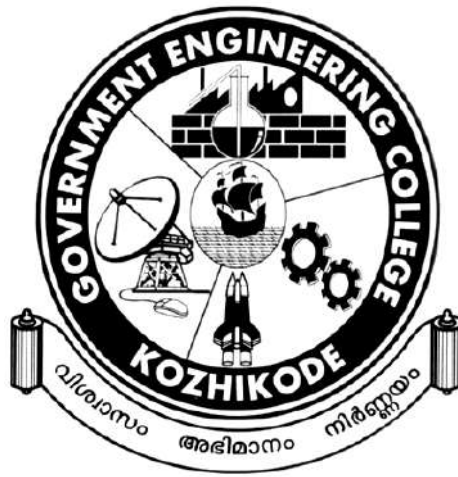


GOVERNMENT ENGINEERING COLLEGE KOZHIKODE

WEST HILL, KOZHIKODE 673 005



ACTIVITY REPORT 2022-23

CONTENTS

	Page Number
1 INTRODUCTION	2
2 ACTIVITIES OF DEPARTMENTS	4
2.1 APPLIED ELECTRONICS & INSTRUMENTATION	4
2.2 CHEMICAL ENGINEERING	20
2.3 CIVIL ENGINEERING	41
2.4 MECHANICAL ENGINEERING	50
3 ACTIVITIES OF IEEE PLACEMENT UNIT	59
4 ACTIVITIES OF IEDC & IIC	67
5 ACTIVITIES OF CAREER GUIDANCE & PLACEMENT CELL	69
6 ACTIVITIES OF COUNSELLING CELL	70
7 ACTIVITIES OF ISTE	73
8 ACTIVITIES OF THE NATIONL SERVICE SCHEME	78
9 ACTIVITIES SHE	94
10 ACTIVITIES OF ANTI NARCOTIC CELL	98
11 INTERNATIONAL CONFERENCE" YUKTHI-2023	109
12 ACTIVITIES OF CORAL	133

1. INTRODUCTION

Government Engineering College Kozhikode has started functioning in 1999 at West Hill, Kozhikode. The institute was started by the Government of Kerala with a view to catering to the needs of man-power in technology for the country. The institute is affiliated to University of Calicut, which was set up with a motto to nurture the talents in northern Kerala. The College imparts high quality technical education and also focuses on the overall development of the students. State-of-the-art facilities are available in the College and the facilities are updated regularly using funds received from State Government and Central Government. Affiliated to the University of Calicut and approved by AICTE, the institution offers Six B.Tech courses (Applied Electronics and Instrumentation, Civil, Chemical, Electronics and Communication, Computer Science and design and Mechanical) with an annual intake of 63 students through State Level Entrance Test and 6 students through Lateral entry per each branch. The Institution offers four M.Tech courses (Computer Aided Process Design offered by Dept. of Chemical Engg. Structural Engineering offered by Dept. of Civil Engg., Signal Processing offered by Dept. of Electronics Engg and Energy System Analysis and Design offered by Dept. of Mechanical Engg.) with an annual intake of 18 students. The computer science and engineering department of GEC Kozhikode was established in the year 2022 with a new generation BTech programme in “Computer Science and Design”. The programme is a good blend of the fundamentals of computer science & engineering and the essential design principles.

The institution has facilities that include central computing facilities, well stocked central technical library, online access to international journals under INDEST-AICTE Consortium, and a campus network. The major strength of the institution is its highly qualified faculty (majority having Doctoral or Post Graduate degree) possessing academic experience and industrial exposure. The Institution is located in the heart of the Calicut city, well connected by a network of road, rail and airport. The staff strength and the quality of student input are medium. The major weakness of the institute is identified as limitations in infrastructural facilities.

The institution is striving constantly for improving and being at par with the institutional counter parts not only in the state, but even in the country. Several academic and co-curricular activities are organized every year to bring up the institution as a Centre of Excellence. Faculty have active involvement in various research areas and many have to their credit articles published in reputed National/ International Journals and conferences. Interactive programs with pioneer industries in and around the state have also been conducted. Interaction with experts of various fields of knowledge is extremely helpful in motivating and enlightening the students and faculty. Visiting faculty scheme is fruitfully utilized to provide talks and workshops handled by technical experts for the benefit of students. The institution being one among the nineteen project institutions of TEQIP phase II, the academic quality improvement activities involving students, faculty and staff were in full swing during the academic year.

This report presents a summary of the various activities organized and conducted in the institution during the academic year 2022-2023.

2. ACTIVITIES OF DEPARTMENTS

The institution offers five B.Tech courses viz. Applied Electronics and Instrumentation Engg. (AE&I), Civil Engg. (CE), Chemical Engg. (ChE), Electronics and Communication Engg. (EC) and Mechanical Engg. (ME). The Applied Electronics & Instrumentation Engg and Electronics and Communication Engg are combined and acted as one department.

2.1 Department of Applied Electronics and Instrumentation Engineering

2.1.1 Faculty and Supporting Staff

2.1.1.1 Details of Faculty members

Sl. No.	Name	Designation	Qualification
1	Dr. Agnes Jacob	Professor & HOD	PhD
2	Dr. Shajeemohan B. S.	Professor	PhD
3	Dr. Shajahan E S	Professor	PhD
4	Dr. Bindima T.	Associate Professor	PhD
5	Dr. Baburaj M.	Associate Professor	PhD
6	Dr. Abdu Rahiman V.	Associate Professor	PhD
7	Brij Mohan K.	Assistant Professor	M. Tech
8	Dr. Job Chungath	Assistant Professor	PhD
9	Dr. Reshmi S Bhooshan	Assistant Professor	PhD
10	Subhija E N	Assistant Professor	M. Tech
11	Jithesh C. P.	Assistant Professor	M. Tech
12	Abdul Jaleel N.	Assistant Professor	M. Tech
13	Dr. Gladwin Jose K T	Assistant Professor	PhD
14	Dr. Anoop C S	Assistant Professor	PhD
15	Anju S Anand	Assistant Professor	M. Tech
16	Rashid Ummer N. T.	Assistant Professor	M. Tech
17	Harikrishnan P. R.	Assistant Professor	M. Tech
18	Sreeraj S.	Assistant Professor	M. Tech
19	Aswathy G.	Assistant Professor	M. Tech
20	Sreeram R	Assistant Professor	M. Tech
21	Ranju K V	Assistant Professor	M. Tech
22	Dr. Saritha M.	Associate Professor (EEE)	M. Tech
23	Priyaja K. V.	Associate Professor (EEE)	M. Tech
24	Babitha Nair B.	Assistant Professor (EEE)	M. Tech
25	Sabeeh Ahammed M T	Assistant Professor (Adhoc)	M. Tech
26	Abdul Kareem V	Assistant Professor (Adhoc)	M. Tech
27	Sreeram M	Assistant Professor (Adhoc)	M. Tech
28	Presi T P	Assistant Professor (Adhoc)	M. Tech
29	Anagha Sudhakar	Assistant Professor (Adhoc)	M. Tech
30	Anusree B	Assistant Professor (Adhoc)	M. Tech

2.1.1.2 Details of Technical Staff

Sl.NO.	NAME	Designation	Qualification
1	HARISH KUMAR C H	Instructor Gr-I	M.Tech
2	SHAHUL HAMEED P	Instructor Gr-I	B.Tech
3	SIJO S VADAKKAN	System Analyst	MCA
4	SUMESH E	Computer Programmer	B.Tech
5	MALLIKA M T	Trade Instructor	ITI
6	SOBHANA M	Trade Instructor	ITI
7	SUDHA T	Trade Instructor	ITI
8	SURESH G	Trade Instructor	ITI
9	SMITHA E	Trade Instructor	ITI
10	PRAJITH A P	Tradesman	Diploma (EC)
11	ROSHMI V	Tradesman	B.Tech (EC)
12	BINDU K	Tradesman	Diploma (EC)
13	AYSHA FIRANA K P	Tradesman	B.Tech (EC)
14	RAJESH C	Tradesman	Diploma (CS)
15	VINODAN PP	Tradesman	ITI
16	PURUSHOTHAMAN E	Tradesman	VHSE
17	SETHU MADHAVAN	Tradesman	Diploma (EC)
18	SEBI AUGUSTIN	Tradesman	Diploma (EE)
19	MRIDUL K	Tradesman	Diploma (EE)

2.1.2 Academic Performance

A brief account of the various academic activities and their outcome are dealt in this section.

2.1.2.1 Results of University Examinations

B. Tech Applied Electronics and Instrumentation Engineering

Batch	S1			S2			S3			S4			S5			S6			S7			S8		
	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%
2022-26	57	16	28																					
2021-25	42	16	38	38	79	16	68	116																
2020-24	38	29	76	38	20	54	59	35	59	20	39	59	16	27										
2019-23	63	50	79	63	58	92	69	50	89	69	46	67	69	50	72	69	44	64	68	62	91			
2018-22	63	52	83	61	49	81	69	49	71	69	60	87	69	54	78	69	46	67	69	53	77	69	55	80

B. Tech Electronics and Communication Engineering

Batch	S1			S2			S3			S4			S5			S6			S7			S8		
	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%
2022-26	65	46	71																					
2021-25	67	51	76	65	47	72																		
2020-24	65	56	84	64	48	75	72	54	75	72	34	47	72	33	45									
2019-23	57	53	92	57	56	98	66	59	99	66	49	74	66	56	85	66	56	85	66	53	80			
2018-22	59	55	95	57	53	93	67	61	91	67	64	95	67	61	91	67	46	68	67	58	86	67	60	90

M. Tech Signal Processing

Batch	S1			S2			S3			S4		
	T	P	%	T	P	%	T	P	%	T	P	%
2021-23	16	16	100	16	16	100	16	16	100			
2020-22	18	18	100	18	18	100	18	18	100	18	18	100
2019-21	17	17	100	16	16	100	16	16	100	16	16	100

2.1.2.2 Academic Distinctions

2.1.2.3 Academic Achievements




Following students of 2018-2022 Batch B-Tech **Applied Electronics and Instrumentation Engineering** secured highest CGPA in the university examinations conducted by KTU

		
KKE18AE004 ABHIRESHMI J CGPA -8.8	KKE18AE011 AMAL KRISHNA U R CGPA - 8.86	KKE18AE013 ANNET MARY VINCENT CGPA - 8.84

Following students of 2018-2022 Batch B-Tech **Electronics and Communication Engineering** secured highest CGPA in the university examinations conducted by KTU

		 AKSHARA JAYADEEP 01.02.2018
KKE18EC055 SNEHA SUNIL CGPA - 9.54	KKE18EC014 ANJANA SHAJI CGPA - 9.51	KKE18EC004 AKSHARA JAYADEEP CGPA - 9.32

Following students of 2020-2022 Batch M-Tech **Signal Processing** secured highest CGPA in the university examinations conducted by KTU

		
KKE20ECSP09 JALIBA SHERIN T CGPA - 9.79	KKE20ECSP18 SUNEINA JEMIMA CHEERAN CGPA - 9.77	KKE20ECSP08 FOUSIYA CGPA - 9.70

Following Students of 2018-22 Batch B-Tech qualified GATE

Rank	Reg.No.	Name	Semester	GATE Score
1	KKE20EC005	AMOGH G PRASAD	S6 EC	426

2.1.2.4 Student Publications

No	Name of the Students	Title of the Paper, Description
1	Aparna M S	Aparna M S, Anjini P, Parvathy M , Sayana S, Mechanical Vibrational Frequency Estimation of a Transmission Line, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023,
2	Anju Nandakumar	Anju Nandakumar, Anaina P, Anaswara K, Fathimath Risvana, Malpractice detection using machine learning algorithms, Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023, Govt. Engineering College Kozhikode, 10-12th April 2023
3	Nisa Fathima P	Fake news detection using deep learning architecture, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.
4	Sooryadas M	Sentiment analysis of social media chats using learning-based algorithms, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.
5	Namitha M	Weed detection using machine learning algorithm, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.
6	Ahammed fayadh pm	A Review of Generative Adversarial Networks for Text-to-Image Synthesis, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.
7	Stephy J S	Feature Reduction and Optimization using Learnt Kernel Matrix, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.
8	Midhun C	Music Information Retrieval Using Hybrid Features, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.
9	Gopika A S	Review of text summarization algorithm using different deep recurrent networks, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.
10	Aathira Anil	Breaking Down Language Barriers: A Review of Speech-to-Text Translation Techniques and Datasets, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.
11	Vyga M	A Deep Learning Based Intrusion Detection for Secure Internet of Things, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.
12	Binsiya C	Rail Surface Defect Detection And Localisation System, Proceedings of the International Conference on Emerging Trends in Signal Processing Yukthi-2023, Govt. Engineering Collge Kozhikode, 10-12th April 2023.

2.1.2.5 Achievements in Extra-Curricular Activities

- Ms. Rashmi R Shenoi, 2019-23 Batch B-Tech Electronics and Communication Engineering student has received IEEE Kerala Section SIGHT Outstanding Student Humanitarian Volunteer Award 2022.



- Ms. Amritha D, 2019-23 Batch B-Tech Electronics and Communication Engineering student has received Best Student Award (ISTE Kerala section).



- Ms. Shahra Munavara P, 2019-23 Batch B-Tech Electronics and Communication Engineering student has achieved India book of record for writing 30 baby names in Arabic calligraphy in 2 minutes and 58 seconds.



