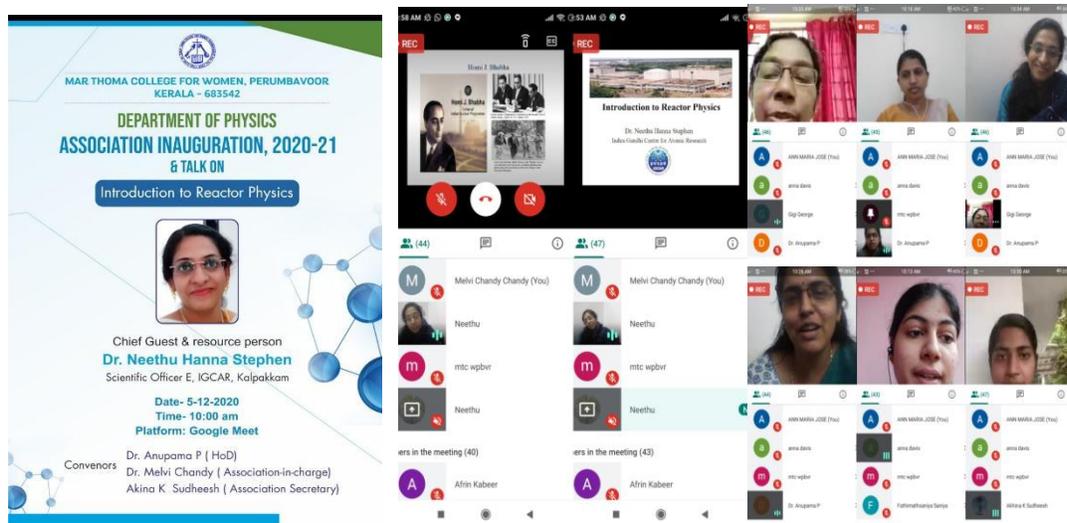


Physics Association Report 2020-2021

Even though due to Covid -19 pandemic offline classes has not been started from June, online educational activities of the Department of Physics have been started on 30 March 2020 using LMS Moodle and Google classrooms.

Physics Association

Dr. Melvi Chandy is the association in charge for the academic year 2020-2021. Physics Association inauguration was done by Dr. Neethu Hanna Stephen, Scientific Officer E, IGKAR, Kalpakkam, Tamil Nadu on 05 December 2020 and led a talk on Introduction to Reactor Physics.



Days of Celebration

We celebrated Environment Day, World Space Week, Energy Conservation Day and National Science Day by conducting Webinars and various online competitions.


MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR
 KERALA - 683542

ENERGY CONSERVATION DAY CELEBRATIONS 2020
 Organized by Department of Physics

Online Poster Design Competition

e-certificates and prizes will be given to the winners

Theme
ENERGY ADVICE FOR YOUR HOME

Guidelines:

1. The competition is open to all UG students.
2. Poster should be vertical A4 size with good resolution.
3. Submission format - JPG, JPEG or PNG format.
4. One poster per student.
5. **Entry deadline: 07/12/2020 before 6.00 PM**
6. Entries should be mailed to physicsmarthoma@gmail.com
7. The posters will be reviewed by experts and three will be declared winners.
8. Decision of judges will be final.

FOR MORE DETAILS CONTACT : 9746893701

Convenors
 Dr. Anupama P (HoD)
 Dr. Melvi Chandy (Association-in-charge)




MAR THOMA COLLEGE FOR WOMEN,
 PERUMBAVOOR, KERALA - 683542

NATIONAL SCIENCE DAY CELEBRATION 2021
 Organized by:
Department of Physics





is association with



Webinar
"Why Science is important to us humans?"

Resource Person
Dr. JOE JACOB
 Associate Professor, Dept. of Physics
 Newman College, Thodupuzha
 (Visiting Associate, IUCAA, Pune)


Google Meet:
26th February, 2021
11:00 AM

Dr. Anupama P
(Head of the Department)

Dr. Melvi Chandy
(Teacher-in-charge)

Ms. Akina K Sudheesh
(Association Secretary)



Why is science important to us humans
 National Science Day Celebrations 2021
 Mar Thoma College, Perumbavoor
 Dr. Joe Jacob, Newman College, Thodupuzha



