



**Institute of Electrical and Electronics Engineers (IEEE)
Hyderabad Section**

MTT/AP/EMC Jt. Chapter

Presents a Technical Lecture (Webinar)

On

“Active Phased array antenna systems and associated Subsystems”

By

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Schedule:

Date: 13th March 2021 (Sat)

Time: 1830 Hrs onwards

Duration: 60 minutes

Abstract: Active phased array antennas or active electronically scanned antennas (AESA) have been a constant source of attraction for last 4-5 decades. The technology has evolved vigorously with phenomenological research activities being carried out worldwide. AESA may be considered as a system of systems comprising of various systems/sub-systems within itself. Now a days, AESA has even found its applications in commercial arenas like wireless communication due to ever-growing demand of bandwidth, capacity, etc., with the advent of 5G technology. The commercialization of AESAs is made possible due to the evolution of new semiconductor technologies like GaN, SiGe, CMOS, etc. with a great reduction in the cost and the form factor involved. An overall reduction in SWAP-C resources has made the commercialization possible.

This talk is going to discuss an overview of AESA technologies and the various subsystems involved along with the few critical technologies involved in their development. A brief on theoretical/commercial analysis tools will be presented which come handy in the development of the AESAs. The talk will conclude upon futuristic possibilities linked to the current scenario required for upgradation of AESAs..

Registration:

Registration for this webinar lecture is free however registration is mandatory.

For Registrations (URL):

Use link given in IEEE e-notice



Dr. Ashutosh Kedar was born in Delhi, India on July 9, 1973. He received his Ph.D., M.Tech. and M.Sc. in 2003, 1998 & 1995, respectively from Dept. of Electronic Science, DOES, Univ. of Delhi, India.

He fulfilled his teaching & research duties at DOES, Univ. of Delhi, and is currently working as a Radar scientist in LRDE, Bangalore since 2003. He has published more than 75 peer reviewed papers in various international/national journals and conferences. He serves as reviewer for different journal from IEEE, IET, PIERS, ACES, Elsevier, IETE, EuCAP, and INCAP. He is working on development of active phased array antennas for various applications at LRDE. He received DRDO technology group award for 1st indigenous active phased array radar and 1st four-walled radar development in country in 2008 and 2018 and received best paper award in ICMARS and ATMS'18. His research interest includes CEM, phased array antennas & radars. He is Senior Member IEEE, AP-S, AESS and Fellow IETE.