- Mr.Aswin Prakash R C ,2019-23 Batch B-Tech Applied Electronics and Instrumentation Engineering student has achieved third place in university inter collegiate Basket Ball Tournament.



2.1.2.6 Online Courses attended by students

Sl No.	Name of the Student	Semester	Name of the course	Duration	Organized by
1	HARITHA P K	S7 AE	Fundamentals Of Artificial Intelligence	JULY-OCT 2022	NPTEL
2	JAYASREE T C	PhD Scholar	Introduction to Machine Learning	JULY-OCT 2022	NPTEL
3	BHAVYA P	S5 EC	Introduction To Internet Of Things	JULY-OCT 2022	NPTEL
4	LAKSHMI S NAIR	S5 EC	Digital Circuits	JULY-OCT 2022	NPTEL
5	NANDANA K	S5 EC	Introduction To Internet Of Things	JULY-OCT 2022	NPTEL
6	PRAKARSHA C	PhD Scholar	Introduction to Machine Learning	JULY-OCT 2022	NPTEL
7	RASEENA VK	S5 EC	Introduction To Internet Of Things	JULY-OCT 2022	NPTEL

8	SANA NOURIN KC	S5 EC	Digital Circuits	JULY-OCT 2022	NPTEL
9	ADITHYAN KG	S5 EC	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
10	ANSHIN M K	S7 AE	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
11	AMOGH G PRASAD	S5 EC	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
12	GOPIKA GIREESH	S7 AE	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
13	NANDANA A R	S7 AE	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
14	MARIYAM MOHAMMAD ALI	S7 EC	Cloud Computing	JULY-OCT 2022	NPTEL
15	RENI V	S7 AE	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
16	RIJUL RAMANAN	S7 AE	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
17	K SWETHA MALIYA	S5 EC	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
18	DEVIKA JEEVAN	S7 AE	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
19	DONA SHAJU	S7 EC	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
20	ANAGHA E S	S7 EC	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
21	NAVYA PRAKASH	S7 AE	The Joy of Computing using Python	JULY-OCT 2022	NPTEL
22	JAYASREE T C	PhD Scholar	Programming, Data Structures And Algorithms Using Python	Jul-Dec 2022	NPTEL
23	PRAKARSHA C	PhD Scholar	Programming, Data Structures And Algorithms Using Python	Jul-Dec 2022	NPTEL
24	SHAFIN SHAJAHAN	S7 AE	Natural Gas Engineering	Jul-Dec 2022	NPTEL
25	N AKSHAY KRISHNA	S6 EC	The Joy of Computing using Python	JAN APRIL 2023	NPTEL
26	AMANA	S6 AE	The Joy of Computing using Python	JAN APRIL 2023	NPTEL
27	ARATHI V	S6 AE	The Joy of Computing using Python	JAN APRIL 2023	NPTEL
28	KARTHIK C K	S6 EC	The Joy of Computing using Python	JAN APRIL 2023	NPTEL
29	DHANASREE SHANKAR	S6 EC	Introduction To Industry 4.0 And Industrial Internet Of Things	JAN APRIL 2023	NPTEL
30	ARDRA K	S6 AE	The Joy of Computing using Python	JAN APRIL 2023	NPTEL
31	MOHAMMED YOOSAH KK	S6 EC	The Joy of Computing using Python	JAN APRIL 2023	NPTEL
32	PARVATHY S	S8 EC	Sensors and actuators	JAN APRIL 2023	NPTEL

33	NASNIN HAMEED	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
34	SONA V K	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
35	K SWETHA MALIYA	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
36	ATHULYA C JOSEPH	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
37	BINSHA THASNI	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
38	SIVADA C S	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
39	NANDITHA C P	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
40	ABIRAJ P E	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
41	ATUL AUSTIN	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
42	FATHIMA NASRIN K	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
43	FIZA FATHIMA V	S6 EC	Introduction To Internet Of Things	JAN APRIL 2023	NPTEL
44	JEWEL ROSE GEORGE	S6 EC	Data Analytics with Python	JAN APRIL 2023	NPTEL
45	ANJALI N	S6 EC	Analog Circuits	JAN MARCH 2023	NPTEL
46	ANAMIKA M	S6 EC	Analog Circuits	JAN MARCH 2023	NPTEL
47	ANUSHKA PK	S6 EC	Analog Circuits	JAN MARCH 2023	NPTEL
48	ARJA P	S6 EC	Analog Circuits	JAN MARCH 2023	NPTEL

2.1.3 Achievements by the faculty members

2.1.3.1 Faculty Publications

Sl No	Name of the Faculty	Title of the Paper	Authors	Name of Journal
1	Dr.Gladwin Jose K T	An Efficient SSFEM-POD Scheme for Wideband Stochastic Analysis of Permittivity Variations	K. T. J. Gladwin and K. J. Vinoy,	IEEE Transactions on Antennas and Propagation, vol. 71, no. 2, pp. 1654-1661, Feb. 2023, doi: 10.1109/TAP.2022.3221061.

2	Dr.Gladwin Jose K T	A Nonintrusive POD-PCE Scheme for Uncertainty Quantification of Stochastic EM Problems	M. N. Hossain, K. T. J. Gladwin and A. B. Narendranath	IEEE Microwave and Wireless Technology Letters, doi: 10.1109/LMWT.2023.3267493.
3	Subhija E N	A Feature Fusion Based Detection of Oral Squamous Cell Carcinoma with Morphological and Textural Features in Haar Wavelet Transform Space	Subhija E N and Dr.Reju V G	Proceedings of the International Conference on Systems, Energy and Environment 2022 (ICSEE 2022)
4	Subhija E N	Computer Assisted Recognition of Oral Squamous Cell Carcinoma Using GLCM Features in Haar Wavelet Transformed Space and Random Forest Classifier	Subhija E N and Dr.Reju V G	2022 Second International Conference on Next Generation Intelligent Systems (ICNGIS)
5	Dr. Baburaj M.	Efficient Unsupervised Partial Discharge Detection using Empirical Mode Decomposition and Clustering	B. Babitha Nair;Anjith. K. M;Baburaj. M	2022 IEEE 19th India Council International Conference (INDICON)

6	Dr.Saritha .M	Road segmentation from satellite images using FCNN for autonomous driving vehicles	Anjitha, A. P., M. Saritha, and M. Baburaj.	" 2022 IEEE 19th India Council International Conference (INDICON). IEEE, 2022
7	B. Babitha Nair;	Efficient Unsupervised Partial Discharge Detection using Empirical Mode Decomposition and Clustering	B. Babitha Nair;Anjith. K. M;Baburaj. M	2022 IEEE 19th India Council International Conference (INDICON)
8	Dr.Abdu Rahiman V	Performance analysis of attention mechanism in image captioning using deep learning methods	Anjitha MP, Abdu Rahiman V	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
9	Dr. Baburaj M.	A review on demystifying deepfakes in videos	Asiya Rahna,Dr.Baburaj M	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
10	Dr. Baburaj M.	Rail surface defect detection and localisation system	Binsiya C, Baburaj M	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
11	Sreeraj S	Fake news detection using deep learning architecture	Nisa P,Sreeraj S	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
12	Subhija E N	Review on machine learning techniques for weed detection	NAMITHA M, Subhija E N	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023

1 3	Dr.Shajeemohan BS	Music information retrieval using hybrid features	Midhun C , Dr.Shajeemohan BS	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
1 4	Dr.Shajeemohan BS	Sentiment analysis in social media text chats using deep learning models	Sooryadas M , Dr.Shajeemohan BS	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
1 5	Dr. Baburaj M.	A deep learning based intrusion detection for internet of things	Vyga M,Dr. Baburaj M.	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
1 6	Subhija E N	A review paper on machine learning methods on covid-19 detection using cough sound analysis	Fathima Shamna V,Subhija E N	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
1 7	Dr.Reshmi S Bhoosan	Breaking Down Language Barriers: A Review of Speech-to-Text Translation Techniques and Datasets	Aathira Anil , Dr.Reshmi S Bhoosan	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
1 8	Subhija E N	Survey on lung cancer detection and classification	Fathima Minsha , Subhija E N	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
1 9	Dr.Abdu Rahiman V	Review of text summarization algorithm using different deep recurrent networks	GOPIKA A S , Dr.Abdu Rahiman V	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023

20	Dr. Abdu Rahiman V	A Review of Generative Adversarial Networks for Text-to-Image Synthesis	Ahammed Fayadh P M, Dr. Abdu Rahiman V	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
21	Dr. Shajeemohan BS	Feature Reduction and Optimization using Learnt Kernel Matrix	Stephy JS, Dr. Shajeemohan BS	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
22	Sreeram M	Aparna M S, Anjini P, Parvathy M, Sayana S, Sreeram M, Mechanical Vibrational Frequency Estimation of a Transmission Line,	Aparna M S, Anjini P, Parvathy M, Sayana S, Sreeram M	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023
23	Dr. Shajeemohan BS	Malpractice detection using machine learning algorithms,	Anju Nandakumar, Anaina P, Anaswara K, Fathimath Risvana, Dr. Shajeemohan BS	Proceedings of the international conference on Emerging trends in signal processing Yukthi-2023

2.1.3.2 FDP / STTP / TRAINING / WORKSHOP attended by the faculty

Sl. No.	Name of faculty	FDP / STTP	FDP / STTP Attended	Dates of FDP	Number of days
1	Harikrishnan P. R.	FDP	Nanotechnology fundamentals to applications	13-02-2023 to 18-02-2023	6

3	Ranju K V	FDP	Nanotechnology fundamentals to applications	13-02-2023 to 18-02-2023	6
4	Subhija E N	FDP	Nanotechnology fundamentals to applications	13-02-2023 to 18-02-2023	6
5	Dr. Abdu Rahiman V.	FDP	Nanotechnology fundamentals to applications	13-02-2023 to 18-02-2023	6
6	Babitha Nair B.	FDP	Nanotechnology fundamentals to applications	13-02-2023 to 18-02-2023	6
7	Dr. Shajahan E S	FDP	Nanotechnology fundamentals to applications	13-02-2023 to 18-02-2023	6
8	Dr. Agnes Jacob	FDP	Nanotechnology fundamentals to applications	13-02-2023 to 18-02-2023	6
9	Sabeeh Ahammed M T	FDP	Nanotechnology fundamentals to applications	13-02-2023 to 18-02-2023	6
10	Dr. Baburaj M.	FDP	Energy Fundamentals to Research	27-02-2023 to 4-03-2023	6
11	Subhija E N	FDP	Mathematics for Artificial Intelligence MAI2023	16-01-2023 to 20-01-2023	5
12	Subhija E N	FDP	Energy Fundamentals to Research	27-02-2023 to 4-03-2023	6
13	Dr. Job Chungath	FDP	Energy Fundamentals to Research	27-02-2023 to 4-03-2023	6
14	Dr.Saritha M.	FDP	Energy Fundamentals to Research	27-02-2023 to 4-03-2023	6
15	Dr. Bindima T	FDP	Energy Fundamentals to Research	27-02-2023 to 4-03-2023	6

16	Jithesh C. P.	FDP	Entrepreneurship-New Development	20-02-2023 to 25-02-2023	6
17	Dr. Baburaj M.	FDP	Entrepreneurship-New Development	20-02-2023 to 25-02-2023	6
18	Ranju K V	FDP	Open source software tools for Engineering and research	30-01-2023 to 04-02-2023	6
19	Subhija E N	FDP	Open source software tools for Engineering and research	30-01-2023 to 04-02-2023	6
20	Aswathy G	FDP	Open source software tools for Engineering and research	30-01-2023 to 04-02-2023	6
21	Babitha Nair B	FDP	Open source software tools for Engineering and research	30-01-2023 to 04-02-2023	6
22	Harikrishnan P R	FDP	Open source software tools for Engineering and research	30-01-2023 to 04-02-2023	6
23	Dr. Baburaj M.	FDP	Open source software tools for Engineering and research	30-01-2023 to 04-02-2023	6
24	Dr. Shajahan E S	FDP	Open source software tools for Engineering and research	30-01-2023 to 04-02-2023	6
25	Ranju K V.	FDP	Recent Developments in Nano Research and nano materials for future Applications.	20-03-2023 to 25-03-2023	6
26	Subhija E N.	FDP	Recent Developments in Nano Research and nano materials for future Applications.	20-03-2023 to 25-03-2023	6
27	Babitha Nair B.	FDP	Recent Developments in Nano Research and nano materials for future Applications.	20-03-2023 to 25-03-2023	6
28	Aswathy G	FDP	Recent Developments in Nano Research and nano materials for future Applications.	20-03-2023 to 25-03-2023	6

29	Dr.Reshmi S Bhooshan	FDP	An insight into EV Design and Development	30-01-2023 to 3-02-2023	5
----	----------------------	-----	---	-------------------------	---

2.1.3.3 Faculty doing Quality Improvement Programme

Sl No	Name of the Faculty	Programme attending
1	Prof. Shanthini K	PhD

2.2 Department of Chemical Engineering

2.2.1 Faculty and Supporting Staff

2.2.1.1 Details of Faculty members

Sl No	Name	Designation	Qualification
1.	Dr. Gigi Sebastian	Professor	Ph.D
2.	Dr. Ushakumary E R	Professor	Ph.D
3.	Dr. Anjana R	Associate Professor	Ph.D
4.	Dr. Manju M S	Associate Professor	Ph.D
5.	Dr. Beula C	Associate Professor & HOD	Ph.D
6.	Dr. Binu T V	Associate Professor	Ph.D
7.	Prof. Sindhu N.	Assistant Professor	M. tech.
8.	Prof. Suma K	Assistant Professor	M. Tech.
9.	Prof. Sajitha C M	Assistant Professor	M. Tech.
10.	Dr. Suji S K	Assistant Professor	Ph.D
11.	Prof. Shyja M	Assistant Professor	M. Tech.
12.	Prof. Dhaneesh K P	Assistant Professor	M. Tech.
13.	Mrs. Susheeba OK	Faculty- Adhoc	M. Tech.
14.	Mrs. Jeena Prakash	Faculty- Adhoc	M. Tech.
15.	Dr. Dhanya M	Faculty- Adhoc	Ph.D.
16.	Dr. Minju M	Faculty- Adhoc	Ph.D.
17.	Mrs. Srijina M	Faculty- Adhoc	M. Tech.

