



College of Engineering Trivandrum (CET)

Department of Chemistry

Organizes

Two Day National Seminar

On

Climate Change and Sustainable Development

20th & 21st December 2022

Venue: CETAA HALL

Sponsored by

**Directorate of Technical Education
Government of Kerala**



Dear Sir/Madam

The 2022 United Nations Climate Change Conference or Conference of the Parties (COP27) of the United Nations Framework Convention on Climate Change (UNFCCC), the 27th edition, was held from 6th November to 20th November 2022 in Sharm El Sheikh, Egypt. UN's sustainable development goals (SDG) aim not only to achieve sustainable development in its three dimensions –economic, social and environmental– but also to foster peaceful, just and inclusive societies, realizing the human rights of all. Sustainable development is the development that meets the needs of the present, without compromising the ability of future generations to meet their own needs. Thus ecological studies have been developed into climate change and sustainable development studies.

Climate change is caused by burning fossil fuels which has resulted in adverse changes in the global environment, such as shortage of water resources, ecosystem degradation, aggravation of soil erosion and a sharp decline in biodiversity, thus exerting a significant impact on life. In this context, the Department of Chemistry, College of Engineering Trivandrum is organising a two day National Seminar on **Climate Change and Sustainable Development**. The seminar becomes relevant in the current era of climate change and aims at the alternate energy systems and how to achieve sustainable development.

Government has initiated steps to overcome the adverse effects of climate change and also to introduce the inclusive development concept through electric vehicles, hydrogen bus, carbon neutral farming, environmental budget, climate friendly constructions etc. Several researches have been initiated in this direction in the field of Research and Development (R&D) of Higher Education. We can join our hands together.

All are cordially invited

Dr. Gowri Sreedevi K C
Head, Department
of Chemistry

Dr. Rani Pavithran
Organizing Secretary
CCSD 2022

Dr. Suresh Babu V
Principal, CET

Climate Change & Sustainable Development

Two Day National Seminar

Day 1, 20.12.2022 (Tuesday)

Day 1

20th December 2022

9:15 am. to 9:30 am. : Registration

9:30 am. to 10:45 am. : Inauguration

Invocation

Welcome Speech : Dr. Rani Pavithran

Organizing Secretary CCSD 2022

Presidential Address : Dr. Suresh Babu V.

Principal, CET



Inauguration &
Keynote Address

: Dr. B. Ekbal

Former Vice Chancellor, University
of Kerala & Chairperson, Kerala State Expert
Committee on Covid-19 Management

Topic:
Climate Change and
Sustainable Development:
The Way Forwards



Vote of Thanks

: Dr. Bringle C. Das

Assistant Professor,
Department of Chemistry, CET

10:45am. to 11.00 am. : Tea break

11:00am. to 12:15 pm. : **Invited Lecture 1**

Session Chair : **Dr. Bosco Lawarence**
Associate Professor & Head,
Department of Botany, Government
College for Women, TVM

Resource Person: : **Dr. Shibu A.**
Professor, Department of
Civil Engineering, CET

Topic:
Climate Change and
Sustainable Development



12:15pm. to 1:15 pm. : Lunch

1:15 pm. to 2:30 pm. : **Invited Lecture 2**

Session Chair : **Dr. Lekshmi A.**
Dean, Research, CET

Resource Person : **Dr. Rani S.**
Associate Professor, Department
of Mechanical Engineering, CET

Topic:
Bioenergy for Sustainable
Development



2:30pm. to 2: 45pm Tea Break

2:45pm. to 4:00 pm. : **Invited Lecture 3**

Session Chair : **Dr. Muhammed Arif M.**
Associate Professor,
Department of Chemistry, CET

Resource Person : **Dr. Prathish K P**
Senior Scientist, Environmental
Technology Division, CSIR-NIIST

Topic:
A Roadmap to Sustainable
Municipal Solid waste Management
& Emission Control for Kerala



Day2 21st December 2022

9:30am. to 10:45am : **Invited Lecture 4**

Session Chair : **Dr. M. Abdul Nizar**
Dean, UG Studies, CET

Resource Person : **Dr. Shaji E.**
Associate Professor &
Head, Department of Geology,
University of Kerala

Topic:
Climate Change and Disasters:
A Kerala Narrative

10:45am. to 11:00 am : Tea Break



11:00am. to 12:15pm. : **Invited Lecture 5**

Session Chair : **Dr. Bindhu G. R**
Dean, International Affairs, CET

Resource Person : **Dr. A. Bijukumar**
Professor. & Head, Department of
Aquatic Biology
University of Kerala

Topic:
**UN Decade of Ocean Science for
Sustainable Development:
Implications under Climate
Change Paradigms**



12:15pm. to 1:15 pm. : **Lunch**

1:15pm. to 2:30 pm. : **Invited Lecture 6**

Session Chair : **Dr. Jisha V R**
Dean, Student Affairs, CET

Resource Person : **Dr. Sabu Joseph**
Professor, Department of
Environment Science,
University of Kerala

Topic:
**Climate Change: Concept,
Impacts, Mitigation
& Adaptation Strategies for India**



2:30pm. to 2:45pm. : **Tea Break**

- 2:45pm. to 4:00pm. : **Valedictory Function**
Welcome : **Dr. Muhammed Arif M.**
Associate Professor,
Department of Chemistry
- Presidential Address : **Dr. Gowri Sreedevi K C,**
Head, Department of Chemistry
- Inauguration of
Valedictory Function : **Dr. Suresh Babu V. Principal**
- Keynote Address : **Prof. D. Thankamoney**
Former Member Secretary
Kerala State Pollution Control Board
and Former Head, Environmental
Engineering Division, CET

Topic:
Carbon footprint and personal
footprints



Feedback from participants

- Vote of thanks : **Dr. Rani Pavithran,**
Organising Secretary, CCSD 2022
Assistant Professor Chemistry

College of Engineering Trivandrum (CET)

Vision

National Level Excellence and International Visibility in Every Facet of Engineering Research and Education.

Mission

- To facilitate quality transformative education in Engineering and Management.
- To foster innovations in Technology and its application for meeting global challenges.
- To pursue and disseminate Quality Research.
- To equip, enrich and transform students to be Responsible Professionals for better service to humanity.

The College of Engineering, Trivandrum was established in 1939 as the first Engineering College in the then Travancore State. The first classes were started on 3rd July 1939 during the reign of the Travancore King, Sri Chithira Thirunal Balarama Varma and as the head of the then Travancore state he deserves his share of credit in the establishment of the college. Initially the College was housed in the former office and bungalow of the Chief Engineer (present PMG Office). Maj T.H. Mathewman, a Britisher was the first Principal. Started as a constituent College of Travancore University, the College had an initial intake of 21 students each for Degree and Diploma courses in Civil, Mechanical and Electrical branches. With the establishment of the Directorate of Technical Education in the late fifties, the College administration came under the control of the Government of Kerala. The College was shifted to the present sprawling 125 acres in 1960.

Organising Committee: Dr. Suresh Babu V. (Principal), Dr. Gowri Sreedevi K.C. (Assistant Professor & HoD), Dr. Muhammad Arif M., (Associate Professor), Dr. Bringle C.Das (Assistant Professor), Dr. Sreedevi P. (Assistant Professor, Adhoc), Dr. Anu George (Associate Professor, ECE), Mr. Gopi Krishnan, (M. Tech. Student, EED, Department of Civil Engineering) Ms. Gopika Chandran (M. Tech., EED, CE) and Dr. Rani Pavithran (Assistant Professor & Organizing Secretary)