

**IEEE Antenna and Propagation Society &  
Council on RFID Delhi Chapter, India**  
&

**Department of Electronic Science  
University of Delhi South Campus, India**

**Jointly organize**

**Distinguished Lecture under**

**“ 75<sup>th</sup> Anniversary Celebrations of IEEE AP-S”**



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**September 09, 2024|| 10:30 AM - 1:00 PM, Venue: Department of Electronic Science, UDSC**



**Invited Speaker**

**Prof. Debatosh Guha,  
IEEE Fellow, Institute  
of Radio Physics and  
Electronics, University  
of Calcutta, 92 A P C  
Road, Kolkata 700 009,  
India**

**Lecture-1: 10:30AM-11:30AM**

**Art and Challenges in Low Cross-Polar  
Antenna Design**

**Lecture-2: 12:00AM-1:00PM**

**Antenna Science and Engineering: in the  
light of IEEE AP-S 75th Anniversary,**

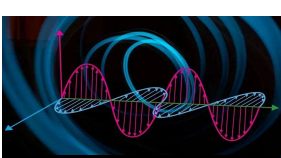
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# 75<sup>th</sup> Anniversary Celebrations of IEEE AP-S

## Distinguished Lecture: Art and Challenges in Low Cross-Polar Antenna Design

**Prof. Debatosh Guha, IEEE Fellow**

Distinguished Lecturer, IEEE AP-S,  
Institute of Radio Physics and Electronics, University of Calcutta  
Email : [dgirpe@yahoo.co.in](mailto:dgirpe@yahoo.co.in), [dguha@ieee.org](mailto:dguha@ieee.org)

**Event Details :**

**Date : Monday 09<sup>th</sup> September 2024**

**Time : 10:30 AM – 1:00 PM IST**

**Hybrid Mode:**

**Venue:** Department of Electronic Science, University of Delhi  
South Campus, Near Durgabai Deshmukh Metro Station

**Meeting Link:** <https://meet.google.com/hum-vwse-mxx>

**No registration fee**

**Registration Link:** <https://forms.gle/dv3D2AY72Cqb9vbX7>



### Abstract

Achieving low cross-polarization in antenna design is crucial for enhancing signal purity and system efficiency in modern communication systems. This talk explores the art and challenges involved, focusing on fundamental design principles like substrate selection, element configuration, and feed network optimization. It addresses current obstacles and emerging trends in materials, fabrication techniques, and computational methodologies aimed at improving cross-polar performance. By synthesizing these insights, the talk aims to advance practical applications of low cross-polar antenna design.

### About the speaker

**Prof. Debatosh Guha** is a Professor of Radio Physics and Electronics at the University of Calcutta, India. He has also closely worked with several wireless industries and R&D Laboratories at home and abroad. He has authored and co-authored over 200 technical papers in leading journals and conferences, along with a reference book published by Wiley, UK, in 2011. His research contributions have been featured in the recent editions of most of the text and handbooks on Antennas. Dr. Guha is Abdul Kalam Technology Innovation National Fellow. He has been a Fellow of IEEE since 2017, received the IEEE AP-S Raj Mittra Travel Grant award in 2012, and was a recipient of the 1996 URSI Young Scientist Award. He also received the 2016 Ramlal Wadhwa Arad from the Institution of Electronics and Telecommunication Engineers (IETE), India. He is a Fellow of Indian Academy of Sciences, Indian National Academy of Engineering, the National Academy of Sciences, India, and the West Bengal Academy of Science and Technology. He is a full member of Sigma Xi. He was appointed as a HAL Chair Professor (visiting) at the Indian Institutes of Technology Kharagpur in 2015 and the Director of the Centre for Research in Nanoscience and Nanotechnology (CRNN) at the University of Calcutta in 2017. Dr. Guha has served IEEE Antennas and Wireless Propagation Letters (2014-2019) and IEEE Transactions on Antennas and Propagation (since 2016) as an Associate Editor, and also IEEE APS Field Award Committee (2017-2019) and IEEE Technical Committee on Antenna Measurement (2021) as a member. He is a Distinguished Lecturer of the AP Society and Chair of MGA Committee.



**Organized by:** IEEE CRFID-APS JOINT CHAPTER  
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University of Delhi South Campus, New Delhi  
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