2.2.1.2 Details of Technical Staff

Sl No	Name	Designation	Qualification
1	Karthika M	Instructor Grade I (Adhoc)	B. Tech.
2	Mr. Ali Akbar E T	Instructor Grade II (Chemical)	M.Tech.
3	Mr. Bijoy M	Instructor Grade II (Chemical)	Diploma
4	Mrs. Geetha M	Trade Instructor (Chemical)	B.Tech.
5	Mr. Jineesh V.C.	Trade Instructor (Chemical)	B. Tech.
6	Mr. Rajeesh P	Trade Instructor (Chemical)	Diploma
7	Mr. Harikumar V	Trade Instructor (Electrical)	Diploma
8	Mr. Sunil K N	Tradesman	Diploma
9	Mr. Dheeraj S	Tradesman	Diploma
10	Mr. Ajith Soman A	Tradesman	Diploma

2.2.2 Academic Performance

A brief account of the various academic activities and their outcome are dealt in this section.

2.2.2.1 Results of University Examinations

B. Tech Chemical Engineering

Batch	S1			S2			S3			S4			S5			S6			S7			S8		
	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%
2022-26	62	47	76																					

2021-25	63	57	91	61	48	79	71	36	51															
2020-24	65	55	85	65	49	75	74	40	54	74	48	65	74	45	61									
2019-23	62	55	89	58	57	98	65	52	80	65	28	43	63	47	75	63	39	62	62	63	47	75	63	49

M. Tech Energy Systems Analysis and Design

Batch	S1			S2			S3			S4		
	T	P	%	T	P	%	T	P	%	T	P	%
2021-2023	7	7	100	7	7	100	7	7	100			
2020-2022	12	12	100	12	12	100	12	12	100	12	12	100

2.2.2.2 Academic Distinctions

Academic Achievements

- Following secured highest SGPA in the university examinations conducted by KTU

Sl. No.	Name	SGPA	Semester
1	Nandana V P	9.29	S1
2	Nima B S	9.03	S1
3	Fathima Hanan V	9.00	S1
4	Rishika M	9.00	S1
5	Ambili G	9.91	S3
6	Asha Jayasankar	9.27	S3
7	Muhammed Sahal K	9.18	S3
8	Vishnupriya M	9.42	S5
9	Rajla K P	9.28	S5
10	Sreelakshmi Asokan	9.26	S5
11	Fahmidha Sherin P	10	S7
12	Febin mathew	10	S7
13	Sana Hameed T	9.4	S7

- **Student Participation in Technical Events**

Joel Anto, Alen aul, Adhil Musthafa, Jinan T K and Hafna P (Final year B-tech students) have attended Young Innovators Programme organized by Kerala Development and Innovation Strategic Council, and their Project idea selected for YIP- 4.0 Grand Finale.



Selected for YIP-4 Grand Finale

➤ **GATE 2023 Qualifiers**

Sl. No.	Name	Register No.	Score & Rank
1	Adarsh Ramesh M	CH23S61309077	329,2374
2	Febin Mathew	CH23S61327061	372,1781
3	Ck Munees Muhammed	CH23S61303100	353,2021
4	Hafna P	CH23S61309053	357,1967
5	Sana Hameed T	CH23S61309119	353,2021
6	Anandu Hari	CH23S67215014	345,2205
7	Malavika PV	CH22S41325044 (GATE 2022)	387,1483



- **Participation in International conference YUKTHI2023:** The following UG & PG students actively participated and presented their research findings in the International conference STEP2023 organized by chemical engineering department under the aegis of Yukthi2023. Sabida Sathyan ,2019-2023 Batch S8 student selected for **Best Paper Award**

Sl No	Name of the Students	Class	Title of the Paper, Description
1	Kaviya M Fahmidha Sherin Abinlal K P Krishnasree G	S8 BTech	Preparation and Characterization of Biochar from Banana Stem for the Treatment of Textile Dye
2	Febin Mathew Adhil Musthafa Anandhu Hari Vinay Thomas	S8 BTech	Oil Palm Biomass As A Potential Heavy Metal Adsorbent:- A Review
3	Hafna P Zainaba Rahim Asif Sha S Arthith N V	S8 BTech	Simulation of Titanium Dioxide Production Using UniSim Design R480
4	Ayman Mahamood Bijith B Deepika D	S8 BTech	Zeolite synthesis from waste materials and its recent application:- A review

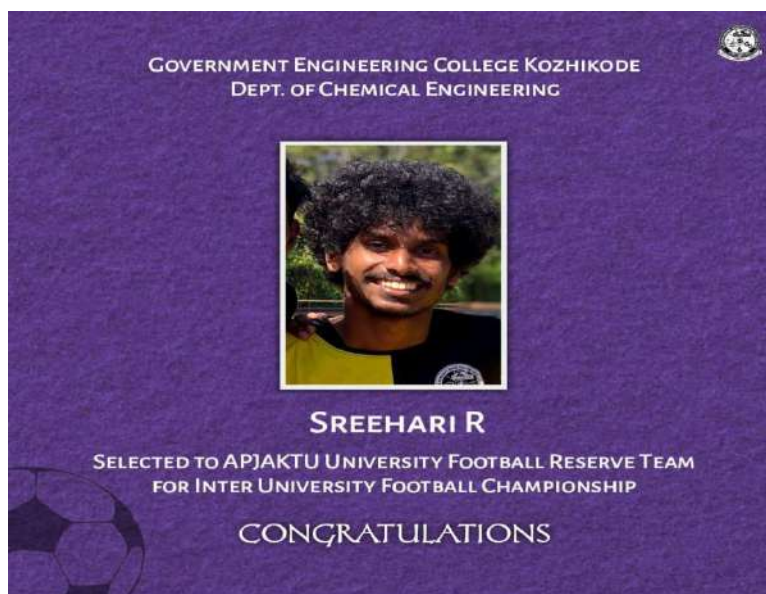
Sl No	Name of the Students	Class	Title of the Paper, Description
	Sameer Ali M		
5	Dhrisya K A Eldho Kuriakose Namitha V B Athira V	S8 BTech	MFC Production and Rainfastness Analysis
6	Anagha P S Geo saju Ajmal C Rhea jennifer joy	S8 BTech	A review on Unsaturated polyester resin based metal adhesives
7	Elias M Elias Mohammed Haseeb K P Uthara K U	S8 BTech	Extraction and characterization of natural pigment curcumin: A review
8	Anzeem Nisar Abdulla CK Munees Muhammed Malavika PV Nandhu A Suseel	S8 BTech	Extraction of Keratin from Different Sources: A Comparative Study
9	Abhirami C B Amrutha priya K T Arora M S Sandra M K	S8 BTech	Oil separation using modified Kapok fiber from different sources of waste water- A review paper
10	Parvathy V R Nayana R H Joel Anto Goutham chandran	S8 BTech	A Comprehensive Review Of Experimental Investigations On Potential Antimicrobial Agents For Biofilm Reduction
11	Anurag P Devadas Babu Misna PK Sabida Sathyan	S8 BTech	Characterization of pineapple leaf fibers and their suitability for biocomposite preparation
12	Aparna c kishor Jinan TK Nithin jose Neeraj S	S8 BTech	Lignin Based Adsorbent For Removal Of Pollutants: A Review
13	Sana Musthafa B Anjima M Abhinav P Saja Nazer	S8 BTech	Comparative Study of Corrosion Inhibitors from Natural and Chemical Means
14	Sana Hameed T Aparna B P Anjima N Vismaya Vijayakumar	S8 BTech	Study and Development of Modified Wheat bran for Dye removal from Wastewater
15	Pooja P	MTech	Biochars And Their Application As Ransesterification Catalyst

Sl No	Name of the Students	Class	Title of the Paper, Description
16	Alisha Babu	MTech	Recovery Of Protein From Waste Dairy Milk
17	Nanditha P P	MTech	1. Simulation Model For Hydrogen Production Via Reforming Of Biomass Gasification Tar 2. Tio ₂ As A Photocatalyst For Wastewater Treatment - A Review
18	Nikhila Mukundan	MTech	Waste To Value Added: Keratin Nanoparticle Synthesis And Application



Achievements in Extra-Curricular Activities

- Harikrishnan E L 2020-2024 Batch B-Tech Student was selected for **NSS National Integration Camp**.
- Sreehari R 2020-2024 Batch B-Tech Student was selected to **APJKTU Football reserve team** for inter university Football Championship.



2.2.2.3 Chemical Engineering Association Activities.

The Association of Chemical Engineering Students (ACES) activity for the year was inaugurated by Dr. Ambili K, Scientist VSSC, Alumnus of Institution (1999-2003 Chemical Engineering Batch) on 23/05/2022. The president of the programme was Dr. Beula C, Head of Chemical Engineering Department welcomed the gathering and Mr. Geo Saju, Association Secretary (S6-Chem) gave the vote of thanks. Er. Ambili handle a session on “Role of Chemical Engineering in Space Programs”.



- **“How to approach research Problems” - Alumni Interaction:** With Srilekshmi M, PhD Scholar IISC Bangalore. 2018 Passed out B.Tech Alumnus of Department. The session was on topic “How to approach research Problems” and was helpful for M.tech and B.Tech students in their project.



- **EMPLOYABILITY SKILLS:** An interactive session was organised on 22nd December 2022 on the topic EMPLOYABILITY SKILLS by GECKAlumni and Chemical Engineering Association. This session was handled by Mr. Abdul Shareef, Certified in

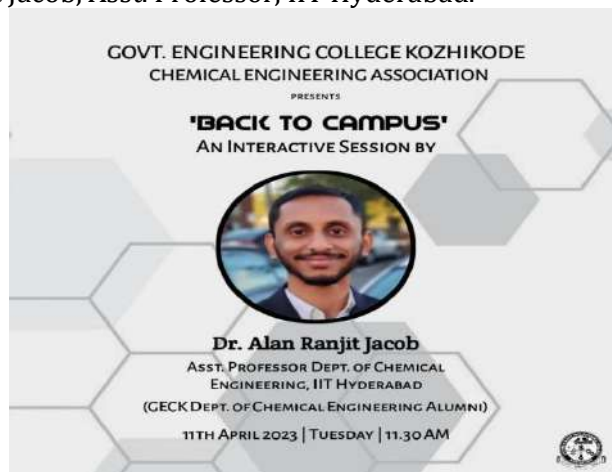
Transformational Living and Change Management from Ruth Cohn International for TCI, Switzerland.



- **Alumni Interaction:** Interactive session for students with Alumnus of department Ajay Kumar K. He is work experience in Refinery and petrochemicals, operation, process management and process safety management. Currently doing business on process safety management.



- **“Back to Campus”:** Interactive session for students with Alumnus of department, Dr. Alan Ranjit Jacob, Asst. Professor, IIT Hyderabad.





2.2.2.4 IChE Student Chapter Activities

- **Online session on Topic- “Strategies to synergise your future roadmap” 12/07 2023 by Mr. Manoj P L, Technical Advisor, Vice President, Abu Dhabi Refinery**



Indian Institute of Chemical Engineering (IIChE)
GEC Kozhikode Student Chapter



Presents

Interactive online session

Mr. Manoj P L



Technical Advisor, Vice President, Abu Dhabi Refinery

Focal point for ADNOC Refining Decarbonization & Sustainability

Operation support, Abu Dhabi Refinery Decommissioning, ADRD, ADNOC Refining

Co-Founder - Epinox Prompt Consulting Engineers PVT LTD, Kochi India

Topic- “Strategies to synergise your future roadmap”

Wednesday, 12 July 2023 at 7.30 pm

Google Meet link: <https://meet.google.com/wzg-ocbp-dgk>

- **BRAIN AND BRAWN (Quiz Competition):** A quiz competition was conducted on 27 th February 2023 on the topic “History Of Chemical Engineering”. Six teams participated in the competition, and each team consisted of two members. The team of Gokul Krishna and Ansha Aboobacker of S6 CH secured the first position. The team of Muhammed Javad and Salvin Varghese S6 CH secured the second position. The team of Arya Sivadas and Diya P S6 CH secured the third position.



- **COSMETIC CHEMISTS (Crossword Puzzle Competition):** As a part of women's day IICHE Student Chapter conducted an online crossword puzzle competition on 8th March 2023. The puzzle was about cosmetics and their use. Nandana Lakshmanan of S6 CH secured the first position. Vishnupriya K S of S6 secured the second position and Salvin M Varghese of S6 CH secured the third position.