ASLAMIA K S Joined

Karthika Das Joined


 You


 Anitha


 48 others


 You


 Anitha


 Gigi


 49 others

Webinars Conducted

3 International Webinars :

1. Webinar 1- International webinar

Topic: Materials simulations,

Resource Person: Dr. Binit Lukose, Associate Editor, John Wiley & Sons, Hoboken, NJ, USA

Date & Time: 27 May 2020, 9 am.(IST)



2. Webinar 2- International webinar

Topic: 3 D printing of metallic materials

Resource Person: Prof. Dr. Ing. K. G. Prashanth, Prof. and Head of Additive Manufacturing

Laboratory Dept. of Mechanical and Industrial Engineering Tallinn, Estonia

Date & Time: 28 May 2020, 10.00 am.(IST)

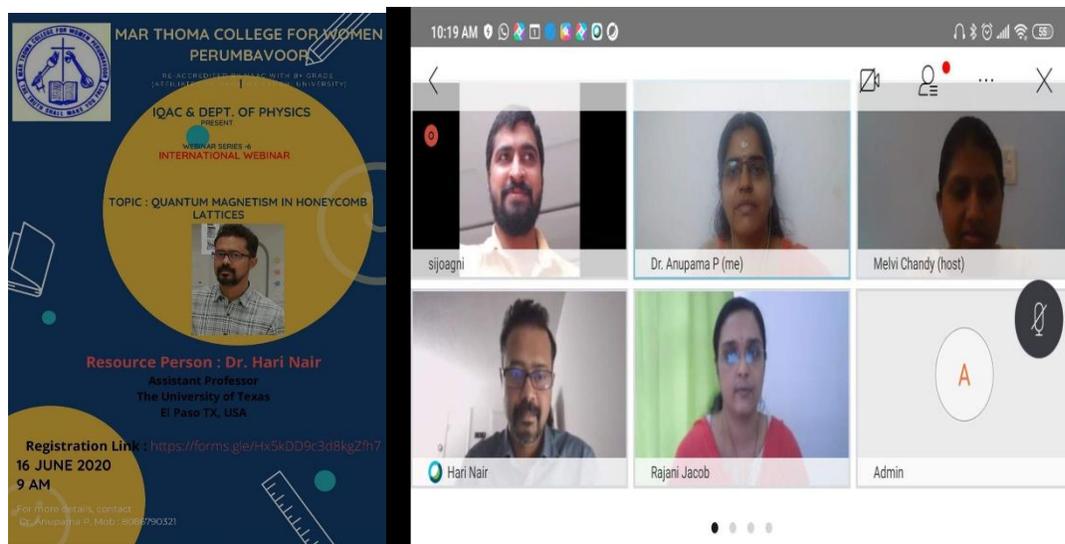


3. Webinar 3- International webinar

Topic: Quantum magnetism in honeycomb lattices

Resource Person: Dr. Hari Nair, Assistant Professor, Department of Physics, University of Texas at El Paso, USA

Date & Time: 16 June 2020, 9.00 am.(IST)



2 Day National Webinar

A two day Webinar was conducted in association with Institute for Plasma Research, Gujarat, on 08&09 October 2020, Resource Persons : Dr. Ravi A. Kumar, Scientific Officer-H, IPR, Ms. Chhaya Chavda, Scientific Officer, IPR, Gujarat

Other Webinars

1. Webinar on Energy Efficiency in domestic sectors, in association with Energy Management Centre (EMC), Kerala on 03 December 2020, Resource Person : Mr. Ijas M.A, Energy Technologist, EMC.

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR
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ENERGY CONSERVATION DAY CELEBRATIONS 2020

Organized by
Department of Physics

In association with  ENERGY MANAGEMENT CENTRE KERALA

Webinar 1

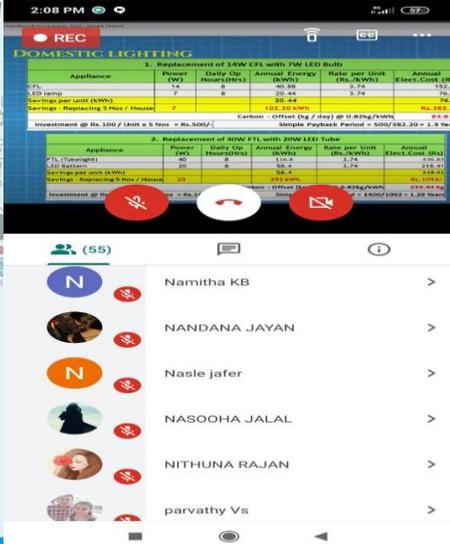
Energy efficiency in domestic sectors



Resource Person
Mr. Ijas M A
Energy Technologist,
Energy Management Center
(EMC), Kerala.

