IEEE Antennas and Propagation Society
ACTIVITY REPORT

1. **Name of the Department**: Electronics and Communication Engineering

2. **Name of the Activity**: The Language of RF: Transmission Lines and Scattering Parameters

3. **Objectives:**

   - To provide an overview of current trends and technological advancements in the RF interconnects industry
   - To provide a glimpse of fundamentals of the parameters used in radio frequency circuit design, from an industry perspective

4. **Date, Time and Venue of the Activity:**

   6th June 2026, 12.30 to 1.30pm, Seminar hall, Department of ECE

5. **Name and details of collaborating agency (if it is collaborative/joint activity):** IEEE Antennas and Propagation Society

6. **Brief summary of the Programme:**
   Presenter of the programmes
   - Mr. Akhil Karthik, Signal Integrity engineer, Molex

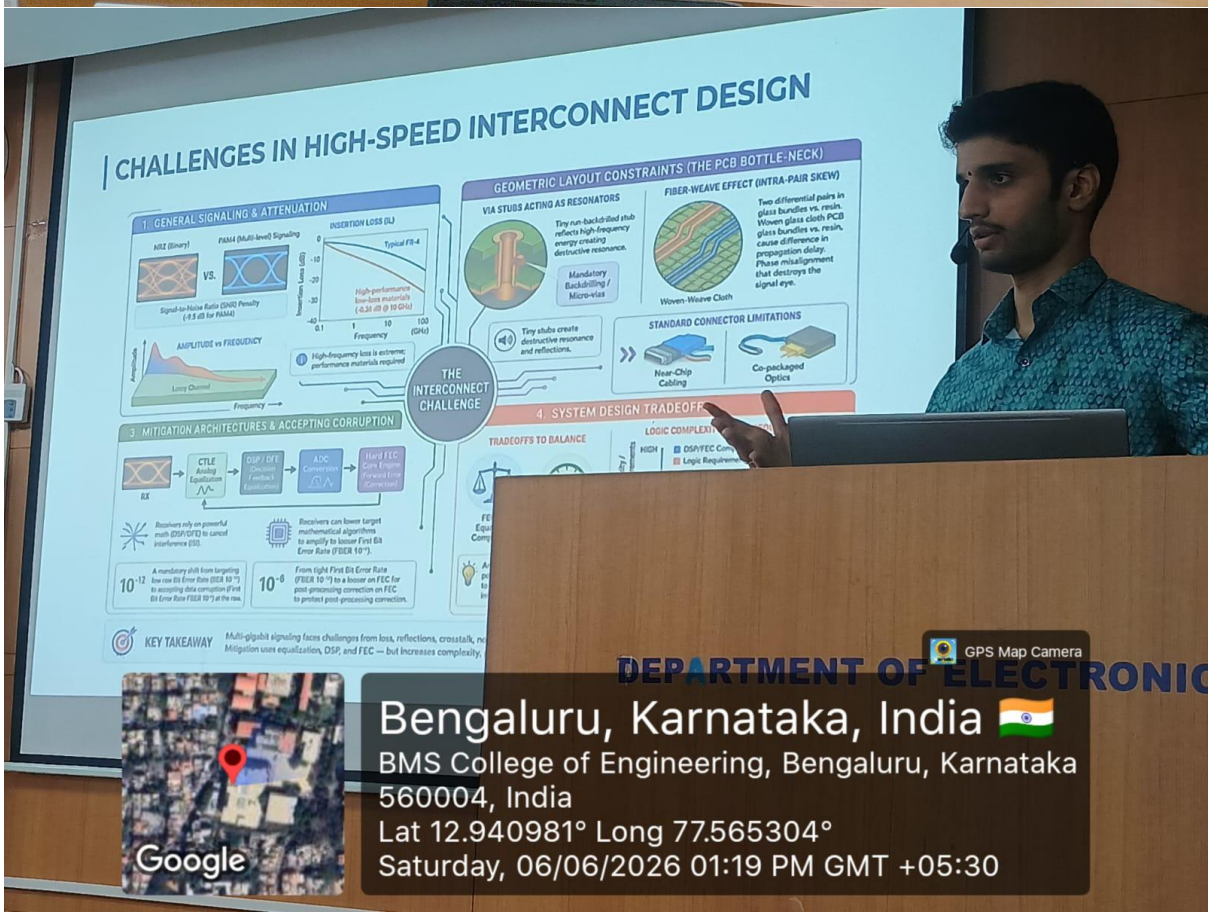
7. **Outcomes:**
   - Explained the context of fundamental parameters in the RF circuit design industry
   - Exposure to the application of S-parameters in interconnect design
   - Exposure to job opportunities in the high frequency field