2.2.2.5 Student Placements

Sl No	Name of the Student	Placed at
1	Adarsh Ramesh M	Cognizant
2	Sana Hameed T	Cognizant
3	C K Munees Muhammed	Cognizant
4	Anagha PS	TCS
5	Anzeem	MITSOGO
6	C K Munees Muhammed	TCS
7	Kaviya	Mycaptain

2.2.2.6 Courses attended by students

Sl No	Name of the Student	Semester	Name of the course	Duration	Organized by
1	Salvin M Varghese	S6	Waste to energy conversion	8 Weeks	NPTEL
2	Vishnupriya M	S6	Equipment Design - Mechanical Aspect	8 Weeks	NPTEL
3	Gokul Krishna T S	S6	Hydrogen Energy: Production, storage, transportation and safety	8 Weeks	NPTEL
4	Jaick Thomas	S6	Mechanical Operations	8 Weeks	NPTEL
5	Bhagyasree P	S6	Mechanical Operations	12 Weeks	NPTEL
6	Indu Mohan S	S6	Renewable energy engineering : solar, wind and biomass energy systems	8 Weeks	NPTEL
7	Jyotsna B Raj V	S6	Technologies for clean and renewable energy production	8 Weeks	NPTEL
8	T Muhammed Javad	S6	Natural Gas Engineering	8 Weeks	NPTEL
9	Rifna P Ali	S6	Natural Gas Engineering	8 Weeks	NPTEL
10	Rajla K P	S6	Environmental engineering and pollution abatement	8 Weeks	NPTEL
11	Rahna M T	S6	Technologies for Clean and Renewable Energy Production	12 Weeks	NPTEL
12	Anand V B	S6	Basic Principles and Calculations in Chemical Engineering	8 Weeks	NPTEL
13	Anand V B	S6	Waste to Energy Conversion	8 Weeks	NPTEL
14	Archishma sreebal	S6	Air Pollution and Control	8 Weeks	NPTEL
15	Theja Moorthy K	S6	Unit Operations of Particulate Matter	12 Weeks	NPTEL
16	Anjima N	S8	Basic Environmental Engineering and Pollution Abatement	8 Weeks	NPTEL

Sl No	Name of the Student	Semester	Name of the course	Duration	Organized by
17	Aparna B P	S8	Basic Environmental Engineering and Pollution Abatement	8 Weeks	NPTEL

2.2.3 Achievements by the faculty members

2.2.3.1 Faculty Publications

Sl No	Name of the Faculty	Title of the Paper, Description
1	Dr. Anjana R.	Ranjana Ramath,, Akshay Madappilly Sukumaran , Anjana Ramachandran c Sajeena Beevi Basheer, Methyl orange dye adsorption and degradation at low temperature using iron oxide-incorporated biochar derived from industrial by-products Bioresource Technology Reports 22 (2023) 101470
2	Dr. Anjana R.	Ranjana R,Dr. Anjana Rand ,Dr. Beula C. A Review on Biochar as Catalyst/Catalyst Support for oxidation/Reduction/Redox Reactions Eur. Chem. Bull. 2023,12(4), 3255-3279
3	Dr. Anjana R.	R. Ranjana, R. Anjana, B. Sajeena Beevi Comparative study on the removal of methyl orange using zeolite/biochar-supported iron oxide catalyst from industrial by-products. Desalination and Water Treatment, doi: 10.5004/dwt.2022.28941 (2022) 1–19
4	Dr. Anjana R.	Ansab N.P, Ranjana R, Anjana R. Molecular Modelling & Characterization of Metal Incorporated Biochar from Industrial Wastes Advanced Materials Research ISSN: 1662-8985, Vol. 1178, pp 171-184
5	Dr. Manju M S	Internationl Journals Remya PK, Manju M.S., Abith Sunil, Athulya KS, Jerome Joseph, Jyothsna TU, Synthesis and characterization of nanocellulose from watermelon rinds and water hyacinth, Polymers from Renewable Resources, 2023-05-09
6	Dr. Manju M S	Kandi, R.P., Sudharmini, M.M. (Manju M.S.), Suryan, A, Nižetić, S., State of the art and future prospects for TEG-PCM Systems: A review, Energy for Sustainable Development, 2023, 74, pp. 328–348
7	Dr. Manju M S	Sivakala, S., Manju, M.S., Sudha, J.D, Surfactant Assisted One-Pot Method for Preparation of Polyethylene-Clay Nanocomposites (PECN) and Study of their Viscoelastic Behaviour, Asian Journal of Chemistry, 2023, 35(2), pp. 389–396

Sl No	Name of the Faculty	Title of the Paper, Description
8	Dr. Beula C	Ranjana R, Dr. Anjana Rand, Dr. Beula C. A Review on Biochar as Catalyst/Catalyst Support for oxidation/Reduction/Redox Reactions Eur. Chem. Bull. 2023, 12(4), 3255-3279
9	Dr. Binu T V	T.V. Binu & S. Jayanti, Influence Of Internal Circulation On Absorption Of Atmospheric CO ₂ And SO ₂ In Raindrop International Journal of Fluid Mechanics Research, 49(3):31-42 (2022)
10	Dr. Binu T V	T.V. Binu & S. Jayanti, Non-Isothermal Mass Transfer in Fluid Drops with Internal Circulation Chem. Eng. Technol. 2023, 46, No. 00, 1-7, DOI: 10.1002/ceat.202200501
11	Shyja M	Shyja M, Optimization of straight fins with different geometries using PYTHON: A comparative study. Advances in Chemical Engineering & Material Sciences Select Proceedings - ACMS 2022, Vol. 2, DOI: https://doi.org/10.36375/prepare_u.iiche.a361 .

2.2.3.2 Achievements by the faculty members:

- **Dr. Binu T V** secured 93% marks in the NPTEL course titled **Multiphase Microfluidics** February- April 2023 (8 Weeks Course) and included in the Toppers list.



- **Dr. Manju M S** successfully completed NPTEL course titled **Characterization of polymers, Elastomers and Composites** January- April 2023 (12 Weeks Course)
- **Dr. Gigi Sebastian** handled a session on topic **Simulation with XCOS** in DTE sponsored FDP on 04/02/2023.

2.2.3.3 Short term courses Organized by the department.

Sl No	Title	Coordinator	Duration	Details.
1	Faculty Development Programme (FDP) on Opensource software tools for Engineering & Research	Prof. Dhaneesh K P, Dr. Suji S K	30/01/2023 - 4/02/2023, (6 days)	Sponsored By: DTE 6-day Program with 7 experts from different research Organizations & other Institutes. Participants:45

Number of participants

No. of participants										
Supporting staff - Technical	Teaching staff	Total	Male	Female	Same Institution	Govt. Colleges	Govt. Aided College	Self-Financing College	Polytechnic/THS	Outside District
0	38	38	13	25	24	27	5	6	1	3

Topics covered with:

Sl. No.	Topic	Name & Address of Faculty	No. of Hours
1	LaTeX document preparation system for scientific reporting	Dr. Anil Kumar K R NSS College of Engg Palakkad	12
2	Introduction to DWSIM	Dr. Manilal A M GEC Thrissur	3
3	Introduction to Openfoam	Prof. Arun Shal GEC, Kozhikode	3

4	Programming with Scilab and Xcos	Dr. Gigi Sebastian GEC, Kozhikode	6
5	Multiphase flow modelling in MFiX	Prof. Dhaneesh K P GEC, Kozhikode	3
6	Computations in Science and Engineering using PYTHON	Mr. Bejoy T NPOL, Kochi	6
7	Introduction to Zotero and Webplot digitizer	Dr. Suji S K GEC Kozhikode	2



2.2.3.4 Short term courses attended by the faculty

Sl No	Name of the Faculty	Name of the Program	Date & Duration	Organizing Institute
1	Dr. Gigi Sebastian	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode
2	Dr. Ushakumary E R	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode
3	Dr. Anjana R	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode
4	Dr. Manju M S	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode

Sl No	Name of the Faculty	Name of the Program	Date & Duration	Organizing Institute
5	Dr. Beula C	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode
6	Dr. Binu T V	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode
7	Prof. Sindhu N.	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode
8	Prof. Suma K	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode
9	Prof. Sajitha C M	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode
10	Prof. Shyja M	DTE Sponsored FDP on <i>Opensource software tools for Engineering & Research</i> 30/01/2023 -04/02/2023	30/01/2023 - 4/02/2023, (6 days)	GEC Kozhikode
11	Dr. Manju M S	DTE Sponsored FDP on Energy-Fundamentals to Research	28/02/2023 to 04/03/2023 (6 days)	GEC Kozhikode
12	Dr. Suji S K	DTE Sponsored FDP on Energy-Fundamentals to Research	28/02/2023 to 04/03/2023 (6 days)	GEC Kozhikode
13	Prof. Shyja M	DTE Sponsored FDP on Energy-Fundamentals to Research	28/02/2023 to 04/03/2023 (6 days)	GEC Kozhikode
14	Dr. Gigi Sebastian	TEQIP sponsored FDP on <i>Recent Developments In Nano Research And Nanomaterials For Future Applications</i>	20th - 25th March 2023. (6days)	GEC Thrissur
15	Dr. Anjana R	TEQIP sponsored FDP on <i>Recent Developments In Nano Research And Nanomaterials For Future Applications</i>	20th - 25th March 2023. (6days)	GEC Thrissur
16	Dr. Manju M S	TEQIP sponsored FDP on <i>Recent Developments In Nano Research And Nanomaterials For Future Applications</i>	20th - 25th March 2023. (6days)	GEC Thrissur
17	Prof. Suma K	TEQIP sponsored FDP on <i>Recent Developments In Nano Research And Nanomaterials For Future</i>	20th - 25th March 2023. (6days)	GEC Thrissur

Sl No	Name of the Faculty	Name of the Program	Date & Duration	Organizing Institute
		<i>Applications</i>		
18	Dr. Suji S K	TEQIP sponsored FDP on <i>Recent Developments In Nano Research And Nanomaterials For Future Applications</i>	20th - 25th March 2023. (6days)	GEC Thrissur
28	Prof. Shyja M	TEQIP sponsored FDP on <i>Recent Developments In Nano Research And Nanomaterials For Future Applications</i>	20th - 25th March 2023. (6days)	GEC Thrissur
29	Prof. Dhaneesh K P	TEQIP sponsored FDP on <i>Recent Developments In Nano Research And Nanomaterials For Future Applications</i>	20th - 25th March 2023. (6days)	GEC Thrissur

2.2.3.5 Faculty doing Quality Improvement Programme

Sl No	Name of the Faculty	Programme attending
1	Prof. Adil Muhammed	PhD at IIT Madras
2	Prof. Aparna A M	PhD at IIT Madras

2.2.3.6 International Conference on Process Engineering and Sustainable Technology (STEP2023).

Government Engineering College Kozhikode has successfully conducted several editions of the national conference on emerging trends in engineering (NET) and the first edition of International conference on Emerging Trends in Engineering Yukthi – 2021 in the past. Yukthi 2023 is an attempt to further explore the avenues in technology through conducting events such as paper presentations, panel discussions, webinars, etc. with the active participation of researchers across the Globe. Yukthi 2023 provides a venue for the confluence of the latest ideas, thoughts, and innovations of talented minds all over the world. The International Conference will be conducted from 10th to 12th April 2023 in the hybrid mode using both online method and in-person modes. Yukthi 2023 also has additional tracks on special topics. The Conference was convened by Dr. Sudheesh R S, Associate Professor, Dept. of ME, and Prof. Sindhu N, Assistant Professor, Department of Chemical Engineering as Organizing Secretary. Under the aegis of Yukthi 2023, Chemical Engineering department organized International Conference on Process Engineering and Sustainable Technology (STEP2023). The conference was Convened by Prof. Shyja M and coordinated by Prof. Dhaneesh K. P. The Conference was held in hybrid mode from April 10th to 12th. 31 of the 49 papers that the authors submitted were accepted for oral presentations, and 29 articles were chosen to be published in the Elsevier SSRN Conference Proceedings.

The International Conference was inaugurated on 10th April 2023, by Prof. L. S. Ganesh (ICFAI, Hyderabad, former Professor & HOD, Department of Management Studies, IIT Madras), and followed by a keynote address on “Human Society, Development, Natural Systems and the Sustainability Imperative: What should Science, Engineering and Technology do?”. Dr. Sandeep Mouvanal, (Senior Researcher, University of Nottingham, UK) gave a keynote address on Applications of Computational Fluid Dynamics for Thermal Management.



- Inauguration of the Conference by releasing the Book of Abstracts



The first session of the paper presentation started in the afternoon of the same day. Six papers were presented in the first session and the session was chaired by Dr. Manilal A M, Assistant Professor, Department of Chemical Engineering, Government Engineering College Thrissur and Dr. Binu T V, Associate Professor, Department of Chemical Engineering, Government Engineering College Kozhikode.