Date- 3-12-2020
Time- 1:30 pm
Platform- Google Meet

Convenors Dr. Anupama P (HoD)
Dr. Melvi Chandu (Association-in-charge)



DOMESTIC LIGHTING

1. Replacement of 15W CFL with 15W LED Bulb

Appliance	Power (W)	Daily Op. Hours (hrs)	Annual Energy (kWh)	Rate per Unit (Rs./kWh)	Annual Elect. Cost (Rs.)
CFL	15	8	40.80	7.74	313.80
LED Bulb	15	8	20.44	7.74	158.22
Savings per unit (kWh)			20.36		155.58
Payback Period (Years / Months)					1.00 / 12.00
Investment @ Rs. 100 / Unit x 5 Nos = Rs.500/-					500.00

2. Replacement of 40W FTL with 20W LED Tube

Appliance	Power (W)	Daily Op. Hours (hrs)	Annual Energy (kWh)	Rate per Unit (Rs./kWh)	Annual Elect. Cost (Rs.)
FTL (Fluorescent)	40	8	272.00	7.74	2105.28
LED Tubes	20	8	136.00	7.74	1052.64
Savings per unit (kWh)			136.00		1052.64
Payback Period (Years / Months)					1.00 / 12.00
Investment @ Rs. 100 / Unit x 5 Nos = Rs.500/-					500.00

Participants: (55)

- Namitha KB
- NANDANA JAYAN
- Nasle jafer
- NASOOHA JALAL
- NITHUNA RAJAN
- parvathy Vs

- Webinar on importance of Electrical Safety Physics in association with Electrical Inspectorate, Kerala on 11 December 2020, Resource Person : Dr. F.R. Pazheri Assistant Electrical Inspector, Electrical Inspectorate, Malappuram.

MAR THOMA COLLEGE FOR WOMEN, PERUMBAVOOR
KERALA - 683542

ENERGY CONSERVATION DAY CELEBRATIONS 2020

Organized by
Department of Physics

Webinar 3

Importance of Electrical Safety



Resource Person
Dr. F. R. Pazheri
Assistant Electrical Inspector
Electrical Inspectorate,
Malappuram

Date- 11-12-2020
Time- 2:30 pm
Platform- Google Meet

Convenors Dr. Anupama P (HoD)
Dr. Melvi Chandu (Association-in-charge)

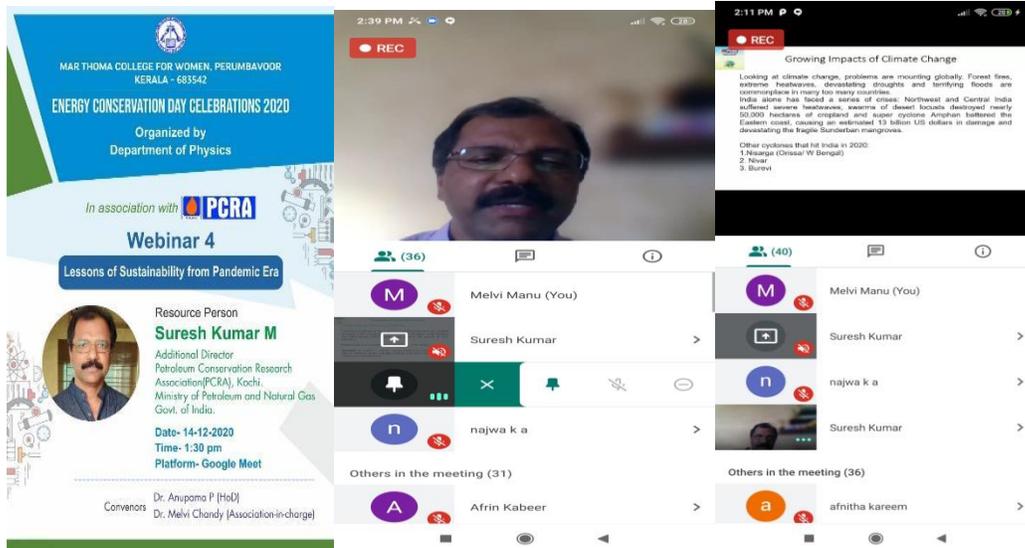


CONSERVE ENERGY ?

