

IEEE - MVSR STUDENT BRANCH Student Branch Code: 12161, School Code: 41329276



# Workshop on Virtual Labs

IEEE MVSR SB WIE Affinity Group has conducted a session on "Workshop on Virtual Labs" on 16<sup>th</sup> October, 2020. This workshop is conducted to help the students learn the basics and advanced concepts in an e-practical approach remotely which makes them understand how this initiative towards virtual experimentation helps to cope up in a better way.

## 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. N. Avinash
Vice Chair	Ms. N. Sahitya
Secretary	Mr. Ch. Saiteja
Joint Secretary	Ms. R. Ruchita Reddy
Treasurer	Ms. P. Sruti
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<b>Committee Head</b>	Ms. A. P. Sahasra

## WIE Affinity Group:

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Secretary	Ms. B. Sudeepthi
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Treasurer	Mr. Sriteja Mopati
Women in Power	Ms. T. Snigdha

# WIE Affinity Group Advisor:

Mrs. A. Vijaya Vahini, Assistant Professor, IT Dept., MVSR Engineering College.

## PES Student Chapter Advisor:

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

# CS Student Chapter advisor:

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

# CASS Student Chapter Advisor:

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

### Computer Society:

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### Circuits & Systems Society:

Mr. D. Venkat
Ms. K. Pranathi
Ms. K. Shreeya Rishi
Mr. N. Bhargay Saketh
Ms. B. Anjana

### **Operating Committees:**

Mr. Zeeshan, Mr. Omer
Mr. J. Sahith
Mr. K.Uthej, Mr.Danish
Mr. P. Srikrushna
Ms. K. Laxmi Priya

Session details:
Date: 16<sup>th</sup> October, 2020.
Time: 2:00 pm – 4:00 pm
No. of attendees: 60
Speaker for the session: Mrs. A.Vijaya Vahini, Assistant Professor, IT Dept., MVSREC and Advisor, WIE AG IEEE MVSR SB.



Attendees for the workshop

IEEE MVSR SB WIE Affinity Group Chairperson Ms. M. Shresta Reddy has started the session by welcoming the speaker, faculty advisors and all the attendees to the webinar. Then she has given an introduction about the speaker to all the attendees present for the e-workshop. Thereafter, she has handed over the session to the speaker.

Later, Mrs. A. Vijaya Vahini, Assistant Professor, IT Dept., MVSREC has started the session by introducing herself and shared her experience in teaching field. Then she spoke about the virtual Labs platform which is an initiative of Ministry of Human Resource Development (MHRD) under the National mission on Education through ICT.



Speaker introducing the Virtual Labs platform to the attendees

Then she has spoken about the objectives and salient features of this e-learning platform and mentioned about the broad areas in Virtual labs interface. She has chosen Electronics and Communication stream to familiarise this platform to the students and explained about the different e-labs that are available from various institutions for them to experience the experimentation process and procedure that has to be followed by them in order to obtain the required results.

Then, she has selected the Basic Electronics Virtual Laboratory to make the attendees know about the actual user interface of virtual labs in making their work easier and understand how the actual circuit or programme works in order to obtain accurate results for better understanding of the theory concepts.



Speaker showing the Basic Electronics Laboratory interface

Later, she told about the list of experiments that are present in the platform for convenience of the students. Then she selected an experiment named V-I Characteristics of a diode and explained about what are the things that the platform offers for better understanding of the student like theory of the experiment, procedure, simulation, quiz, assignment and references for that specific experiment.



Speaker showing the simulation options for the experiment

Then, she has executed an experiment on Forward bias characteristics of a Silicon diode and has explained the various steps involved in the execution process like varying the resistance and other controls required in a detailed manner. Then she has explained the instructions to be followed in order to plot a graph for the required characteristics elaborately.



Speaker explaining about the experiment

She also has executed another couple of experiments like Reverse biased characteristics of the Silicon diode, Half wave rectifier, Full wave rectifier followed by input- output characteristics of Common base Bipolar junction transistor (BJT) to make the students familiarise with the interface.

Later, Mr. Ch. Saiteja, Secretary of IEEE MVSR SB has invited Dr. D. Hari Krishna, Student Branch Counsellor, IEEE MVSR SB to address the gathering. Then he took over the session and explained about the activities done by IEEE MVSR SB and presented a virtual memento to the speaker for spending her time on the workshop.



Presenting the Virtual memento to speaker

At the end, Ms. T. Akanksha, Vice Chairperson of IEEE MVSR WIE Affinity group has given a vote of thanks by thanking the speaker for spending her valuable time for the workshop and detailing about the Virtual Labs platform and also thanked Dr. G. Kanaka Durga, Principal, MVSREC, Dr. D. Harikrishna, Student Branch Counsellor, IEEE MVSR SB, Ex-com members and all the attendees for attending the workshop and for their kind attention towards it.

**REPORTED BY-IEEE MVSR SB.**