The keynote speech on " A small step towards developing edible and sustainable fat substitutes " by Dr. Alan Ranjit Jacob, (Assistant Professor, IIT Hyderabad), kicked off the second day. The opening address was followed by technical sessions. In the forenoon session, six papers were presented. Dr. Ranjith P. M., Assistant Professor, NIT Calicut, and Dr. Ushakumary E R, Professor, GEC Kozhikode, chaired the morning session. The third session was chaired by Dr. Haseena P V, Assistant Professor, GEC Thrissur, and Dr. Anjana R, Associate Professor, GEC Kozhikode. The fourth session was chaired by Dr. Ahammed Sherief K Y, Assistant Professor, NIT Calicut, and Dr. Manju M S, Associate Professor, GEC Kozhikode.

The conference's third day began with an online keynote address by Dr. Nishanth Chemmangattuvalappil (Professor, University of Nottingham), entitled "Computer-Aided Methods for Sustainable Chemical Product Design". Dr. Mercy Anna Philip, Assistant Professor, GEC Thrissur, and Dr. Gigi Sebastian, Professor, GEC Kozhikode, presided over the technical session.

Prof. Dhaneesh K P, Coordinator of STEP-2023, International Conference on Process Engineering and Sustainable Technology, concluded the event with a vote of gratitude.

KEYNOTE SPEAKERS

NAME	DESIGNATION	INSTITUTION	PHOTO
Dr. Alan Ranjit Jacob	Assistant Professor	Department of Chemical Engineering, IIT, Hyderabad	
Dr. Nishanth Chemmangattuvalappil	Professor	Department Of Chemical And Environmental Engineering At University Of Nottingham Malaysia.	

SESSION CHAIRS

NAME	DESIGNATION	INSTITUTION	Session & Date
Dr. Manilal A M	Assistant Professor	Department of Chemical Engineering, GEC Thrissur	Session I , 10/04/2023 AN
Dr. Ranjith P M	Assistant Professor	NIT Calicut	Session II , 11/04/2023 FN
Dr. Haseena P.V	Assistant Professor	Department of Chemical Engineering, GEC Thrissur	Session III , 11/04/2023 AN
Dr. Ahammed Sherief K Y	Assistant Professor	NIT Calicut	Session IV , 11/04/2023 AN

Dr. Mercy Anna Philip Assistant Professor Chemical	Assistant Professor	Department of Chemical Engineering, GEC Thrissur	Session V, 12/04/2023 FN

SESSION CO-CHAIRS

NAME	DESIGNATION	INSTITUTION	
Dr. Gigi Sebastian	Professor	Department of Chemical Engineering, GEC Kozhikode	Session I, 10/04/2023 AN
Dr. Ushakumary E R	Professor	Department of Chemical Engineering, GEC Kozhikode	Session II, 11/04/2023 FN
Dr. Binu T V	Associate Professor	Department of Chemical Engineering, GEC Kozhikode	Session III, 11/04/2023 AN
Dr. Manju M S	Associate Professor	Department of Chemical Engineering, GEC Kozhikode	Session IV, 11/04/2023 AN
Dr. Anjana R	Associate Professor	Department of Chemical Engineering, GEC Kozhikode	Session V, 12/04/2023 FN



Statistics of papers submitted

Track	No. submissions	of	No. Accepted	of	Registered
Process Engineering Sustainable Technology	34		31		31

BEST PAPERS

Session	Name of Author	Paper Title	Author's Affiliation
Session I	Sabitha Sathyan	Characterization of pineapple leaf fibers and their suitability for biocomposite preparation	Govt Engg College Kozhikode

Session II	Jisa Jose	Optimization and production of biodiesel using microbial oil from chlorella vulgaris	Amal Jyothi College of Engineering
Session III	Gokul Chandran	Purification and Characterization of Fullerene Molecules	School of Engineering University of Greenwich
Session IV	Dr. Minju N	Experimental and Modeling studies of Carbon dioxide Adsorption on Silica Aerogel Packed Bed System	Govt Engg College Kozhikode
Session V	Srilekshmi M	Preparation and characterization of bioadsorbent from saw dust for the removal of Cd ²⁺ ions from water S	IISC Bangalore



2.3 Department of Civil Engineering

2.3.1 Faculty and Supporting Staff

2.3.1.1 Details of Faculty members

Sl No	Name	Designation	Qualification
1	Dr. Anjana Santhakumar	Professor	PhD
2	Dr. Kouzer K.M	Professor	PhD
3	Dr. Raghukumar C	Associate Professor -Retired	PhD
4	Dr. Ragesh P P	Associate Professor and Head of Department	PhD
5	Dr. Rahmathulla Noufal	Associate Professor	PhD

	E.		
6	Abdul Raoof A	Assistant Professor	M. Tech
7	Dr. Ansu V.	Associate Professor	PhD
8	Dileep Kumar P.G.	Associate Professor	M. Tech
9	Shyba A	Assistant Professor	M. Tech
10	Raji Karuna	Assistant Professor	M. Tech
11	Nasma Noor N V	Assistant Professor	M. Tech
12	Christena Neethu Priya C Alex	Assistant Professor	M. Tech
13	Dr. Nazeem K M	Assistant Professor (Adhoc)	PhD
14	Aiswarya Manoj	Assistant Professor (Adhoc)	M. Tech
15	Sahir M	Assistant Professor (Adhoc)	M. Tech
16	Chandana M	Assistant Professor (Adhoc)	M. Tech
17	Supritha	Assistant Professor (Adhoc)	M. Tech
18	Neha joy	Assistant Professor (Adhoc)	M. Tech

2.3.1.2 Details of Technical Staff

Sl No	Name	Designation	Qualification
1	Satheesh K	Grade 1 Instructor	ITI
2	Sayuja Kumari T.	Trade Instructor Grade II	B Tech (CE)
3	Gireesh Kumar O.	Trade Instructor Grade II	ITI
4	Bindu B H	Workshop Instructor	M Tech
5	Shajeer Rahman K	Workshop Instructor	B Tech (CE)
6	Manu Aravind	Tradesman	ITI
7	Jessy T P	Tradesman Civil (Ad-hoc)	ITI
8	Muhammed Rashid N	Tradesman Survey (Ad-hoc)	Diploma

2.3.2 Academic Performance

A brief account of the various academic activities and their outcome are dealt in this section.

2.3.2.1 Results of University Examinations

B. Tech Civil Engineering

Batch	S1			S2			S3			S4			S5			S6			S7			S8		
	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%
2022-26	69	47	68.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2021-25	59	57	96.61	55	47	85.45	72	53	73.61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2020-24	65	58	89.23	65	51	78.46	72	60	83.33	72	54	75	73	66	90.41	-	-	-	-	-	-	-	-	-
2019-23	59	54	91.53	59	55	93.22	66	50	75.76	65	47	72.31	64	55	85.94	64	55	87.5	64	60	93.75	64	62	98.44

M. Tech Structural Engineering

Batch	S1			S2			S3			S4		
	T	P	%	T	P	%	T	P	%	T	P	%
2022-24	18											

2.3.2.2 Academic Distinctions

Academic Achievements

- Following students of 2019-2023 Batch B-Tech secured highest CGPA in the university examinations conducted by KTU

		
KKE19CE016 ANJITHA SANTHI CGPA - 9.44	KKE19CE048 RAFA BASHEER. CGPA - 9.29	KKE19CE006 AJMI THAJ CGPA - 9.13

- Following students of 2019-23 Batch Civil qualified GATE-2023
 - KKE19CE049 – RIYA MARIYAM M
 - KKE19CE052 – SHAFNA V
 - KKE19CE041 – MUHAMMED SAJAD T K
- Following students of 2020-24 Batch Civil qualified GATE-2023
 - KKE20CE003 – ABHAY A
 - KKE20CE035 – JOSHIN V J
 - KKE20CE049 – PREETHI K

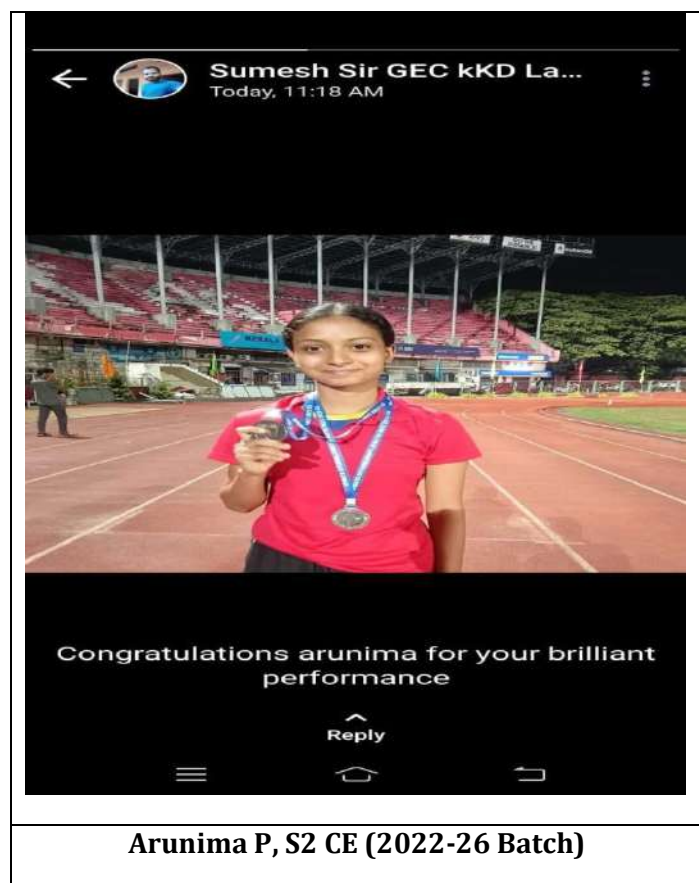
Student Publications

Sl No	Name of the Students	Title of the Paper, Description
1	Aiswarya K D, Amarnath J, Archana T R, Haneena P	Aiswarya K D, Amarnath J, Archana T R, Haneena P, Shyba A, "Water Demand Prediction: A Novel Approach Using Artificial Neural Network." <i>Proceedings of the Yukthi</i> (2021)
2	Arya P, Faiz Ashraf, Chaithanya K K, Devika P	Arya P, Faiz Ashraf, Chaithanya K K, Raji Karuna, Devika P "A Step Towards Pollution Abatement Of Kallai River Basin – A Case Study" <i>Proceedings of the Yukthi</i> (2023)

Sl No	Name of the Students	Title of the Paper, Description
3		

2.3.2.3 Achievements in Extra-Curricular Activities

- Ms. Arunima P., 2022-26 Batch B-Tech Student has secured Second Place in 200 m Race Women in APJAKTU 5th Intercollegiate (Inter zone) Athletic meet held at Thiruvananthapuram.
- Ms. Arunima P., 2022-26 Batch B-Tech Student has secured Second Place in 100 m Race Women in APJAKTU 5th Intercollegiate (Inter zone) Athletic meet held at Thiruvananthapuram.



2.3.2.4 Online Courses attended by students

Sl No	Name of the Student	Semester	Name of the course	Duration	Organized by
1	NUZUHA PT	S4	Geographic Information Systems	Jan- April 2023	NPTEL
2	JAZIBA NASLIN C	S3	Digital Land	Jan-Mar	NPTEL

Sl No	Name of the Student	Semester	Name of the course	Duration	Organized by
	N		Surveying And Mapping	2023	
3	NUZUHA PT	S3	GPS Surveying	Jul-Aug 2022	NPTEL
4	NIBIN KRISHNA R	S3	Digital Land Surveying And Mapping	Jan-Mar 2023	NPTEL
5	IWIN FRANCIS	S4	Engineering Hydrology	12 weeks	NPTEL
6	SNEHA C RAJ	S4	Safety In Construction	8 Weeks	NPTEL
7	HRITHIK SUBIN KV	S3	Digital Land Surveying And Mapping	Jan-Mar 2023	NPTEL
8	YADHU KRISHNA PS	S3	Digital Land Survey And Mapping	Jan-Mar 2023	NPTEL
9	AISWARYA EP	S3	Digital Land Surveying And Mapping	Jan-Mar 2023	NPTEL
10	ELIZABETH ABRAHAM	S2	Geographic Information Systems	Jan- April 2022	NPTEL
11	GAYATHRI DINESH	S3	Modern Indian Architecture	Aug-Oct 2022	NPTEL
12	SURYA C R	S5	Air pollution and control	Jan- April 2023	NPTEL
13	AFNA FATHIMA	S3	Air pollution and control	Jan- April 2022	NPTEL
14	ANJU P	S5	Air pollution and control	Jan-April 2023	NPTEL
15	ARYA KRISHNA C	S3	Air pollution and control	Jan-April 2022	NPTEL
16	AYISHA LEENATH K	S3	Air pollution and control	Jan-April 2022	NPTEL
17	HAFSA LATHEEF C	S5	Air pollution and control	Jan-April 2023	NPTEL
18	SURYA C R	S5	Air pollution and control	Jan- April 2023	NPTEL

2.3.3 Achievements by the faculty members

2.3.3.1 Faculty Publications

Sl No	Name of the Faculty	Title of the Paper, Description
1	Dr Ansu V	Ansu, V., & Anjaneyulu, M. V. L. R. (2022). The optimum strategy for mode choice modelling of interregional fish

Sl No	Name of the Faculty	Title of the Paper, Description
		transport considering shippers' heterogeneity. Archives of Transport, 64(4), pp 7–26. https://doi.org/10.5604/01.3001.0016.1046 . http://www.archivesoftransport.com/eaot/2022/04/001.pdf
2	Dr Ansu V	Ansu, V., & Anjaneyulu, M. V. L. R. (2022, September). Mode Choice Behaviour of Textiles Shippers in India. 2nd International Conference on “Transportation Infrastructure Projects: Conception to Execution,” Indian Institute of Technology Roorkee.
3	Dr Ansu V	Gayathri, K. A., Ansu, V., & Anjaneyulu, M. V. L. R. (2022, December 19). Joint Mode and Shipment Size Choice for Interregional Transportation of Fruits and Vegetables in India. 14th International conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC) organized by the Transportation Systems Engineering (TSE) group at Indian Institute of Technology Bombay.
4	Dr.Rahmathulla Noufal.E	E.Rahmathulla Noufal, “Experimental evaluation of the effect of infill in the dynamic responses of multi-storied structures”, in Materials Today ,Elsevier 5 july 2022.
5	Dr.Rahmathulla Noufal.E	E. Rahmathulla Noufal, “Assessment of Copper Slag as an Eco-friendly and Sustainable Alternative construction material” 37th Indian Engineering Congress of Institution of Engineers India(IEI) on Role of Engineers for creating a Sustainable &Self Reliant India on December 16-18,2022 , Tamilnadu, India Pg 121-130.
6	Dr. Nazeeh K M	Nazeeh, K. M., Deepthi Mary Dilip, Sivakumar Babu, G. L. (2023, July) - Quantile-based design and optimization of shallow foundation on cohesionless soil using adaptive kriging surrogates. International Journal of Geomechanics ASCE, Volume 23, Issue 9. https://doi.org/10.1061/IJGNALGMENG-8226

2.3.3.2 Faculty Acquired PhD

- Dr. Ansu V has been awarded Ph. D from NIT Calicut on the topic “MODE CHOICE MODELLING OF INTERREGIONAL FREIGHT TRANSPORT” on June 2022.