Participants: (54)

- Alfiya Kareem
- AMEENA KASIM
- Amitha Kareem
- ANAGHA JOY
- Anitha Thomas
- Anju K Rajan

- Webinar on Lessons of Sustainability from Pandemic Era- in association with Petroleum Conservation and Research Association, Ministry of Petroleum and Natural Gas, Govt. of India on 14 December 2020, Resource Person : Mr. Suresh Kumar M., Additional Director, PCRA, Kochi.



4. Webinar on 26 February 2021 by Joe Jacob, Associate Professor, Dept. of Physics, Newman College, Thodupuzha on the topic ‘Why Science is important to us humans’ ? as part of National Science Day Celebration in association with Academy of Physics Teachers (APT) Kerala.

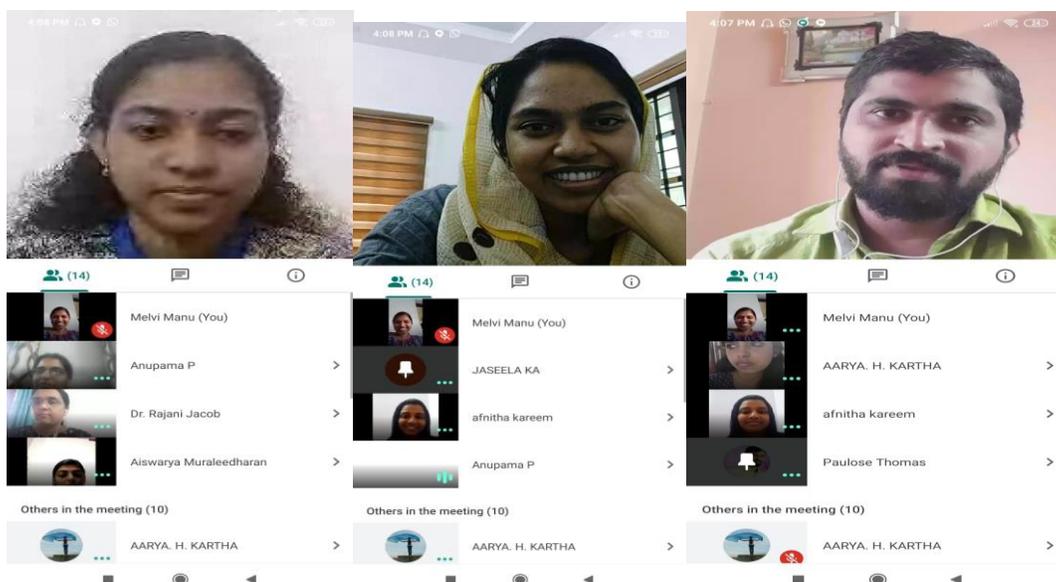
Online competitions conducted

1. Ideation- Innovative Idea competition as part of Environment Day Celebrations on 05 June 2020.
2. Online Space Quiz as part of World Space Week Celebrations on 12 October 2020.
3. Slogan Writing Competition as part of Energy Conservation Day Celebrations on 01 December 2020.
4. Poster Design Competition-Energy advice for your home as part of Energy Conservation Day Celebrations on 07 December 2020.
5. Presentation Competition as part of Energy Conservation Day Celebrations on 16 December 2020.
6. Online Physics Quiz as part of National Science Day Celebrations on 28 February 2021.
7. Online Model Making Competition as part of National Science Day Celebrations on 28 February 2021.

Meetings conducted

1. PTA meeting for BSc 2nd year Physics students via WebEx

2. **Farewell meeting to Mrs. Jayasree M.J**, who retired on May 2020 by the teachers of Physics department and passing out students of 2020
3. **Virtual reunion of Physics students of 2016-19 batch** through Google Meet on 9 August 2020 from 3 pm to 4.30pm



Student Achievements

1. Ms. Najwa K.A and Ms. Fasma T. Moosa of 3rd BSc Physics attended Intium series inaugural lecture by Dr. N. Shaji, Adjunct Faculty, CUSAT through online platform WebeX.
2. Ms. Anitha Thomas and Ms. Fasma T. Moosa of 3rd BSc Physics completed an online certificate course authorized by University at Buffalo, the State University of New York through Coursera.
3. Ms. Fasma T. Moosa of 3rd BSc Physics completed an online certificate course authorized by Kore advanced Institute of Sciece and Technology University through Coursera.