8. **Number of participants:**

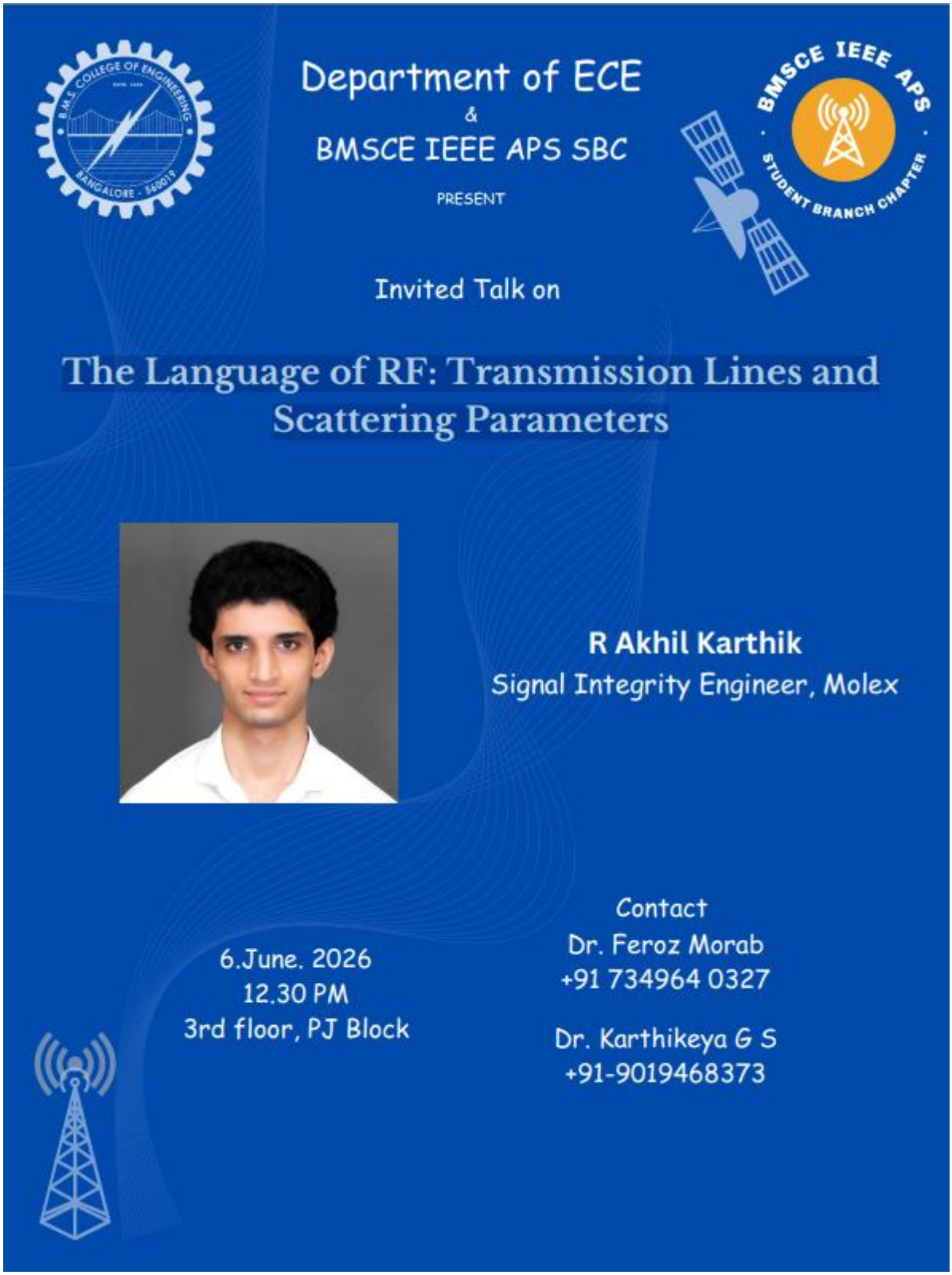
Particulars	Number of Faculty & Students	Non-Teaching Staff	External Participants
Total Number of Participants 35	IEEE Members : 12 Non-IEEE Members : 23	-	**-**