2.3.3.3 Short term courses attended by the faculty

Sl No	Name of the Faculty	Name of the Program	Date & Duration	Organizing Institute
1	Nasma Noor N V	Open source Resource tools for Engineering and Research	30/01/2023 to 04/02/2023, 6 days	GEC Kozhikode
2	Nasma Noor N V	Entrepreneurship-New Developments	20/02/2023 to 25/02/2023, 6 days	GEC Kozhikode
3	Rahmathulla Noufal E	Open source Resource tools for Engineering and Research	30/01/2024 to 04/02/2023, 6 days	GEC Kozhikode
4	Rahmathulla Noufal E	Entrepreneurship-New Developments	20/02/2024 to 25/02/2024, 6 days	GEC Kozhikode
5	Rahmathulla Noufal E	Energy-Fundamentals to Research	27/02/2023 to 04/03/2023, 6 days	GEC Kozhikode
6	Rahmathulla Noufal E	NanoTechnology Fundamentals to Applications	13/02/2023 to 18/02/2023, 6 days	GEC Kozhikode
7	Raji Karuna	Entrepreneurship-New Developments	20/02/2023 to 25/02/2023, 6 days	GEC Kozhikode
8	Christena Neethu Priya C Alex	Entrepreneurship-New Developments	20/02/2023 to 25/02/2023, 6 days	GEC Kozhikode
9	Dr. K. M. Kouzer	Webinar on "Landslides Mitigation Techniques" in a Short Course on Landslids	16-9-2022	SC7 - Student Chapter of IGS
10	Dr. K. M. Kouzer	Webinar on "Introduction to Landslides and Analysis of Finite & Infinite Slopes" in a Short Course on Landslids	9-9-2022	SC7 - Student Chapter of IGS

2.3.3.4 Faculty doing Quality Improvement Programme

Sl No	Name of the Faculty	Programme attending
1	Shyba A	PhD-Contact Programme-IIT Madras
2	Nasma Noor N V	PhD-Contact Programme-IIT Bombay

2.3.3.5 International Conference

Under the auspices of YUKTHI-2023-International Conference of Emerging on Emerging Trends in Engineering, the Department of Civil Engineering at GEC Kozhikode held the International Conference on Sustainable Solutions for Infrastructural Development. This conference's primary goal was to bring together top academics, researchers, and students to share their knowledge, experiences, and research findings on all facets of Civil engineering and sustainable technologies. The Conference was convened by Prof. Nasma Noor N V and Prof. Raji Karuna , Professor, Dept. of ME. The coordinators were Prof. Raji Karuna., Associate Professor, and Prof. Arun Shal U. B., Assistant Professor, MED. The call for papers from the Civil Engineering disciplines, such as Environmental Engineering and Geo informatics, Geotechnical Engineering, Green-Engineering, Hydraulics and Water Resources Engineering, Remote Sensing, Earthquake and Structural Engineering, Structural Health Monitoring, Traffic and Transportation Engineering, Construction management, etc., served as the catalyst for the conference's planning. 23 of the 46 papers that the authors submitted were accepted for oral presentations, and all those 23 articles were chosen to be published in the Elsevier SSRN Conference Proceedings.

Event Overview:

The "YUKTHI 2023: International Conference on Sustainable Solutions for Infrastructure Development" was a three-day event organized by the Department of Civil Engineering at Government Engineering College, Kozhikode. The conference took place from 10th to 12th April 2023, and it aimed to explore emerging trends in engineering, particular focus in civil department was on sustainable solutions for infrastructure development. The event brought together experts, researchers, academicians, and professionals from various fields to discuss and share their knowledge on the latest developments in the civil engineering domain.

The conference commenced with an inaugural session featuring two keynote speakers:

Prof. L S Ganesh: In his keynote address, Prof. Ganesh emphasized the importance of human society, development, natural systems, and the imperative for sustainability. He discussed the role of science, engineering, and technology in addressing sustainability challenges.

Dr. Sandeep Mouvanal: Dr. Mouvanal presented on "Applications of Computational Fluid Dynamics," highlighting the significance of CFD in various engineering applications.

The second day of the conference focused on structural engineering, and it featured a keynote address by Dr. M. V. Anil Kumar from IIT Palakkad, who spoke on "Recent Developments in the Design of Cold Formed Steel Compression

Members." The session was chaired by Dr. M Abdul Akbar from NIT Calicut, with Dr. Anjana Santhakumar from GEC Kozhikode serving as the co-chair.

Several research papers were presented during this session, covering topics such as seismic response evaluation of buckling restrained braced frames, post-fire behavior of cold-formed steel tubular T-joints, structural health monitoring of vertical poles in coastal areas, and more. These research papers were contributed by scholars and researchers from various institutions.

In the afternoon, the focus shifted to materials and technology in civil engineering. Dr. Muhammad Saleem from Jubail Industrial College, KSA, discussed "Green Building and its optimized design to efficiently use as natural resource" through online mode, delivered the keynote speech.

During this session, multiple research papers were presented, covering topics such as the ranking of human factors influencing safety performance in the Kerala construction industry, the blend of IoT and extended reality for construction safety, comparative analysis of green building rating systems, BIM-based BOQ estimation, and more. The session was chaired by Dr. Aslam Kunhi Mohamed from IIT Madras, with Dr. Rahmathulla Noufal E from GEC Kozhikode as the co-chair.

The final day of the conference focused on water resources and environmental engineering. The keynote address was delivered by Dr. Athira P from IIT Palakkad, who presented on "Climate Change: Regional Impact." The session was chaired by Dr. George K Varghese from NIT Calicut, with Dr. Sharannya T M from KSCSTE CWRDM as the co-chair.

Research papers presented during this session covered topics such as the analysis of trends and teleconnections between streamflow and global climatic indices in Chalakudy River Basin, photocatalytic removal of acetaminophen using green-synthesized zinc oxide nanoparticles, drinking suitability and source apportionment of physical parameters in surface water in Mahanadi Basin, and more.

During each session, the conference organizers recognized outstanding research contributions by presenting "Best Paper Awards." These awards aimed to acknowledge the exceptional quality and relevance of the research papers presented by the participants. The recipients of these awards were selected based on their paper's originality, methodology, results, and overall contribution to the field of civil engineering.

The session chairs and co-chairs, who efficiently moderated the technical sessions, ensuring smooth discussions and presentations, were presented with certificates of appreciation. Their guidance and support in conducting the sessions played a pivotal role in maintaining the conference's high standards of professionalism. Throughout the conference, student volunteers played a crucial role in ensuring the smooth execution of various activities. They provided assistance in managing registrations, guiding participants to different venues, facilitating technical sessions, and coordinating with speakers and attendees. Their dedication and hard work significantly contributed to the overall success of the event.

The "YUKTHI 2023: International Conference on Sustainable Solutions for Infrastructure Development" provided a platform for participants to explore and discuss emerging trends in engineering, with a strong focus on sustainable infrastructure development. The conference successfully brought together experts

from diverse backgrounds, fostering knowledge exchange and discussions that can contribute to future advancements in the field of civil engineering.

2.4 Department of Mechanical Engineering

2.4.1 Faculty and Supporting Staff

2.4.1.2 Details of Faculty members

Sl No	Name	Designation	Qualification
1	Dr. Shaji K.	Professor	PhD
2	Dr. Sajith P. P.	Professor	PhD
3	Dr. Anirudhan P.	Professor	PhD
4	Dr. Pradeep V.	Professor	PhD
5	Dr. Pradeep M. Kamath	Professor	PhD
6	Dr. Jesseela S.	Professor	PhD
7	Dr. Sudheesh R. S.	Associate Professor	PhD
8	Prof. Biju I. K.	Associate Professor	M. Tech
9	Prof. Prajeeth Kumar K. P.	Associate Professor	M. Tech
10	Dr. Manu V Thottakkad	Assistant Professor	PhD
11	Dr. Jithesh P. K.	Assistant Professor	PhD
12	Prof. Francis J. Emmatty	Assistant Professor	M. Tech
13	Prof. Nidhin Sreedas E	Assistant Professor	M. Tech
14	Prof. Arun Shal U. B.	Assistant Professor	M. Tech
15	Prof. Subin Michael	Assistant Professor	M. Tech
16	Prof. Fouad Ebn Muhammed Abdulla	Assistant Professor	M. Tech
17	Prof. Lasithan L. G.	Assistant Professor	M. Tech
18	Prof. Vidhun V. R.	Assistant Professor	M. Tech
19	Prof. Neeshma Radhakrishnan	Assistant Professor (Adhoc)	M. Tech
20	Prof. Muhammad Akbar T. K	Assistant Professor (Adhoc)	M. Tech
21	Prof. Muhammed Fasil K	Assistant Professor (Adhoc)	M. Tech

2.4.1.2 Details of Technical Staff

Sl No	Name	Designation	Qualification
1	Sri. Prajith Prabhakar M M	Instructor Gr-I	B. Tech
2	Sri. Anil Kumar C.	Instructor Gr-II	Diploma (ME)
3	Sri. Gireesh Kumar T	Trade Instructor	ITI
4	Sri. Santhosh Kumar K. G.	Trade Instructor	ITI
5	Sri. Sujilesh K V	Trade Instructor	Diploma (ME)
6	Sri. Subrahmanyam K.	Trade Instructor	Diploma (ME)
7	Sri. Santhosh Kumar M.	Trade Instructor	Diploma (ME)
8	Sri. Shaji O. M.	Trade Instructor	Diploma (ME)
9	Sri. Prasanth K. M.	Trade Instructor	Diploma (ME)

Sl No	Name	Designation	Qualification
10	Sri. Venugopalan E.	Trade Instructor	ITI
11	Sri. Hasif. E	Trade Instructor	Diploma (ME)
12	Sri. Jamaludheen P P	Tradesman	ITI
13	Sri. Romith Lincoln	Tradesman	Diploma (ME)
14	Sri. Baiju A K	Tradesman	ITI
15	Sri. Dinesh V.	Tradesman	ITI
16	Sri. Janeesh Kumar K.	Tradesman	Diploma (CS)
17	Sri. Shibi K. M.	Tradesman	ITI
18	Sri. Ratheesh Kumar C. G.	Tradesman	ITI
19	Sri. Muhammad Roshan	Tradesman	Diploma (CE)
20	Shidith P	Tradesman	ITI
21	Jishnu E M	Tradesman	ITI

2.4.2 Academic Performance

A brief account of the various academic activities and their outcome are dealt in this section.

