



## Innovative practice 1: Physics club

Name of the practice : Physics club

Year of started : 2020-21

Assessment / Activity : \* Main aim of this club is Students can run this club by conducting various activities like JAM sessions, Quiz competitions, Group discussions on subject, Celebrations of birth anniversary of famous physicists etc.

Outcome of the practice : \* Leadership qualities are evolved from the students  
\* Organizing programme skills and Communication skills will be improved.

*Signature*

PRINCIPAL  
Government Degree College  
Kukatpally, Medchal Dist.

039 K.VENKATESH MPCs is presenting

PHYSICS CLUB  
INTERNATIONAL BATH DAY  
DEPARTMENT OF PHYSICS  
GOVT. DEGREE COLLEGE,  
KUKATPALLY

17:00 | International Bath Day - Archimedes Principle

05:00 PM  
14-06-2021

092 R.Anitha Mpcs is presenting

14 June 2021  
14:59 | India, Telangana

16:52 | International Bath Day - Archimedes Principle

04:52 PM  
14-06-2021

Dr. Vijaya Lakshmi Nayunigari is presenting

Archimedes Principle - Class 9 Tutorial

17:20 | International Bath Day - Archimedes Principle

05:20 PM  
14-06-2021

Zoom Meeting - You are screen sharing

PHYSICS CLUB  
**NATIONAL TEACHER'S DAY**  
 Dt: 05.09.2021  
 DEPARTMENT OF PHYSICS  
 GOVT. DEGREE COLLEGE,  
 KUKATPALLY

Teacher's Day  
 "Books are the means by which we build bridges between cultures."  
 Remembering  
 Former President of India  
 Dr. Sarvepalli Radhakrishnan  
 on his Birth Anniversary

Participants (28):  
 M Kondaiah  
 D. Manikyam  
 Lavanya chadar...  
 Lavanya chadaram  
 Nayunigari Vijaya lakshmi

Zoom Meeting - Recording... Remaining Meeting Time: 08:25 | Upgrade to Pro

Participants (28)

Munna	M Kondaiah	Mpcs J saibaba 064	K Ganesh 021mpc	031 G.Geethanjali MPCs
B. Anusha [B.Sc.(MPC)] [13]	Nayunigari Vijaya lakshmi	(Pavani)mpcs(079)	D. Manikyam	Lavanya chadar...
N. Lingamma mpc 030	Srujan Kumar	K.Swathi MPC 084	V Nagarani MPC 189	Praveen Kumar Goud
M.Adhi laxmi 043	P.Krishna Mpcs 052	K Shiva Kumar 022	Nandan	P.Gayathri (mpc) 146
Talla Rakesh	Khetavat Venkatesh	Nagaraj sagar 062	Kiran Kumar(MPCs)087	Nallapothula Ganesh

Participants (28) list:  
 M Kondaiah (Host, me)  
 Nayunigari Vijaya lakshmi  
 (075)zenus kothapalli(mpcs)  
 (Pavani)mpcs(079)  
 031 G.Geethanjali MPCs  
 B. Anusha [B.Sc.(MPC)] [13]  
 B.Raviteja MPCs 008  
 D. Manikyam  
 K Ganesh 021mpc  
 K Shiva Kumar 022  
 K.Swathi MPC 084  
 Khetavat Venkatesh  
 Kiran Kumar(MPCs)087  
 Lavanya chadaram

Zoom Meeting 40-Minutes - Recording... View

Participants (29)

Nayunigari Vijaya lakshmi	K Ganesh 021mpc	Srujan Kumar	K.Swathi MPC 084	(075)zenus kothapalli(mpcs)
P.Gayathri (mpc) 146	Talla Rakesh	Anil G	Raju k 089	N. Lingamma mpc 030
031 G.Geethanjali MPCs	B. Anusha [B.Sc.(MPC)] [13]	V Nagarani MPC 189	Praveen Kumar Goud	M.Adhi laxmi 043
P.Krishna Mpcs 052	K Shiva Kumar 022	Nandan	T. Shireesha MPCs	Mohammed Awaiz Uddin
Munna	Raju Sangaipeta 157 Mpcs	Khetavat Venkatesh	Nagaraj sagar 062	Shalini Vardhan mpcs 179

