



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category A by MHRD)

Re-accredited with A ++ Grade by NAAC. CGPA 3.65/4, Category 1 by UGC

Coimbatore – 641043, Tamil Nadu, India.

School of engineering

(Estd. in 1996 and Approved by AICTE)

Ayya Avinashilingam Nagar, Varappalayam, Thadagam post, Coimbatore-641 108

Report on “Electromagnetism and Antenna Engineering”

Organized by

**Department of Electronics and Communication Engineering in Association with
Research & Development Cell and Avinashilingam Centre for International Education**
on

11.03.2025

Venue: Conference Hall, School of Engineering.

The Department of ECE in Association with Research & Development Cell and Avinashilingam Centre for International Education, Avinashilingam Institute, organised an seminar on the topic “*Electromagnetism and Antenna Engineering*” on 11.03.2025 at Conference Hall for the students (II and III ECE), research scholars and faculty members. The event aimed to explore the significance of Electromagnetism and Antenna in telecommunication.

The session began with the invocation of the Almighty, and Ms. Tejaaswini B G, III ECE, School of Engineering, welcomed the gathering.



Welcome address by Ms. Tejaaswini B G, III ECE

Christos Monochristou, Ettorre’s Group, University of Rennes, Rennes, France discussed on his research work focussing on **Antenna Array for telecommunication system.**

He briefed on the phased array structure and its application in 5G systems. The key challenges in the designing the array antenna such as its cost in implementation and complexity in design structure are discussed.



Christos Monochristou, Ettorre's Group, University of Rennes, France delivering lecture on Array Antenna

He then briefed about his research implications in antenna array structure and tools for simulation. The performance in terms of directivity, gain and power losses are illustrated. He also discussed on the analysis and design of wideband and wide-scanning phased arrays, the synthesis of irregular arrays, and the development of both analytical and numerical methods of computational electromagnetics. He shared his research experience in France and scope of research in France, Greece and USA.



Discussion on Antenna Array Design

After the discussion a memento is presented to the guest by Dr.B.Sargunam, Dean, School of Engineering



The guest interacted with faculty members including ECE, BMIE and Physics in the board room. All the faculty introduced with their research area and queries related to antenna designing and other applications are discussed with the guest.



Interaction with Faculty members

After the interaction, the guest visited the laboratories of ECE and BMIE departments.



Lab Visit



Group Photo with Faculty members, School of Engineering

Outcome of the Event

The event provided students with a comprehensive understanding of the array antenna design and practical challenges in implantation. The session was beneficial particularly in research aspect, focussing on electromagnetics and antenna design in telecommunication system.

Total Beneficiaries: 110

Students and Research Scholar: 100

Faculty Members: 10

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| Conveners | : | Dr.B.Sargunam – Dean, School of Engineering, Professor ECE
Dr.P.Lalitha, Director – R&D, Professor of Chemistry |
| Organizer | : | Dr. R. Sudarmani, Professor & HoD/ECE |
| Secretaries | : | Dr. S. Sumathi, Coordinator - Avinashilingam Centre for International Education, Professor BCBT |
| Coordinators | : | Dr.D. Sumitha, Associate Professor/S&H
Dr. K.V. Archana, Assistant Professor/ECE |

Signature of HoD - ECE