



# IEEE - MVSR STUDENT BRANCH

Student Branch Code: 12161, School Code: 413292

## INNOVATIONS IN VLSI DESIGN

IEEE MVSR SB Circuits and Systems Society Student Chapter organized a webinar on 29<sup>th</sup> October, 2022 on “VLSI DESIGN”. The objective of this event was to give awareness about the future in VLSI domain and its evolution in recent trends.

### Student Branch Mentor:

Dr. Atul Negi,  
Professor,  
School of CIS,  
University of Hyderabad

### Student Branch Advisor:

Dr. G. Kanaka Durga,  
Principal and Professor,  
MVSR Engineering College.

### Student Branch Counsellor:

Dr. D. Hari Krishna,  
Associate Professor, EEE Dept.,  
MVSR Engineering College.

### Student Branch Executive Committee:

Chair	Mr. Hemanth Kollapudi
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Treasurer	Ms. B. Rajya Laxmi
Women in Power	Ms. Kuntoori Shravani

### WIE Student Branch Advisor:

Mrs. G. Ushasri,  
Assistant Professor, IT Dept.,  
MVSR Engineering College.

### PES Advisor:

Mr. Y. Laxmi Narasimha Rao,  
Assistant Professor, EEE Dept.,  
MVSR Engineering College.

### CS student branch advisor:

Mrs. B. Saritha  
Associate Professor, CSE Dept.,  
MVSR Engineering College.

### CASS Student Branch Advisor:

Mrs. S. Aruna  
Assistant Professor, ECE Dept.,  
MVSR Engineering College.

### Computer Society:

Chair	Mr. M. Hareen
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Joint Secretary	Ms. Ch Venkata Satya Sreeya
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Women in Computing	Ms. Anoushika Boddupalli

### Circuits & Systems Society:

Chair	Mr. Gautham Purohit
Vice Chair	Mr. D. L. N Srihith
Secretary	Ms. Mudumba Harshitha
Joint Secretary	Ms. Jindam Pragna
Treasurer	Mr. Erram Sai Vineeth

### Operating Committees:

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Content - Writing	Mr. T. Karthikeya, Mr. Krishna Chaitanya N
Web-Master	Mr. Vinay Kumar, Mr. K. Samuel

## Session Details:

**Date:** 29<sup>th</sup> October, 2022

**Timings:** 6:30PM – 8:00 PM

**No. of Attendees:** 85

**Speaker of the Session:** Dr. A. G. Krishna Kanth, Director of Analog Mixed-Signal R&D, AMS OSRAM Vice-chair, IEEE CAS/EDS Hyderabad Chapter. He was awarded with President of India Shankar Dayal Sharma gold medal and IIT Bombay Student Role of Honour in 2002. His specialization includes sensors and sensor interfaces, high performance analog signal processing, power management for automotive and consumer semiconductor IC design.

The event was started by Mr. Gautham Purohit, Chairperson, IEEE MVSR CASS, addressed the gathering and welcomed the speaker of the day, to the session. Then, an idea about the event and its importance was given to the students by him. Later, Ms. J. Pragna, Joint Secretary, IEEE MVSR CASS, gave an introduction about the speaker.

Maturi Venkata Subba Rao (MVSRR) Engineering College  
(An Autonomous Institution)  
(Sponsored by National Education Society, Ltd. 1986)  
Affiliated to Osmania University & Approved by AICTE  
Counselling code EAMCET/ECET/ICET: MVSR. PGICET: MVSR1

IEEE MVSR  
Student Branch

**IEEE MVSR CASS SBC**  
In association with  
**ECE Department, MVSREC**  
Presents.....  
**INNOVATIONS IN  
VLSI DESIGN**

29th October, Saturday  
6:30 PM - 8:00 PM

<https://meet.google.com/hai-sgnb-ekq>

**FACULTY COORDINATOR**  
Mrs. S. Aruna  
IEEE MVSR CASS Student  
Chapter Advisor

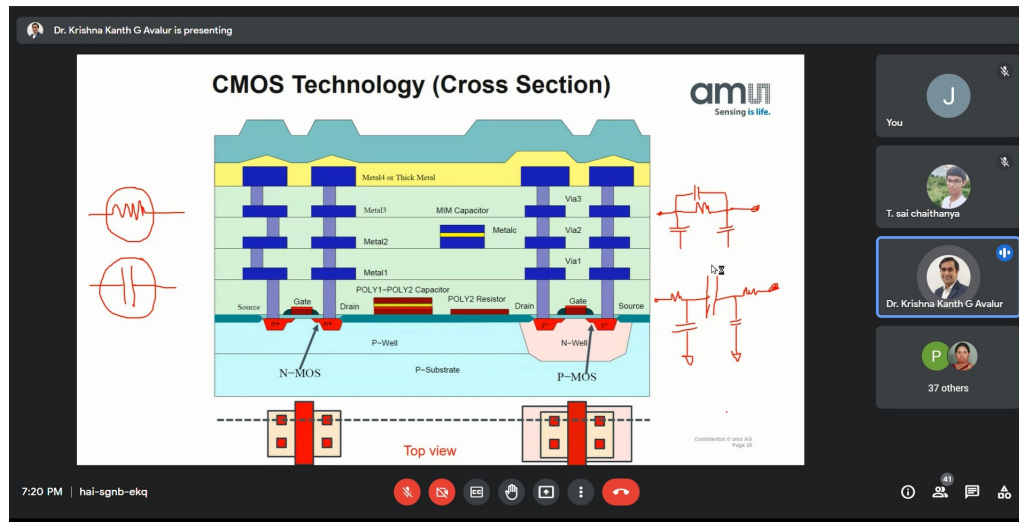
**SPEAKER**  
Dr. A. G. Krishna Kanth  
Director of Analog Mixed-Signal R&D, AMS OSRAM  
Vice-Chair, IEEE CAS/EDS Hyderabad Chapter