Participants (29) list:  
 N. Lingamma mpc 030  
 Nagaraj sagar 062  
 Nandan  
 Nayunigari Vijaya lakshmi  
 P.Gayathri (mpc) 146  
 P.Krishna Mpcs 052  
 Praveen Kumar Goud  
 Raju k 089  
 Raju Sangaipeta 157 Mpcs  
 Shalini Vardhan mpcs 179  
 Shalini Vardhan mpcs 179  
 Srujan Kumar  
 T. Shireesha MPCs  
 Talla Rakesh  
 V Nagarani MPC 189



## INDEX

S.No	Name of the Best practice	Academic Year year of started
1.	Quiz competition	2013-2014
2.	Student seminars	2016-2017
3.	Slip Tests or class room Exam	2018-2019
4.	Remedial Teaching	2018-2019
5.	Student study projects	2018-2019
6.	Field visit	2018-2019
7.	Guest Lectures	2019-2020
8.	Extension Lectures	2019-2020
9.	Parent-Teacher Meeting	2019-2020
10	Mentor-Mentee system	2020-2021

## Best practice to Mentor-Mentee System.

Department of physics initiated the Mentor-Mentee system from the Academic year 2020-21 onwards. The groups ~~are~~ to be allocated to physics faculty as per the semester wise (MPC and MPCS groups) (MPS group).

In this system faculty will interact with students thrice in a semester to monitor the attendance of classes, progress in study and guide the students to achieve their goals and aspirations in their life.

- \* Name of the Best practice: Mentor-Mentee system
- \* year of started : 2020-21
- \* Methodology / Assessment : physical interaction with student every thrice in a semester
- \* outcome of the practice : Students will focus on lagging of skills and develop their intrapersonal, communication skills with others. After this practice students will be better getting of opportunities in their studies and life for future.

*Signature*  
21/12/20

PRINCIPAL  
Government Degree College  
Kukatpally, Medchal Dist.



**Mentor – Mentee system**



## Student Seminars

2021-08-05-08-36-35.mp4 - VLC media player

Media Playback Audio Video Subtitle Tools View Help

meet.google.com/dxy-czwg-gq?authuser=0

003 MPCs Bhaskar Allu is presenting

### GOVT DEGREE COLLEGE, KUKATPALLY

TOPICS:-  
1.MODES OF VIBRATIONS OF STING  
2.LAWS OF TRANSVERSE VIBRATIONS  
3.HARMONICS & OVER TONES

ALLU BHASKAR  
(M.P.Cs)  
203919468003

08:37 | Modes of vibration of stretched strings - Overtone...

21:18

26°C Partly cloudy

19:38 06-10-2021

2021-08-04-08-36-57.mp4 - VLC media player

Media Playback Audio Video Subtitle Tools View Help

meet.google.com/haz-olaa-age?authuser=0

M.Tejaswi 119 MPCs is presenting

### VELOCITY OF A TRANSVERSE WAVE ALONG A STRETCHED STRING

Transverse wave propagation along a stretched string

08:38 | IV SEM - Transverse vibrations on strings - Transver...

09:38

26°C Mostly sunny

19:33 06-10-2021



## Quiz competitions

The screenshot shows a Google Meet window with a Kahoot! quiz presentation. The browser tabs include 'Inbox - gdcphysicskukatpally', 'Paper VIII A: Basic Electronics', 'Google Calendar - Wednesday', 'Meet - Quiz on "Digital Electronics"', and 'Kahoot!'. The address bar shows the URL 'meet.google.com/wzj-crsr-tuv?authuser=0'. The presentation content displays the Kahoot! dashboard with a list of quizzes: 'Digital Electronics Quiz' (25 Questions) and 'Online Quiz 12.05.2020' (40 Questions). A 'People' panel on the right shows participants: 'Department of Physi... (You)', 'Department of Physics GD...', and 'Your presentation'. The bottom of the screen shows the Windows taskbar with the time '08:54' and the title 'Quiz on "Digital Electronics"'. A 'Sharing create.kahoot.it to meet.google.com' notification is visible at the top.

The screenshot shows the Kahoot! game over screen for the 'Digital Electronics Quiz'. The background is purple with confetti. The quiz title 'Digital Electronics Quiz' is at the top. The results are displayed as follows:

Rank	Name	Score	Progress
1	K.VENKATESH	15240	20 out of 25
2	P.shiva prasad	11631	15 out of 25
3	M.devi	10810	16 out of 25

The interface includes a 'Next' button in the top right corner and a 'meet.google.com is sharing your screen.' notification at the top. The Windows taskbar at the bottom shows the time '09:36 AM' and the date '09-06-2021'.

