



## **Energy and ENCON Club**

Energy Club aims at generating and disseminating awareness for judicious and sustainable consumption of energy. The ENCON Club is a volunteer-driven, non-profit initiative focused on promoting energy conservation and environmental protection. It provides a platform for members to gain, process, and share knowledge on these important topics. Established by Kochi Refinery in 2002, the club aims to engage with the younger generation to foster environmental stewardship.

The core mission of the ENCON Club is to instill a deep understanding of energy conservation and environmental protection among students through various activities. These include talks, seminars, workshops, exhibitions, and other awareness programs organized throughout the year. By doing so, the club strives to build a network of environmentally conscious individuals who will continue to champion these values for future generations. Currently, there are approximately 50 BPCL Kochi Refinery-sponsored ENCON Clubs in educational institutions across Kerala.

### **Report (2022-2023)**

As a part of environment day celebrations on June 5<sup>th</sup>2022 we identified a space to create a green classroom for our students. For identifying a proper space for converting into a green classroom, we first conducted a survey and ground study with the help of google earth. We mapped the college campus, made an inventory of the plants, and also assessed ways in which the college campus can be used for outdoor learning.

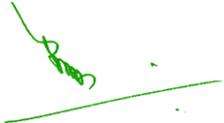
A beautiful outdoor space under tree cover was identified after the survey for being converted into a green classroom. The students were involved in many aspects of creating the classroom; from site planning and design, to planting beautiful plants in the site. As it was already under the shade of trees additional cover for providing shade to students was not necessary. The premises was cleaned





List of Participants

Year of enrollment	Name	Student enrollment number
2021	VAISHNAVI SUDHARSAN	39975
2021	GEONE K PHILIP	39992
2021	ALEENA ANNA ALEX	40049
2021	DANIEL MATHEW	40069
2021	DELIN SHAJI JOHN	40071
2021	BINNU BABY	40095
2021	JOOLY BENNY	40121
2021	KAVYA UNNI	40134
2021	AKASH SUNIL	40140
2021	SURYA HAREENDRAN	40146
2021	SABARINATH T J	40152
2021	ARUN K R	40153
2021	AKHILA R NAIR	40155

  
Dr. Ison V Vanchipurackal

**PRINCIPAL**  
**KURIAKOSE ELIAS COLLEGE**  
**MANNANAM, KERALA - 686 561**





## Encon Club Report (2021-2022)

### Report of Webinar on “Understanding and Managing Residential Energy Bills Hands on Training”

An online session on “Understanding and Managing Residential Energy Bills Hands on Training “ was conducted by Encon club on October 01, 2021. Mr. Richu Zachariah , Certified Energy Auditor, Assistant Professor, Amal Jyothi College of Engineering, Kanjirappally. 45 participants have actively attended the session.



**KURIAKOSE ELIAS COLLEGE**  
Mannanam P.O, Kottayam, Pin-686021





**ENCON CLUB**  
Department of Physics

### Understanding and Managing Residential Energy Bills- Hands on Training

**Resource Person:**  
Richu Zachariah  
Certified Energy Auditor  
Assistant Professor  
Amal Jyothi College of Engineering Kanjirappally



**Coordinators**  
Ms. Aparna Raj  
Dr. Ranjini Radhakrishnan

**HoD**  
Dr. Jini Thomas

**Principal**  
Rev. Dr. Xavier C.S.

**Date: 01 October 2021**  
**Time: 2:30 pm to 3:30 pm**

**About Speaker**

Richu Zachariah is currently working as Assistant Professor in Department of Mechanical Engineering, Amal Jyothi College of Engineering, Kanjirappally. He completed his B.Tech in Mechanical Engineering from Mar Athanasius College of Engineering, Kothamangalam and M.Tech in Energy Engineering from NIT Trichy. He is currently pursuing his PhD in the department of energy science and engineering, IIT Bombay. He is one of the executive committee members of Society of Energy Engineers and Managers (SEEM), Kerala chapter. Also, he is an empanelled resource person of Agency for Non - conventional Energy and Rural Technology (ANERT), Kerala.





