in these elections. I want to use my experience to develop the EMCS, for and by the members.



**STEPHANIE ZAJAC** (M'22) is an engineer in the aerospace industry, specializing in ionizing radiation effects on electronics and modeling natural space environment phenomena. Stephanie’s love of physics, mathematics, and astronomy motivated her undergraduate and graduate studies at the Cal State Polytechnic University, Pomona, and Stony Brook University, respectively. Stephanie has thus far had a varied career in the satellite and space exploration industries, with a work history that includes Boeing’s satellite division, the Jet Propulsion Laboratory, and the Applied Physics Laboratory at Johns Hopkins University. Stephanie has maintained a passionate involvement in STEM

outreach activities over the years, especially at the K-12 level, continuing the tradition of impactful mentorship that has made an immeasurable difference throughout her career.

**IEEE/EMCS Activities:** Stephanie Zajac first became involved with the EMC Society in 2018, when she served at the Youth Technical Program (YTP) Chair at the 2018 IEEE International Symposium on EMC+SIPI, held in Long Beach, CA. Stephanie has since then reprised the role of YTP in 2019 - 2024 (excluding virtual conference years, 2020 and 2021). Beginning in 2022, and continuing to the present year, Stephanie has also served as the Secretary on the Symposium organizing Committee. For the first time this year, Stephanie is also the EMC Society Awards Chair for the 2024 Symposium, coordinating an international committee across three continents to review and vote on Award nominees. Stephanie has also been an Officer at Large of the EMCS Technical Committee on Aerospace EMC (TC-8) since 2022.

**Statement:** As summarized in my record of involvement within the EMC Society, since 2018, I have had the opportunity to apply my talents and grow my experience across various administrative, educational, and leadership roles within the EMC Society. Year to year, each of these roles has broadened my exposure to and impact on the EMC community. Today, I find myself energized toward becoming more involved with the management of the EMC Society in a more general capacity rather than isolating my involvement in the annual Symposia. My experience in the aerospace industry, on prior Symposium Committees, my fresh perspective on engaging the broader community, and my passion for mentoring make me a valuable addition to the Board of Governors.