Register Here:

## Event Poster

The lecture commenced as Dr. A. G. Krishna Kanth gave a brief introduction about Innovations in VLSI and the topics that will be covered

- Why is VLSI a “hot” field?
- Fundamental IPs inside an IC
- VLSI Technology
- IC Design flow



**Dr. A. G. Krishna Kanth explaining about CMOS Technology**

Subsequently, he gave a detailed explanation about Very Large Scale Integration and the following:

- Innovation in VLSI
- VLSI Evolution
- What drives VLSI Innovations
- Different specialization of circuits and systems

Thereafter, the speaker presented about IC Technology Scaling, CMOS Technology (Cross Section), Integrated circuit variations, Analog IC design flow, Analog layout, the process of Digital design.

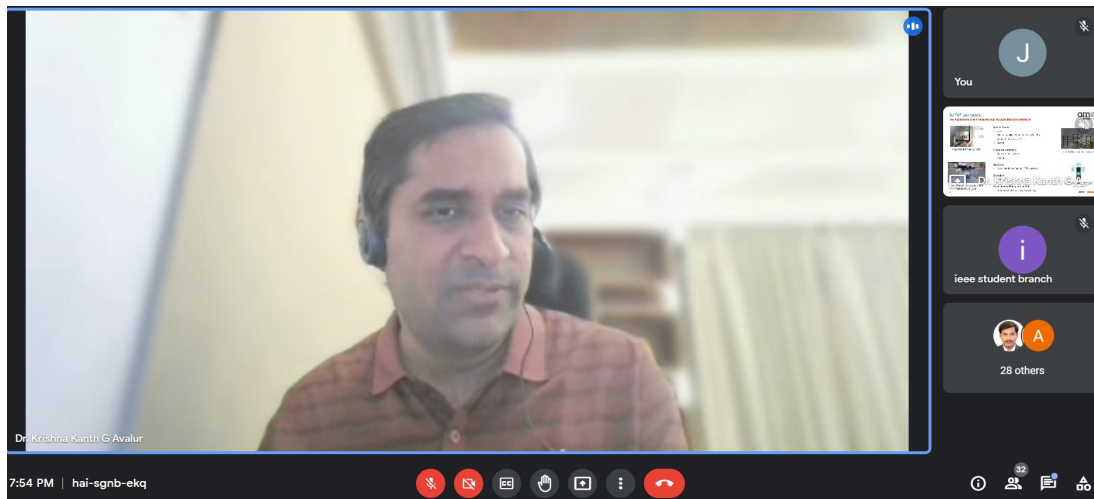
He added some information about Design of op-Amp, Differential pair layout, IC design flow, Wafer generation, Mask preparation, Integrated circuits package parsites.



### Speaker explaining about various design

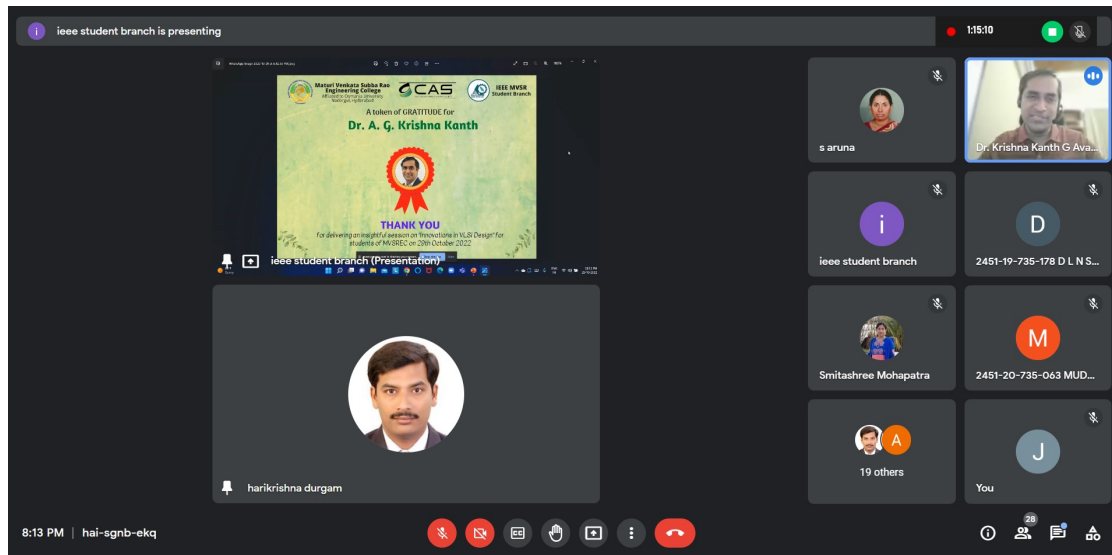
The key points involved in the lecture were :