# Parent-Teacher Meeting

Zoom Meeting

Participants (11)

- M Kondaiah (Host, me)
- N.Neelaveni MPC 125
- (114) M.SATISH KUMAR mpcs
- <Anitha> <mpcs> <092>
- 014 b. raju mpcs
- B Nagaraju mpc(014)
- K. Akash Naik MPC 203919441072
- M.Devi <mpcs> <065>
- mpcs 057 Sandhya Reddy
- T.Suman kumar Mpcs 105
- VENKATESH KADARI

11:32 AM  
24-07-2021

Zoom Meeting

Participants (25)

- M Kondaiah (Host, me)
- (114) M.SATISH KUMAR mpcs
- <Anitha> <mpcs> <092>
- 014 b. raju mpcs
- B Nagaraju mpc(014)
- I SAI KRISHNA 061
- K Thrisha (MPC) 085
- K. Akash Naik MPC 2039194410...
- K. Thirupathi 087
- Lavanya
- M.Devi <mpcs> <065>
- Md naziya mpcs
- mpcs 057 Sandhya Reddy
- N.Neelaveni MPC 125
- V.Navyasree bsc ...
- Shalini vardhan...
- Raviteja
- Y.Durga kalyani...
- K. Thirupathi 087
- VENKATESH KAD...
- K Thrisha (MPC) ...
- Patilla priyanka...
- Sajid
- K. Thirupathi 087
- VENKATESH KAD...
- K Thrisha (MPC) ...
- Prabhu teja 068
- N.Neelaveni MP...
- Rajesh soma mpc
- Lavanya
- QCOM-BTD

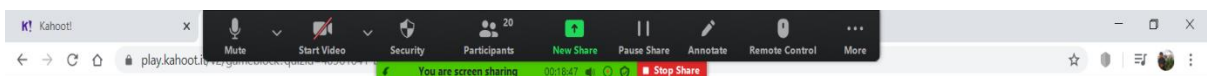
11:42 AM  
24-07-2021

**Essay writing competitions**





## Quiz Competitions



Name the experiment

7

12 Answers

Newton's rings

Michelson Interferometer

Double refraction

None

kahoot.it Game PIN: 3735653



## Student Seminars



Zoom Meeting 40-Minutes

Nayunigari Vijaya... N. Padma (mp... Venkatesh Kada... Sreikha .v (mpcs) mahesh Kumar(...)

Zoom Meetings is using the webcam (1/5)

Find a participant

- NV Nayunigari Vijaya lakshmi (Host, me)
- C Chandrakala(MPC) (Guest)
- A Anitha(mpcs) (Guest)
- BT B. Tejeshwari (mpcs) (Guest)
- B B.Anusha(mpc) (Guest)

yes no go slower go faster more clear all

Invite Mute All Unmute All

Zoom Group Chat

From laxman to Everyone:  
madam mi voice mute lo vundhi

From Dakuri Manikyam(Mpcs) to Me: (Privately)  
mi Voice ravatle medam

To: Dakuri Manikyam(Mpcs) (Privately)

Type message here...

End

Chandrakala(MPC)

Mute Stop Video Security Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions

Type here to search

DOUBLE REFRACTION

Isotropic Medium  $\rightarrow$  the property of the medium is in all directions.

Anisotropic medium  $\rightarrow$  the property of the medium is in all directions.

ex: Calcite crystal, Sugar, [crystalline form of CO<sub>2</sub>]

The diagram shows a rectangular crystal with a vertical dashed line representing the optical axis. A horizontal line represents the normal to the crystal surface. Light rays are shown incident from the left, passing through the crystal, and emerging on the right. The incident ray is labeled 'i'. The refracted rays are labeled 'o' (ordinary ray) and 'e' (extraordinary ray). The angle of incidence is labeled 'i'. The angle of refraction for the ordinary ray is labeled 'r<sub>o</sub>'. The angle of refraction for the extraordinary ray is labeled 'r<sub>e</sub>'. The diagram illustrates how the extraordinary ray's path depends on its direction of travel relative to the optical axis.

$\mu = \frac{\text{velocity of light in vacuum}}{\text{velocity of light in medium}}$

09:47 05-05-2020

## Classroom Exams





# Remedial Coaching

**Transport Phenomena:-**

A moving gas molecule has mass, momentum and kinetic energy. While moving molecules from one part of the container to another part these physical quantities are transported. When a gas is in equilibrium, there is no transport of mass, momentum and kinetic energy. When gas is not in equilibrium,

(i) The different parts of the gas are moving with different velocities resulting in a relative motion between different layers of the gas. Now the layers moving faster transport momentum to the slower moving layers until the equilibrium state is attained. This gives rise to the phenomena of viscosity.