2.4.2.1 Results of University Examinations

B. Tech Mechanical Engineering

Bat ch	S1			S2			S3			S4			S5			S6			S7			S8		
	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%	T	P	%
2021-22	60	35	58	60	23	38																		
2020-24	66	28	42	66	21	32	73	45	62	72	42	58												
2019-23	61	42	69	61	58	95	67	21	31	66	39	59	66	36	54	66	29	44						
2018-22	60	25	42	59	32	54	68	28	41	67	58	87	66	40	60	65	44	68	64	46	72	64	49	76

M. Tech Energy Systems Analysis and Design

Batch	S1			S2			S3			S4		
	T	P	%	T	P	%	T	P	%	T	P	%
2021-23	9	7	78	9	9	100						
2020-22	15	11	73	15	14	93	15	14	93	15	14	93

2.4.2.2 Academic Distinctions

Academic Achievements

- Following students of 2018-2022 Batch B-Tech secured highest CGPA in the university examinations conducted by KTU

		
KKE18ME044 RANWIN KUMAR CGPA- 9.77	KKE18ME037 MOHAN JAYASANKAR CGPA - 9.66	KKE18ME043 RANIYA NAZRIN CGPA - 9.38

- Following Student of 2020-22 Batch M-Tech secured highest CGPA in the University Examinations conducted by KTU


KKE20MEES06 DONY SUNNY CGPA- 9.03

- Following Students of 2018-22 Batch B-Tech qualified GATE
- KKE17ME044 – RANWIN KUMAR

2.4.2.3 Student Publications

Sl No	Name of the Students	Title of the Paper, Description
1	Aravind Ramachandran	Ramachandran, A., Arun Shal, U.B., Ramachandran, S. (2023). Thermodynamic Analysis of an Integrated OTEC-Based Multi-Generation Plant for Hydrogen and Freshwater Production. In: Maurya, A., Srivastava, A.K., Jha, P.K., Pandey, S.M. (eds) Recent Trends in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-7709-1_19
2	Akhil B. Nair	Akhil B Nair, Shaji. K. and Prajeeth Kumar. K. P. (2023) Comparative analysis of solar dryer with and without heat recovery system, International Conference on Emerging Trends in Engineering, Govt. Engineering College Kozhikode.
3	Sajay Krishna	Sajay Krishna , Sudheesh R S. (2023) Energy Efficient Path Planning in Mobile Robots through Hybridization of Rapidly Exploring Random Tree and Probabilistic Roadmap

Sl No	Name of the Students	Title of the Paper, Description
		Algorithms , Recent Advances in Modeling and Analysis of Thermal and Energy Systems (RAMATES-2023) Department of Mechanical Engineering, National Institute of Technology Karnataka, Surathkal, India
4	Abhinand T R	Abhinand T R, P K Jithesh (2023). Investigations on Transient Characteristics of Proton Exchange Membrane Fuel Cells, Recent Advances in Modeling and Analysis of Thermal and Energy Systems (RAMATES-2023) Department of Mechanical Engineering, National Institute of Technology Karnataka, Surathkal, India
5	Ajay Krishnan K	Ajay Krishnan K, Emmatty, F. J.(2023) Numerical investigation of thermal performance of cylindrical lithium ion batteries using composite helical fin with PCM, International Conference on Recent Trends in Engineering Technology and Management 2023, Christ the King Engineering College Coimbatore.

2.4.2.4 Online Courses attended by students

Sl No	Name of the Student	Semester	Name of the course	Duration	Organized by
1	ABHIRAG K V	S3	Nature And Properties Of Materials	8 Weeks	NPTEL/ IIT Kanpur
2	AJAY P S	S3	Non-conventional energy resources	12 Weeks	NPTEL/ IIT Madras
3	AKHIL JOHNSON	S3	Product design and manufacturing	12 Weeks	NPTEL/ IIT Kanpur
4	AMAN BILAL HILAR N P	S3	Operations management	12 Weeks	NPTEL/IIT Roorkee
5	ANN ROSHEAL	S3	Operations management	12 Weeks	NPTEL/IIT Roorkee
6	FATHIMA RINSHA K	S3	Operations management	12 Weeks	NPTEL/IIT Roorkee
7	GOUTHAM S	S3	Mechatronics	8 Weeks	NPTEL/IIT Roorkee
8	HARIGOVIND T P	S3	Earth Science for Civil Engineering	8 Weeks	NPTEL/ IIT Kanpur
9	HARIGOVIND T P	S3	Basic Construction Materials	12 Weeks	NPTEL/ IIT Madras
10	HIBA SHERIN V	S3	Operations management	12 Weeks	NPTEL/IIT Roorkee
11	KARTHIK S	S3	Nature And Properties Of	8 Weeks	NPTEL/ IIT Kanpur

Sl No	Name of the Student	Semester	Name of the course	Duration	Organized by
			Materials		
12	MUHAMMAD FAHAM E M	S3	Work ,system and design	12 Weeks	IIT Roorke
13	MUHAMMED HAYAN K E	S3	Non-conventional energy resources	12 Weeks	NPTEL/ IIT Madras
14	MUHAMMED K K	S3	Non-conventional energy resources	12 Weeks	NPTEL/ IIT Madras
15	MUHAMMED SHAMEEL S	S3	Operations management	12 Weeks	NPTEL/IIT Roorkee
16	MUHAMMED UWAIS	S3	Non-conventional energy resources	12 Weeks	NPTEL/ IIT Madras
17	NADHA P	S3	Operations management	12 Weeks	NPTEL/IIT Roorkee
18	NANDAKISHOR K	S3	Non-conventional energy resources	12 Weeks	NPTEL/ IIT Madras
19	NANDANA SUNIL	S3	Operations management	12 Weeks	NPTEL/IIT Roorkee
20	NITHIN N	S3	Operations management	12 Weeks	NPTEL/IIT Roorkee
21	SREESHANKAR K	S3	Power Plant Engineering	8 Weeks	NPTEL/IIT Roorkee
22	VIGHNESH	S3	Basic Construction Materials	12 Weeks	NPTEL/ IIT Madras
23	Surya S Nair	S5	MS Excel		Shape AI
24	Sanin Muhammed	S5	Mechatronics	8 Weeks	NPTEL/IIT Roorkee
25	Surya S Nair	S5	Electric and future mobility	22/5/2021	KSEB
26	Sabeel Ali	S5	Vedic Maths	Aug 26-27	iste sc Rit
27	Sonu Satheesh S	S5	Vedic Maths	Aug 26-27	iste sc Rit

2.4.3 Achievements by the faculty members

2.4.3.1 Faculty Publications

Sl No	Name of the Faculty	Title of the Paper, Description
1	Prof. Biju I K	Po-Chih Kuo, Biju Illathukandy, Zhuang Sun, Muhammad Aziz. Efficient conversion of waste-to-SNG via hybrid renewable energy systems for circular economy: Process design, energy, and environmental analysis, Waste Management https://doi.org/10.1016/j.wasman.2023.04.041
2	Prof. Biju I K	Tinku Casper D' Silva, Sameer Ahmad Khan, Subodh Kumar, Dushyant Kumar, Adya Isha, Saptashish Deb, Saurabh Yadav, Biju Illathukandy, Ram Chandra, Virendra Kumar Vijay, Paruchuri M.V. Subbarao, Zolt'an Bagi, Korn'el L. Kov'acs, Liang Yu, Bhushan P. Gandhi, Kirk T. Semple. Biohydrogen production

Sl No	Name of the Faculty	Title of the Paper, Description
		through dark fermentation from waste biomass: Current status and future perspectives on biorefinery development. Fuel https://doi.org/10.1016/j.fuel.2023.128842
3	Dr. Sudheesh R S	A. Narayanan A. and Sudheesh R.S. 2022. EXPERIMENTAL AND NUMERICAL INVESTIGATION OF EPOXY HYBRID POLYMER COMPOSITE REINFORCED WITH ZrB ₂ AND PTFE PARTICLES USING A PIN-ON-DISC TRIBOMETER. Materials and Technology. 56, 3 (Jun. 2022), 315–322. DOI: https://doi.org/10.17222/mit.2022.412 .
4	Dr. Francis J Emmatty	Raghavan R, Panicker VV, Emmatty FJ. Ergonomic risk and physiological assessment of plogging activity. Work. 2022;72(4):1337-1348. doi: 10.3233/WOR-205210. PMID: 35723137.
5	Dr. Francis J Emmatty	Lasin, P., Panicker, V. V., & Emmatty, F. J. Assessment of mental workload in a sorting task: a game-based approach. International Journal of Industrial and Systems Engineering, (2023), 43(4), 529-554. https://doi.org/10.1504/IJISE.2023.129755
6	Dr. Sudheesh R S	Sajay Krishna , Sudheesh R S. (2023) Energy Efficient Path Planning in Mobile Robots through Hybridization of Rapidly Exploring Random Tree and Probabilistic Roadmap Algorithms , Recent Advances in Modeling and Analysis of Thermal and Energy Systems (RAMATES-2023) Department of Mechanical Engineering, National Institute of Technology Karnataka, Surathkal, India
7	Dr. Jithesh P K	Sajay Krishna , Sudheesh R S. (2023) Thermodynamic Analysis of Energy Utilization in a Passive Solar Desalination System , Recent Advances in Modeling and Analysis of Thermal and Energy Systems (RAMATES-2023) Department of Mechanical Engineering, National Institute of Technology Karnataka, Surathkal, India
8	Dr. Shaji. K. and Prof. Prajeeth Kumar K P	Akhil B Nair, Shaji. K. and Prajeeth Kumar. K. P. (2023) Comparative analysis of solar dryer with and without heat recovery system, International Conference on Emerging Trends in Engineering, Govt. Engineering College Kozhikode.
9	Dr. Jithesh P K	Abhinand T R, P K Jithesh (2023). Investigations on Transient Characteristics of Proton Exchange Membrane Fuel Cells, Recent Advances in Modeling and Analysis of Thermal and Energy Systems (RAMATES-2023) Department of Mechanical Engineering, National Institute of Technology Karnataka, Surathkal, India
10	Prof. Francis J Emmatty	Ajay Krishnan K, Emmatty, F. J.(2023) Numerical investigation of thermal performance of cylindrical lithium ion batteries using composite helical fin with PCM, International Conference on Recent Trends in Engineering Technology and Management 2023, Christ the King Engineering College Coimbatore.
11	Prof. Arun Shal U B	Ramachandran, A., Arun Shal, U.B., Ramachandran, S. (2023). Thermodynamic Analysis of an Integrated OTEC-Based Multi-

Sl No	Name of the Faculty	Title of the Paper, Description
		Generation Plant for Hydrogen and Freshwater Production. In: Maurya, A., Srivastava, A.K., Jha, P.K., Pandey, S.M. (eds) Recent Trends in Mechanical Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-7709-1_19

2.4.3.2 Short term courses coordinated by the faculty

Sl No	Name of the coordinator(s)	Name of the Program	Date & Duration	Sponsored by
1	Dr. Manu V Thottackkad & Prof. Subin Michael	Nanotechnology Fundamentals to Applications	13th - 18th February, 2023, 6 Days	DTE
2	Dr. Manu V Thottackkad & Prof. Shyba A	Entrepreneurship-New Developments	20th - 25th February, 2023, 6 Days	DTE
3	Prof. Subin Michael & Dr. Manu V Thottackkad	Energy-Fundamentals to Research	27th February - 4th March, 2023	DTE

2.4.3.3 Expert Talks Conducted within the Department

Sl No	Title of the Talk	Name of the Expert and Affiliation	Name of The Coordinator	Dates
1	Hands on Training programme on Ansys software	Dr Abdul Samad, HODME GEC Srikrishnapuram	Dr. Pradeep M Kamath	12 th Oct - 14 th Oct, 2022

2.4.3.4 Short term courses attended by the faculty

Sl No	Name of the Faculty	Name of the Program	Date & Duration	Organizing Institute
1	Dr. Pradeep M Kamath	Nanotechnology Fundamentals to applications	13th - 18th February, 2023, 6 Days	Dept. of ME, GECK
2	Prof. Subin Michael	Open Source tools for Engineering and Research	30 th Jan – 4 th Feb 2023	Dept. of CH, GECK
3	Prof. Subin Michael	AICTE students Learning Assessment-PARAKH	30 th Apr -14 th May 2022	AICTE
4	Prof. Subin	National Initiative for	10 th Jan – 10 th	AICTE

Sl No	Name of the Faculty	Name of the Program	Date & Duration	Organizing Institute
	Michael	Technical Teachers Training (NITTT) July 2022 Examination	July 2022	
5	Dr. Jithesh P K	Workshop on Energy Systems and Modeling	26 th – 30 th June 2022	NIT Calicut
6	Prof. Prajeeth Kumar K P	Energy- Fundamentals to Research	27 th Feb – 4 th Mar 2023	Dept. of ME, GECK
7	Prof. Prajeeth Kumar K P	Nanotechnology Fundamentals to Applications	13th - 18th February, 2023, 6 Days	Dept. of ME, GECK
8	Dr. Francis J Emmatty	Energy- Fundamentals to Research	27 th Feb – 4 th Mar 2023	Dept. of ME, GECK
9	Dr. Francis J Emmatty	Entrepreneurship-New Developments	20th - 25th February, 2023, 6 Days	Dept. of ME, GECK
10	Prof. Arun Shal U B	Energy- Fundamentals to Research	27 th Feb – 4 th Mar 2023	Dept. of ME, GECK
11	Prof. Arun Shal U B	Nanotechnology Fundamentals to Applications	13th - 18th February, 2023, 6 Days	Dept. of ME, GECK
12	Prof. Arun Shal U B	Advanced Thermodynamics and Molecular Simulations	Jan – Apr, 2022	NPTEL
13	Prof. Vidhun V R	Energy- Fundamentals to Research	27 th Feb – 4 th Mar 2023	Dept. of ME, GECK
14	Prof. Vidhun V R	Entrepreneurship-New Developments	20th - 25th February, 2023, 6 Days	Dept. of ME, GECK
15	Prof. Lasithan L G	Energy- Fundamentals to Research	27 th Feb – 4 th Mar 2023	Dept. of ME, GECK
16	Prof. Lasithan L G	Entrepreneurship-New Developments	20th - 25th February, 2023, 6 Days	Dept. of ME, GECK
17	Prof. Lasithan L G	Nanotechnology Fundamentals to Applications	13th - 18th February, 2023, 6 Days	Dept. of ME, GECK

2.4.3.5 Other Achievements by the Faculty

- Dr Jithesh PK, Assistant Professor received a funding of Rs.4,18,950/- for a research project entitled “Design and Development of High Yield Concentrated Solar Thermal Desalination Systems” from Agency for New and Renewable Energy Research and Technology (ANERT), Department of Power, Government of Kerala (Approval order No: ANERT-RD/30/2022-T8 dt. 23/12/2022).