1. About Indian Semiconductor Market, Auto, EV, mobile, IT hardware and Telecom high growth markets with large export potential(The Semiconductor “decade”).
2. Different types of fundamental IPs and innovations in VLSI such as power management, sensor interfaces, peripheral circuits, Design modelling and multimode processing.



### Dr. A. G. Krishna Kanth explaining about 3d ToF use cases

In this way, the webinar given by Dr. A. G. Krishna Kanth, came to an end after a detailed explanation about all the important concepts of VLSI. At the end, all the doubts of the lecturers and students were clarified by the speaker.



**Dr. D. Hari Krishna presenting virtual momento to the speaker Dr.A.G.Krishna Kanth.**

Finally,webinar was concluded sucessfully as Mr. D. L. N.Srihith , Vice Chair, IEEE MVSR CASS, gave the vote of thanks.

**List of Attendees:**

SNo.	Name	Branch	Mobile Number
1	D TEJAS CHANDRA RAJ	ECE	9390001461
2	MATAM YERRI SWAMY	ECE	8179748280
3	Pruthvi Somaraju	ECE	8019704164
4	Ganji Vishnu Vardhan	ECE	9390396466
5	Puttam Deekshitha	ECE	8886702965
6	Lakkimsetti Yeshwanth	ECE	9652562384
7	Akshay Mourya	ECE	9390391679
8	Pragna Jindam	ECE	8688391798
9	Linga Krishna Vamshi	ECE	7013525978
10	V.Akshay kumar	ECE	8179778903
11	Yedulla Sujith Reddy	ECE	9390288120
12	Nikitha Pandit	ECE	7989624798
13	Sravya Devaki	ECE	9182805685
14	Anusha	ECE	9959312096

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25	sai varun	ECE	9866398830
26	Jonnapally Ramesh Usha Sri	ECE	9390987367
27	EDULAKANTI SHARANYA	ECE	8096361433
28	TEJA RAPOLU	ECE	7989726105
29	V Vishnu Vardhan Dharmavarapu	EEE	9493273971
30	K. Sai Spoorthi	ECE	6281725044
31	Kandala Sneha	EEE	9666288193
32	N. Sowmika	EEE	9640776264
33	Aryan Vedansh	ECE	7993621309
34	D Krishna Keerthan	ECE	6300629372
35	Nagaraju Karnati	ECE	08187096861
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46	Ranga Anurag	ECE	9177728318
47	Sakshi Kulkarni	ECE	9075668774
48	Thummala divya	ECE	7569879801
49	B.Rajyalaxmi	EEE	9440645365
50	Duggi Durga Prasad	ECE	06303479177
51	Makkena Pravallika	ECE	9959353628
52	Prathigudupu Jyothi	ECE	9347792387
53	Shaik Haseena Begum	ECE	9032880026
54	Mounika	ECE	9346916167
55	LAVUDYA VISHANTH RAJ CHOWHAN	ECE	6305693382
56	Katta Malathi latha	ECE	7032795134
57	Karan Ubale	CSE	9373915553
58	Narsing varshini	EEE	9059923237
59	SUNKARA GNANANAND	ECE	7075010316
60	Suravarjula Nikhila	ECE	6309652824
61	Mani Vardhan Satha	ECE	9959639020
62	Taj	ECE	9381950512
63	Tajunnisa shaik	ECE	9381950512
64	JUVARIYA SADAFF	ECE	9390561897
65	INUMARTHI LAHARINAGASAI	ECE	9121650670
66	A.Naga pravallika	ECE	6305690046
67	Ch Jayasimha Reddy	ECE	8341417287
68	mounika	ECE	9346916167
69	TEJA RAPOLU	ECE	7989726105
70	Chethan sadula	ECE	9100716105
71	Gunalapuri Sushmitha	ECE	09014927730
72	K Anusha	ECE	9502533772
73	Nangu Nehemiya reddy	ECE	8096063847



74	B. Teja Reddy	ECE	8121630131
75	K Kishore Kumar	ECE	6303390628
76	Sahithi Maduri	ECE	8328494104
77	Lakkimsetti Yeshwanth	ECE	9652572384
78	Nallam Balaji Ram Ganesh	ECE	9989563471
79	Balayala Niharika	ECE	06304443286
80	Emani Venkata aaha Jyothi	ECE	9346524056
81	Chetan Sairam. Meeniseti	ECE	9182418474
82	Shrutika Amzire	CSE	9373061084
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84	Vinnakota Vishnu	ECE	09676308854
85	meshak burla	ECE	9398452635

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