(ii) The different parts of the gas may be at different temperatures. Now the molecules of gas will carry thermal energy (kinetic energy) from regions of high temperature to regions of low temperature to attain equilibrium state. This gives rise to the phenomena of thermal conduction.

(iii) The different parts of the gas may have different densities (concentrations). Now to bring the equilibrium state, the molecules of the gas transport mass from regions of higher density to regions of lower density. This gives rise to the phenomenon of diffusion. The above three phenomena namely, viscosity, thermal conduction and diffusion are called transport phenomena.

**Viscosity of Gases (or) Transport of Momentum:-**

Let a gas flow over a horizontal surface OX as shown in fig.

The velocity of gas ( $u$ ) is small as compared to the velocity of molecules in a gas. The velocity of layer in contact with the

Zoom Meeting: 40-Minutes

Page: 9 of 88 | Words: 24,731 | English (India)

10:02 AM 15-10-2020

Zoom Meeting 40-Minutes

Zoom Meetings is using the webcam

Find a participant

Nayunigari Vijaya lakshmi (Host, me)

mahesh Kumar(mpcs) (Guest)

Anitha(mpcs) (Guest)

B. Tejeshwari (mpcs) (Guest)

B.Anusha(mpc) (Guest)

B.sindhu( mpcs) (Guest)

B.Tharun (Mpcs) (Guest)

Chandrakala(MPC) (Guest)

G.Harika(mpcs) (Guest)

JK Jatavath Kavitha (mpcs) (Guest)

Kiran Kumar(MPCs) (Guest)

Lavanya chadaram (mpcs) (Guest)

Nagaraju Bujaboina(mpc) (Guest)

B.sindhu( mpcs)

Y.Durga kalyani(Mpcs) (Guest)

B.Tharun (Mpcs) (Guest)

Jatavath Kavith...

yes no go slower go faster more clear all

Invite Mute All Unmute All

Mute Stop Video Security Participants Chat Share Screen Record Reactions End

Type here to search

09:59 04-05-2020

**Student Study Projects**





## Field Visits





# Guest Lectures

Zoom Meeting 40-Minutes

Zoom Meetings is using the webcam

Find a participant

NV Nayunigari Vijaya lakshmi (Host, me)

VM Vijaya Mandava (Guest)

A Anitha(mpcs) (Guest)

BT B. Tejeshwari (mpcs) (Guest)

B B.Anusha(mpc) (Guest)

BM B.sindhu( mpcs) (Guest)

B( B.Tharun (Mpcs) (Guest)

C Chandrakala(MPC) (Guest)

DR D Renuka (mpcs) (Guest)

DM Dakuri Manikyam(Mpcs) (Guest)

G G.Harika(mpcs) (Guest)

GG GOLI Geethanjali (Mpcs) (Guest)

HY Hareesh Yadav Kotha (Guest)

JR J Raju (mpcs) (Guest)

JK Jatavath Kavitha (mpcs) (Guest)

yes no go slower go faster more clear all

Invite Mute All Unmute All

Share Screen

Pause/Stop Recording

Breakout Rooms

Reactions

End

Vijaya Mandava

Mute Stop Video Security Participants Chat

Type here to search

Spherical Aberration

Zoom Meeting 40-Minutes

Zoom Meetings is using the webcam

Find a participant

NV Nayunigari Vijaya lakshmi (Host, me)

BT B. Tejeshwari (mpcs) (Guest)

BM B.sindhu( mpcs) (Guest)

VM Vijaya Mandava (Guest)

GG GOLI Geethanjali (Mpcs) (Guest)

A Anitha(mpcs) (Guest)

B( B.Tharun (Mpcs) (Guest)

C Chandrakala(MPC) (Guest)

DR D Renuka (mpcs) (Guest)

DM Dakuri Manikyam(Mpcs) (Guest)

G G.Harika(mpcs) (Guest)

HY Hareesh Yadav Kotha (Guest)

JR J Raju (mpcs) (Guest)

JK Jatavath Kavitha (mpcs) (Guest)

YG Kavitha godugu(MPC) (Guest)

yes no go slower go faster more clear all

Invite Mute All Unmute All

Share Screen

Record

Breakout Rooms

Reactions

End

Chandrakala(MPC)

Nayunigari Vijaya laka...

