

# Contributions to IEEE APS & MTTS Society (2025)

## 1)Comp-Sif 2025

**Date:** 21st March 2025

**Duration:** 1 Day

**Role:** Event Organizer & APS–MTTS Stall Lead

**Description:** Organized and led the APS & MTTS society stall at IEEE COMP-SIF 2025, themed around military communication systems to engage students with antenna and microwave technologies.

### Key Contributions:

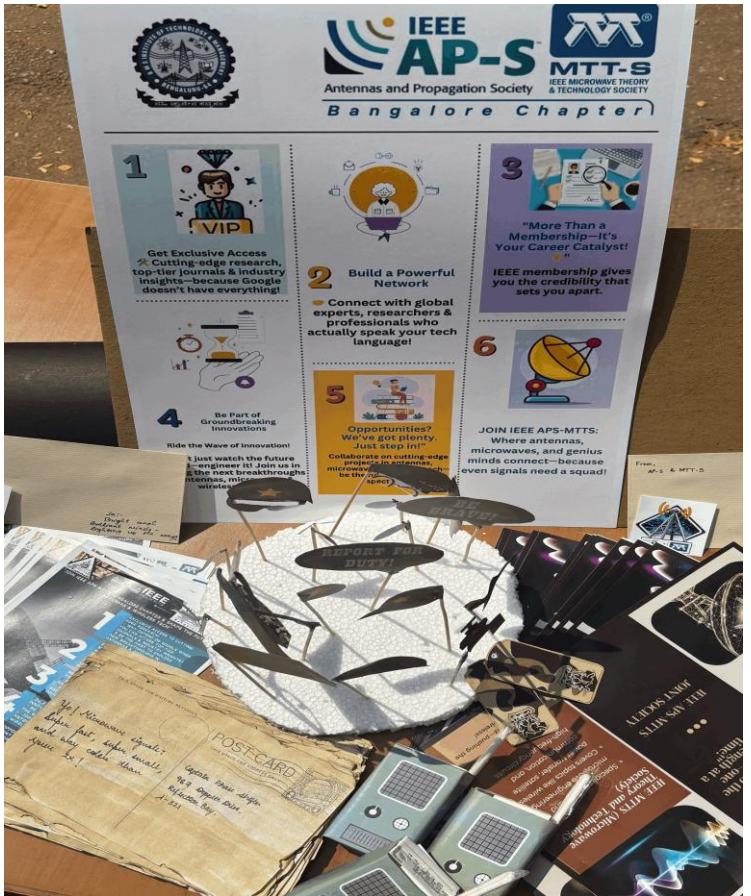
Conceptualized and executed a military-themed exhibition highlighting the role of antennas in defense communication.

Designed interactive models — Dipole and Yagi-Uda antennas, and an RF Energy Harvesting demo.

Curated custom goodies (APS logo envelopes, radio-themed juice boxes, personalized letters, postcards, keychains).

Engaged with over 200+ students, providing hands-on demonstrations and career guidance in APS & MTTS fields.

Outcome: Increased student interest and membership in IEEE APS & MTTS; strengthened society visibility within the institute.



## 2) SAGE – BMSIT&M Symposium 2025

**Date:** 1st – 2nd August 2025

**Duration:** 2 Days

**Role:** Organizing Committee Member & APS–MTTS Representative

**Description:** Co-organized a two-day symposium focusing on RF MEMS applications in modern communication, biomedical systems, and defense technologies.

### **Key Contributions:**

Coordinated sessions with key dignitaries including Dr. K. D. Nayak (Former DG, DRDO), Dr. Ravi M. R. (CEO, SITAR–DRDO), and Dr. Prasad Shastry (Bradley University, USA).

Facilitated a technical industrial visit to SITAR–DRDO, bridging academic learning with industry insights.

Assisted in program design, participant engagement, and technical documentation.

Outcome: Strengthened academia–industry collaboration and exposed students to cutting-edge RF MEMS technologies.

### **Pictures from the event**











### **3) Distinguished Lecture by Dr. Mohammad H. Zarifi**

**Date:** 12th December 2025

**Mode:** On-site (BMSIT&M Campus)

**Duration:** 1 Day

**Role:** Inviter & Event Coordinator

**Topic:** “Microwave/RF Devices and their Interactions with Novel Nano-Materials for Sensing and Communication Applications”

**Contribution:**

Coordinated with international expert Dr. Zarifi to organize an in-person session at the college.

Managed event logistics, technical setup, and promotion among IEEE student branches.

### **4) Distinguished Lecture by Dr. Joseph Bardin**

**Date:** (Planned for late 2025)

**Mode:** Online

**Topic:** “Quantum Computing: What is it, how does it work, and what are the opportunities for microwave engineers?”

**Role:** Organizer & Moderator

**Contribution:**

Invited Dr. Bardin for an exclusive IEEE APS–MTTS webinar.

Coordinating event outreach and participant interaction for over 150+ attendees expected.

## 5) Research Project – Antenna for Food Adulteration & Spoilage Detection

**Timeline:** Ongoing (Initiated November 2025)

**Role:** Project Lead

**Objective:** Designing a microwave antenna system to detect milk adulteration and food spoilage using dielectric property variations.

**Contribution:**

Leading hardware design, simulation, and testing phases.

Integrating RF sensing techniques with data analysis models for real-time quality assessment.

Expected Outcome: Development of a low-cost, non-invasive sensor system for food safety applications.