9. **Photographs of the activity:**


DEPARTMENT OF ELECTRONICS
GPS Map Camera
Bengaluru, Karnataka, India
BMS College of Engineering, Bengaluru, Karnataka 560004, India
Lat 12.940981° Long 77.565304°
Saturday, 06/06/2026 01:38 PM GMT +05:30
Google


CHALLENGES IN HIGH-SPEED INTERCONNECT DESIGN
1. GENERAL SIGNALING & ATTENUATION
INSERTION LOSS (IL)
AMPLITUDE vs FREQUENCY
GEOMETRIC LAYOUT CONSTRAINTS (THE PCB BOTTLE-NECK)
VIA STUBS ACTING AS RESONATORS
FIBER-WEAVE EFFECT (INTRA-PAIR SKEW)
STANDARD CONNECTOR LIMITATIONS
THE INTERCONNECT CHALLENGE
3. MITIGATION ARCHITECTURES & ACCEPTING CORRUPTION
4. SYSTEM DESIGN TRADEOFF
TRADEOFFS TO BALANCE
KEY TAKEAWAY
GPS Map Camera
Bengaluru, Karnataka, India
BMS College of Engineering, Bengaluru, Karnataka 560004, India
Lat 12.940981° Long 77.565304°
Saturday, 06/06/2026 01:19 PM GMT +05:30
Google

10. **Supporting Documents:**
    a) Attendance sheet
    b) Circulars/Brochures:



Total = 35, IEEE = 12, Non-IEEE = 23

BMS College of Engineering, Bengaluru-560019
Department of Electronics and Communication Engineering

Attendance statement
Technical Seminar by Mr. Akhil Karthik, Signal Integrity engineer, Molex, on 6th June 2026

Sl. No.	Name	USN	IEEE member (Yes/ No)	Signature
1.	M·S·N· Sanjeev	1BF24EC082	No	M.Sanjeev
2	Shantakumar	1BM25LEL04	NO	Shantakumar
3	Sachin v Popale ·	1BM25LEL03.	NO ·	
4,	Thanujgowda ·	1BM25LEL06.	NO	
5)	Shashank .K.S	1BM25LEL05	No	
6.	Arshiya Banu	1BM25LEL01	NO	
7.	Lalith Sachin Naik S P	1BM25LVS08	No	
8.	Harindra J	1BM25LVS05	No	Hari.
9.	Gagana A L	1BM24EC064	Yes	Gagana.
10.	Likhitha D L	1BM24EC090	Yes	Likhitha
11.	Dhanya S Karadagi	1BM24EC056	Yes	Dkaradagi

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Sl. No.	Name	Affiliation	Designation	Signature
12.	MANYA.P.	1BM24EC105	Yes	
13.	KrishnaMurthy AK	1BM24EC087	No	
14.	Kaushik BP.	1BM24EC083	Yes	
15.	Anagha N	1BM24EC012	Yes	
16	Siddharth .U.N	1BM24EC209	YES	
17	Rohan .k	1BM24EC170	YES	
18	S Dhruv Balaji	1BM24EC173 ·	NO	
19	S Bharathiraj	1BM24EC172 ·	YES	
20	NIVEA TONGBRAM	1BM24EC135	Yes	Nivea
21	ANGELARANI SANOJAM	1BF24EC018	Yes	
22	K. Vandana	1BM25EC417	No	Vandana
23	Hrithik H.S	1BM25EC414	Yes	

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Sl. No.	Name	Affiliation	Designation	Signature
24	IRFAAN ALI S	1BM24EC076	No	
25	Aadarsh Mani	1BF24EC003	No	Aadarsh
26	Saleem Merchant	1BM24EC115	No	
27	M. Satya Kaushik	1BF24EC135	NO	M. Satya Kaushik
28.	Ujwal M	1BM25LDC06	No	
29	Haroon S	1BM25LDC05	No	
30	Sanjana BA	1BM25LDC03	No	Sanjana
31.	Kavya R	1BM25LDC01	No	
32.	Sharanya R	1BM25LDC04	No	Sharanya
33	Pooja khantmal	1BM24EC143	No	
~~34~~	~~Poornika N~~	~~1BM24EC155~~	~~NO~~	
35	Nivedita Shetty	1BM24EC132	No	Nivedita