Vijaya Mandava

B. Tejeshwari (mpcs)

J Raju (mpcs)

GOLI Geethanjali (Mpcs)

D Renuka (mpcs)

G.Harika(mpcs)

B.sindhu( mpcs)

Dakuri Manikya...

Kavitha godugu...

Anitha(mpcs)

Venkatesh Kada...

M. Shravani(MP...

Y.Durga kalyani...

SrIREkha .v (mpcs)

mahesh Kumar(...

Jatavath Kavith...

N. Padma (mpc)

B.Tharun (Mpcs)

laxman

Pavani(mpcs)

Kiran Kumar(M...

Hareesh Yadav...

P.shiva prasad (...

Type here to search

# Guest Lectures

Zoom Meeting 40-Minutes

Zoom Meetings is using the webcam

Find a participant

- NV Nayunigari Vijaya lakshmi (Host, me)
- VM Vijaya Mandava (Guest)
- A Anitha(mpcs) (Guest)
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- C Chandrakala(MPC) (Guest)
- DR D Renuka (mpcs) (Guest)
- DM Dakuri Manikyam(Mpcs) (Guest)
- G G.Harika(mpcs) (Guest)
- GG GOLI Geethanjali (Mpcs) (Guest)
- HY Hareesh Yadav Kotha (Guest)
- JR J Raju (mpcs) (Guest)
- JK Jatavath Kavitha (mpcs) (Guest)

Spherical Aberrate

Vijaya Mandava

Mute Stop Video Security Participants Chat Share Screen Pause/Stop Recording Breakout Rooms Reactions

Type here to search

10:53 05-05-2020

Zoom Meeting 40-Minutes

Zoom Meetings is using the webcam

Find a participant

- NV Nayunigari Vijaya lakshmi (Host, me)
- BT B. Tejeshwari (mpcs) (Guest)
- BM B.sindhu( mpcs) (Guest)
- VM Vijaya Mandava (Guest)
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- G G.Harika(mpcs) (Guest)
- HY Hareesh Yadav Kotha (Guest)
- JR J Raju (mpcs) (Guest)
- JK Jatavath Kavitha (mpcs) (Guest)
- KG Kavitha godugu(MPC) (Guest)

Chandrakala(MPC)	Nayunigari Vijaya laks...	Vijaya Mandava	B. Tejeshwari (mpcs)	J Raju (mpcs)
GOLI Geethanjali (Mpcs)	D Renuka (mpcs)	G.Harika(mpcs)	B.sindhu( mpcs)	Dakuri Maniky...
Kavitha godugu...	Anitha(mpcs)	Venkatesh Kada...	M. Shravani(MP...	Y.Durga kalyani...
Srirekha .v (mpcs)	mahesh Kumar(...)	Jatavath Kavith...	N. Padma (mpc)	B.Tharun (Mpcs)
laxman	Pavani(mpcs)	Kiran Kumar(M...	Hareesh Yadav...	Pshiva prasad (...)

Mute Stop Video Security Participants Chat Share Screen Record Breakout Rooms Reactions