3:12 PM 15.3KB/s

tfe-nktb-zbt

REC

### Step 2: Estimate equipment wise usage...

Sl. No	Equipment	Daily usage	Rated / usage power	Energy consumption
		Hours (h)	Watts (W)	Watt hour (Wh)
1	Light 1 <i>CFL</i>	3	14	42
2	Light 2	6	55	330
3	Fan 1			
4	Mixi			
	...etc			
Total				

richu is presenting

3:04 PM 24.1KB/s

## HOME ENERGY AUDIT

richu is presenting

12

3:23 PM 13.9KB/s

### Step 5: Energy Performance Index

- If Building area is 'a' m<sup>2</sup>
- Energy Performance Index, EPI  
=  $C \div a$  (Annual consumption / area)
- **EPI < 10** is generally Good for domestic sector
- Evaluate both present and projected EPI with energy saving

richu is presenting

### Active Students Participation List



Criteria 3.2.1





Name	Admission number
VIDHYA P KRISHNA	39548
VISHNU AJITH	39267
AKSHARAPRIYA AMBI	39434
AMRUTHA M	39533
ANAGHA ANIL	39250
ANITTA BENNY	39406
ANN MARIYA THOMAS	39223
ANUPAMA RAJESH	39433
ASIYA SAFFIR	39530
BINIL KRISHNA N P	39572
GOPIKRISHNAN KN	39479
HARI KRISHNAN BK	39474
JITHIN SYAMKRISHNA J	39286
VISHNUMON T P	39326
ADARSH K SATHEESAN	39271
ALBIN P MANI	39543
AMAL RAJU	39567
ARYANANDA C M	39561
CHRIS MARIA THOMAS	39357
CHRIS TOM	39477
GAUTHAM NAJIKETHAS	39461
SHIFANA V S	39476
HIMA D	39624
ANOOPKUMAR J A	39626
ABHIRAM S S	39453
AJISHA N U	39547
AMALA GEORGE	39285
BHADRAM	39380



MISHEL SIBI	39304
ASWANIDEV SURESH	39719
CHRIS TOM	39477
GAUTHAM NAJIKETHAS	39461
CHRIS TOM	39477
ANOOPKUMAR J A	39626
ABHIRAM S S	39453
AJISHA N U	39547
ANOOPKUMAR J A	39626
MISHEL SIBI	39304
ASWANIDEV SURESH	39719
CHRIS TOM	39477
GAUTHAM NAJIKETHAS	39461
CHRIS TOM	39477
ANOOPKUMAR J A	39626
ABHIRAM S S	39453
AJISHA N U	39547
ANOOPKUMAR J A	39626
ABHIRAM S S	39453

**PRINCIPAL**  
**KURIAKOSE ELIAS COLLEGE**  
**MANNANAM, KERALA - 686 561**



Dr. Xavier C.S CMI





## ENCON CLUB REPORT 2019-2020

### **Oil and Gas Mass Awareness Campaign (SAKSHAM- 2020)**

Encon Club is run by the Department of Physics, K.E. College, Kottayam, under the sponsorship of BPCL- Cochin Refineries. The club organizes various competitions, seminars and awareness programs regularly for college students on environment related and energy saving topics.

### Programs

#### **ENCON Week**

##### **1. Inauguration of ENCON club**

**Date and Venue: 11-02-2020 FN, Christopher Hall**

ENCON club along with student members organized an ENCON week in February 2020. ENCON week was started by the inauguration of ENCON Club on 11th February 2020. Dr.Jini Thomas, HOD of Department Of Physics presided over the event. The guest of honour was **Dr. Benny Joseph Thullisseril, Professor, KMEA Engineering College, Aluva**. The event provided an awareness regarding energy conservation among UG and PG students.

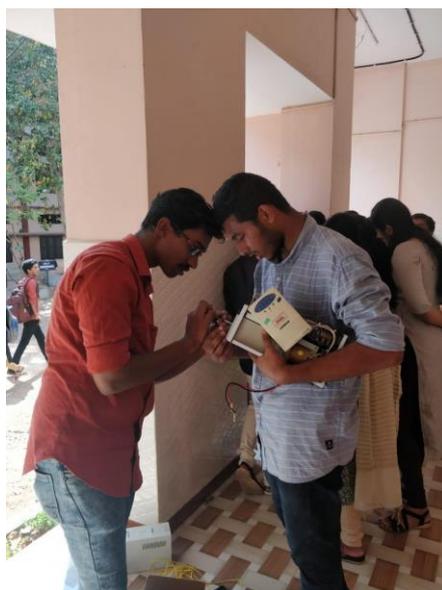




## 2. Workshop on Solar cell Fabrication

**Date and Venue: 11-02-2020 AN, Christopher Hall**

The inauguration was followed by an awareness talk by Dr. Benny Joseph based on the topic “Energy Conservation”. Hands-on experience in the fabrication of solar cells for students was also conducted in the afternoon.





At college level we have conducted an interdepartmental essay, quiz and drawing competition on the successive days in February based on the theme chosen by Cochin refinery. There was active participation by the students from various departments in the college.

### 3. Essay Competition

**Date and Venue: 12-02-2020 AN, Christopher Hall**

An essay completion was held for both UG and PG students on 12<sup>th</sup> February 2020. The topic given was “Importance of Solar Cells in Developing Nations like India”.