Type here to search

10:38 05-05-2020

You are screen sharing Stop Share

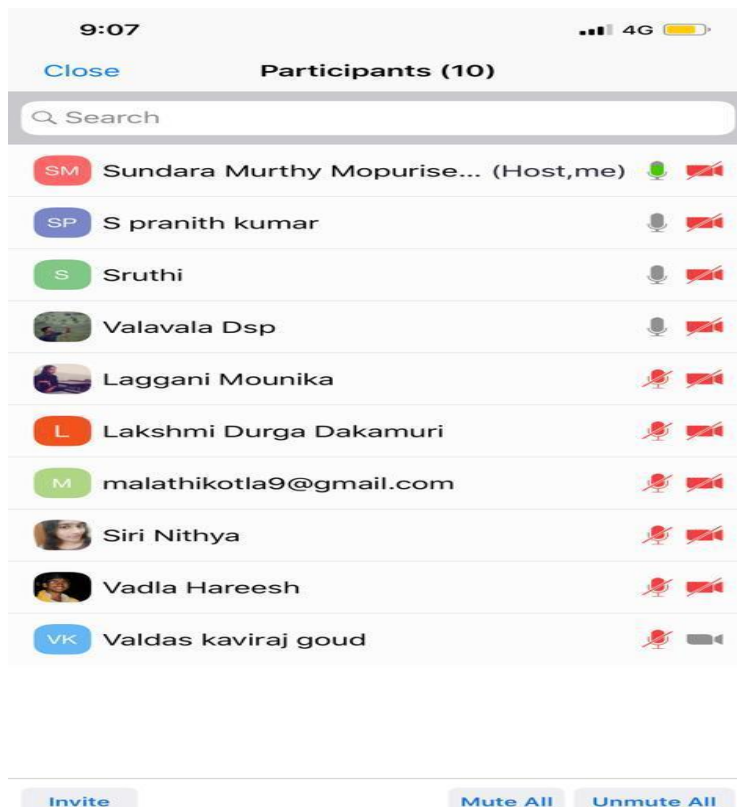
# Phase Shift Oscillator

**Guest Lecture**  
(4<sup>th</sup> May 2020)

by



**Dr. A. Rajani Malathi**  
Assistant Professor of Physics  
Osmania University College for Women, Koti  
Hyderabad





# Phase Shift Oscillator

**Guest Lecture**  
(4<sup>th</sup> May 2020)

by



**Dr. A. Rajani Malathi**  
Assistant Professor of Physics  
Osmania University College for Women, Koti  
Hyderabad

9:07 4G

Close Participants (10)

Search

SM	Sundara Murthy Mopurise... (Host,me)		
SP	S pranith kumar		
S	Sruthi		
	Valavala Dsp		
	Laggani Mounika		
L	Lakshmi Durga Dakamuri		
M	malathikotla9@gmail.com		
	Siri Nithya		
	Vadla Hareesh		
VK	Valdas kaviraj goud		

Invite Mute All Unmute All

## Parent – Teacher Meeting

Zoom Meeting

Participants (64)

Find a participant

Dr. Neeluru Alive...	Kondalah M	Satyanarayana ...	Jatavath Kavitha...	A.vasanthi
Vani's iPhone	Vijaya bhaskar Reddy	Sujatha Kudum	Teju Tejaswi	Vinod Kumar
Solomon Raju	Shashi rekha	N. Padma (mpc)	Meher Barka Fathima	Preethi Manohar...
zenus kothapalli	Sadanand Akhila	Prashanth Mudiraj	Anitha(mpcs)	nikhat anjum
HARI PRASAD I	Swathi Kothapalli...	V.Navyasri (mpcs)	Dakuri Maniyya...	Saipriya(MPC)

Participants list (partial):

- Kondalah M (Me)
- Sujatha Kudum (Host)
- Galaxy M30s
- Dr. Neeluru Alivelu Mangamma
- Meher Barka Fathima
- N. Padma (mpc)
- Vani's iPhone
- shobha rani Rasakata
- Vijaya bhaskar Reddy
- A.vasanth
- Anitha(mpcs)
- B. Tejeshwari (mpcs)
- B. Shirisha(mpc)
- Bhaskar Allu

Buttons: Invite, Mute Me, Raise Hand

System tray: Windows, Taskbar, Zoom Meeting, 11:20 AM 13-05-2020

Zoom Meeting 40-Minutes

Speaker View

Participants (36)

Find a participant

Vani's iPhone	Kondalah M	nikhat anjum	Vijaya bhaskar R...	Bhaskar Allu
Rajani Bonthu	Jatavath Kavith...	Satyanarayana Mah...	Sundara Murthy...	Teju Tejaswi
Sujatha Kudum	Vinod Kumar	Bhavana Honey	Swathi.	A.Vasanth (MCCS)
Shashi rekha	Laddu Sangeetha	Nagesh Balla	Sadanand Akhila	Solomon Raju
Saipriya(MPC)	Kothakaapu Su...	Dr. VIJAYA LAKS...	K Anusha MBC	Savitha K

Participants list (partial):

- Kondalah M (Me)
- Sujatha Kudum (Host)
- Nagesh Balla
- nikhat anjum
- Satyanarayana Maheshwaram
- Teju Tejaswi
- Vani's iPhone
- Rajani Bonthu
- A.Vasanth (MCCS)
- Bhaskar Allu
- Bhavana Honey
- Dr G Dayanand Arya
- Dr. VIJAYA LAKSHMI
- Faimeeda
- Jalapati Bharath kumar

Buttons: Invite, Mute Me, Raise Hand, Leave

System tray: Windows, Taskbar, Zoom Meeting, 12:00 PM 13-05-2020