#### **Results: Essay**

1st place-Jobin Sunny

2nd place- Anjitha M A



3rd place- Vaishnavi S

#### 4. Quiz Competition

**Date and Venue: 13-02-2020 AN, Christopher Hall**



#### Results

1st place- Amal T Azad

Jobin Sunny

2nd place- Sara Jose

Lakshmipriya K

3rd place- Tarun B Sebastian

Kajol Kiran Prasad

#### 5. Drawing Competition

**Date and Venue: 14-02-2020 AN, Christopher Hall**

#### Results:

1st place-Vishnu Soman

2nd place- Krishna Kumar

3rd place- Kevin Sudeep



### Sponsorship

The ENCON Club, K.E.CollegeMannam is sponsored by BPCL Cochin Refinery and the amount granted per year is Rs.6750/-

Dr. Brigit Paul

**PRINCIPAL**  
**KURIAKOSE ELIAS COLLEGE**  
**MANNANAM, KERALA-686 561**





## ENCON CLUB REPORT 2018-2019

### **Oil and Gas Mass Awareness Campaign (SAKSHAM- 2019)**

Encon Club is run by the Department of Physics, K.E. College, Kottayam, under the sponsorship of BPCL- Cochin Refineries. The club organizes various competitions and seminars regularly for college students on environment related topics.

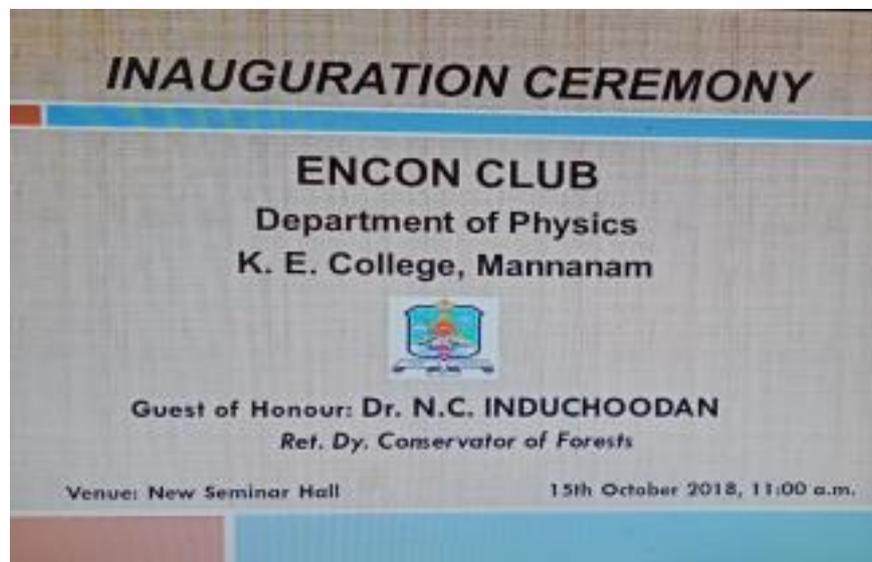
### **Programs**

#### **ENCON day**

##### **1. Inauguration of ENCON Club (2018-2019)**

**Date and Venue:** 15th October 2018, Seminar Hall

The inauguration of Encon Club was held on 15th October 2018. Dr. Antony Thomas, Principal, K.E. College, presided over the function. The guest of honour was Dr. N. C. Induchoodan, Ret. Dy. Conservator of Forest.





## **2. Seminar on Conservation of Natural Resources**

**Date and Venue:** 15th October 2018, Seminar Hall

A one day seminar was conducted by the chief guest, Dr. N. C. Induchoodan, Ret. Dy. Conservator of Forest on “Conservation of Natural Resources”. In the present realm of deteriorating resources, students as well as teachers were enlightened with the need of preserving it.



### 3. Competitions

At college level we have conducted an interdepartmental essay, quiz and painting completion on 27/2/2019 based on the theme chosen by cochin refinery- ‘ Fuel conservation through public participation’. There was active participation by the students from various departments in the college.

The results for the competitions conducted for the year 2019 are as follows: **Date and**

**Venue: 27/02/2019, Room 203**

#### Quiz

1st-Bijili Jacob.

2nd- Harikumar K R

3rd- Sandra Biju

**Date and Venue: 27/02/2019, Room No: 207**

#### Essay

1st-Meghna K Ullas

2nd- Akhil anilkumar

3rd- Liya Reju





**Date and Venue: 27/02/2019, Room No: 302**

**Painting**

1st-Abhijith S

2nd- Athriamol P R

3rd- Ann Maria Sabu

**Sponsorship**

The ENCON club, K.E. College, Mannanam is sponsored by BPCL Cochin REfinery and the amount granted per year is Rs. 6750/-

Dr. Antony Thomas

**PRINCIPAL  
KURIAKOSE ELIAS COLLEGE  
MANNANAM, KERALA - 686 561**