2.4.3.6 International Conference

Government Engineering College Kozhikode has conducted the first edition of the international conference on emerging trends in engineering (YUKTHI-21) in online mode during the year 2021. The second edition of the biennial conference was planned to be conducted in the year 2023. Yukthi 2023 is an attempt to further explore the avenues in technology through conducting events such as paper presentations, panel discussions, webinars etc. with the active participation of researchers across the Globe. Yukthi 2023 provides a venue for the confluence of the latest ideas, thoughts and innovations of talented minds all over the world. The International Conference was conducted from 10th to 12th April 2023 in the hybrid mode using both online method and in-person modes. Yukthi 2023 also had additional tracks on special topics.

Mechanical Engineering and Energy Technologies (URJA-23) is one of the subtrack of the conference organized by the Department of Mechanical Engineering, GEC Kozhikode. Research papers in the following subject areas (not limited to) were called for presentation at the conference. The subject areas include Thermal, Fluid and Energy Engineering, Mechanical Design, Materials and Manufacturing, Industrial Engineering and Optimization, Tribology, Nanoscience and Technology.

Dr. Sudheesh R S, Associate Professor in the Department of Mechanical Engineering was the organising secretary and Prof. Sindhu N, Associate Professor, the Department of Chemical Engineering was the General Convenor of the conference. Dr Pradeep M Kamath, Professor, Department of Mechanical Engineering was the convenor and Prof. Fouad Ebn Mohammed Abdulla, Assistant Professor was the coordinator of the subtrack URJA 23.

URJA 23, track received twenty-six papers from research scholars from various universities. All papers received were sent for peer review. After peer review, twenty-two papers were selected for presentation at the international conference.

The formal inauguration was conducted on 10/04/2023 at 10. 00 am. The inaugural ceremony started with a prayer followed by Welcome Address by the organizing secretary, Dr Sudheesh R S and a Presidential address by Dr Sajith P P, the Principal in charge GECKKD. The inauguration of the conference was done by Dr L S Ganesh by opening Book of abstracts followed by the inaugural address. Dr Sandeepkumar M, and Dr Erwin Furher felicitated the function. A vote of thanks was given by Prof Sindhu N

There were four keynote lectures were presented under the subtrack URJA 2023. Details of the keynote lecture are as follows

1. Dr L S GANESH, ICFAI, Hyderabad (Former Professor and HOD, Dept of Management studies IIT Madras) presented a keynote lecture on the topic 'Human society, Development, Natural Systems and the Sustainability imperative: What should science, engineering and technology do?'
2. Dr Sandeep Kumar Mouvanal (Senior Researcher, University of Nottingham UK) presented a keynote lecture on the topic 'Computational Fluid Dynamics for Thermal Management'
3. Dr Shantakumaran Mohan, Associate Professor, IIT Palakkad delivered a keynote on the topic 'Modern mobile manipulators in industry and others '

4. Dr Ganesh Natarajan, Associate Professor, IIT Palakkad delivered a keynote on the topic 'Deconstructing cricket using mechanics'

The delegate presentation was scheduled in three sessions. Each session was chaired by experts in the relevant area. All papers registered and presented at the conference will be published in the SSRN journal proceedings.

3. ACTIVITY REPORT OF IEEE STUDENT BRANCH OF GEC KOZHIKODE

IEEE student branch (SB) of GEC Kozhikode is an active SB with more than 100 student members and 4 professional members working together to inspire and engage the student community with technical and managerial events thereby fostering their leadership skills, nurturing and promoting leading-edge innovative ideas, empowering their professional skills with knowledge for ethical and value added professional development. The SB has two affinity groups 'Women in Engineering (WIE)' and Industry Applications Society (IAS) and Special Interest Group in Humanitarian Technology (SIGHT)

Details of Activities 2022-23

Date	Programme Conducted	Duration	No. of Beneficiaries	Expenditure/Funding details
19 April 2022	Xtreme Xplore- Orientation session on the 24 hours coding hackathon IEEE Xtreme	1hour	18	Nil
8 May 2022	IEEE Stall at Alumini meet of Government Engineering College Kozhikode - NOSTAL GECK	9:30-1:30		Nil
12 May to 9 June 2022	XJISMU - Gadget Quiz series	1 hr everyday	50	100
17 May 2022	ArticleWriting Competition on 5G network and technology	2hrs		Nil
11 June 2022	Plancad-Workshop on AutoCAD	6hrs	40	5000
17 June 2022	SAYONARA-Farewell party for the 2021 Execom team			5000
6,7 October 2022	Introduction to Python – Workshop	12hrs(2days)	60	3000

12 October	How to execute a Btech project	2hrs	50	
8,9 October	AVIAT-2 day robotics workshop	6hrs	62	8000
6 October 2022	3D printing workshop for technical higher secondary students	2hrs	60	Nil
17,18 October 2022	CELESTA – Workshop on C++ Programming	3hrs	70	Nil
16 October 2022	MOSAIC – Cybersecurity workshop	6hrs	50	4000
14th MARCH 2023	SEQUEIRA – Science quiz	1hr	70	Nil
19 March 2023	Technical writing competition - TECHSCRIBE as a part of the science month celebration	1hr	10	Nil
15 March 2023	Virtual debate competition- Rebuttal Rebels	1hr	20	
31 March 2023	AGM 2023	2hrs	100	8000
1 April 2023	Membership development and leadership training	1day	93	
12 April 2023	Pyckathon	1hr	80	
18 April 2023	Erfenis- Quiz competition as part of World Heritage Day	1hr	22	
25 April 2023	AugmentX- AR/VR workshop	1 day	100	5000
16 October 2022	Photograhpy workshop	6hrs	50	4000





<p style="text-align: center;">ACTIVITIES OF IEEE WIE AFFINITY GEROUP</p>				
<p>IEEE Women in Engineering (WIE) is a global network of IEEE members and volunteers dedicated to promote women engineers and scientists, and inspiring girls around the world to follow their academic interests in a career in engineering and science.</p>				
Date	Programme Conducted	Duration	No. of Beneficiaries	Expenditure/Funding details
12 th February 2022	PICZBEE (Picture puzzles)	1hr	50	-
13 th February 2022	NARRATIVA (Story reciting)	1hr	50	-
14 th February 2022	CLUEMINATI (Treasure hunt)	1hr	50	100
29 th May 2022	FEMME- Just a Minute (in ssociation with IEEE SB	1hr	40	-

	UKFCET,IEEE SB ASIET and IEEE SB AMRITAPURI)			
3 rd July 2022	AADHYAKSHARAM- Diversity Inclusion Project for Kudumbasree women workers for digital literacy	1 day	43	10,000 (From Kerala Section)
8 th March 2023	SPIN THE FLO – Quiz competition	1hr	18	-
11 May – 13 May 2023	TrailBlazeX (a series of events for women engineering students to inspire participants' imagination and inventing skills, in association with the WiE chapters of Vimal Jyothi Engineering College, Government Engineering College, Wayanad, and College of Engineering, Adoor)	3 days	50	1000



IEEE INDUSTRIAL APPLICATION SOCIETY(IAS)

IAS is one of the largest special interest societies within the IEEE. The IAS focuses specifically on the unique needs of industry and commerce. IAS is a source of professional power to its nearly 14,000 worldwide members.

Date	Programme Conducted	Duration	No. of Beneficiaries	Expenditure/Funding details
5 th February 2022	LATEX DRAW WORKSHOP	2hr	80	-
28 th February 2022	CMD AWARDS- Awareness session	2hr	100	-
11 th May 2023	COGNIZE – Introduction to IEEE IA/IE/PELS societies	2hr	25	-

IEEE SIGHT (Special interest group on humanitarian technology)

Time: 09:30 AM to 04:30 PM

IEEE SIGHT is a global network of groups consisting of IEEE members and volunteers who identify and address local problems by applying their technical skills and partnering with their local communities.

Date	Programme Conducted	Duration	No. of Beneficiaries	Expenditure/Funding details
18 th June 2022	3D Modelling Workshop	1 day	70	10,000
18 th June 2022	3D Modelling Competition	2hrs	70	750
24 th October	Destia- Idea pitching competition , debate and oral presentation as part of UN day celebrations.	3 days (2hours each day)	15	-

**AWARDS AND ACHIEVEMENTS OF THE STUDENT BRANCH**

Sl No	Details	Remarks	Photos
1.	Ms Reshmi R Shenoi (S7 ECE 2019-23 batch) received the best student humanitarian volunteer award of IEEE Kerala Section for 2022	For her remarkable contributions to the IEEE Kerala section SIGHT projects Lumen at Muvattupuzha, STEM for social benefit and the Domestic drinking water project D2Re-B at Baveli Wayanad.	
2	Dr. Bindima T SB Counsellor received the outstanding women in engineering outstanding professional award of IEEE Kerala section for 2022	In recognition of her outstanding initiatives to bring out innovative programs specially beneficial for women in engineering	
3	Dr. Bindima T was the principal investigator of the IEEE Kerala section SIGHT project D2Re-B (Domestic drinking water using renewable energy- Baveli Wayanad) which received a project funding of \$4700 from IEEE Humanitarian Activities Committee	This project was awarded the Amarnath Raja Humanitarian technology award including a cash award of Rs. 50,000 for future endeavours of the project	
4	Three of our students Mr. Vignesh (S7ME 2019-24) and Reshmi R Shenoi(S7 ECE 2019-23) and Raseena (S7 ECE 2019-24) served as core team members for the SIGHT project implementation		

	Lumen implemented at Muvattupuzha.		
5.	Three of our students Mr. Vignesh (S7ME 2019-24) and Reshmi R Shenoi(S7 ECE 2019-23) and Sneha (S7 ME 2019-24) served as core team members for the SIGHT project implementation D2Re-B implemented at Baveli tribal colony at Wayanad district.		

4. ACTIVITY REPORT OF IEDC & IIC

Innovation and Entrepreneurship Development Centre (IEDC) a flagship initiative of Kerala Startup Mission, Institution's Innovations Council (IIC) an establishment of Ministry of Education (MoE), Govt. of India and Technology Business Incubator (TBI) of GEC Kozhikode are jointly associated to systematically foster the culture of Innovation among students and academic fraternity of the institution and functioning in this institution jointly.

Details Activities 2022-23

Date	Programme	Duration	No. of Beneficiaries	Expenditure/Funding details
05.03.2022	IEDC summit – 2022 at St. Joseph's College of Engineering and Technology, Palai. GECK Students' Participated	1 day	10	Registration fee from IEDC institution grant Rs. 3000
13.05.2022 – 15.05.2022	INSPIRIA – 2022 at MES College of Engineering, Kuttipuram. GECK Students' Participated	3 days	09	Registration fee from IEDC institution grant Rs. 16191
21.05.2022	Workshop on Prototype / Process design and development at NITC	1 day	04	-
09.06.2022	Orientation Programme –	2.5 hours	54	-

	Seeding Innovation & Entrepreneurship culture in Technical Education at GECK			
16.06.2022	Innovation to startups at NITC. GECK Students' Participated	1. hours 2.	04	-
12.06.2022 – 21.06.2022	Skill Hunt		35	-
24.06.2022	Ideathon.	20 days	20	-
28.06.2022	Career Hacking – Talk session by Mr. Mohammad Shameem, CEO, Quizent	2 hours	75	-
14.07.2023	IEDC Project Expo' 22	1 day	686	Rs. 7134 from CCE, Mementos and Trophy sponsored
29.10.2022	Fin' Lounge – Talk session by Mr. Kochouseph Thomas Chittilappilly	1 hour	85	-
9.12.2022 - 10.12.2022	BIM workshop – CADD Centre	2 days	40	Rs 300/ student
10.12.2022	Creative Spirit – Idea to Product workshop	3 hours	42	Rs 50/ student
22.02.2023	Story of hardware startup from scratch By Muhammed Akbar K K, Co-founder and Director, Birdeye Technologies	2 hours	45	-
23.02.2023	Life in college through Entrepreneurship – By Mr. Shameem Haldoon P, CEO Tomeron	2 hours	45	-

	Developers			
09.03.2023	Wonder Women – Panel discussion	1 hour	33	-
04.04.2023	Orientation session – Young Innovatin Programme (YIP)	1 hour	60	-
26.04.2023	Seminar on Intellectual Property Rights	2.5 hours	64	-
28.04.2023 – 29.04.2023	Endora – Techno Flea Fest	2 days	1500	Fund through Sponsorship, Alumni, CCE, PTA, IEDC, Faculties and Students and registration
23.05.2023 – 24.05.2023	IIT Madras Centre of Innovation and Incubation Cell at Research Park Visit	2 days	13	-
27.05.2023	Session on Business Model Canvas	2 hours	47	-
05.06.2023	Enviro: E- Waste collection	1 hour	15	-

5. ACTIVITY REPORT OF PLACEMENT CELL FOR 2022-23

Activities of the Career Guidance and Placement Committee (CGPC) for the year 2022-23 was coordinated by Dr. Anirudhan P., Professor in Mechanical Engineering, along with the core committee comprising of faculties (Mrs. Shyba A., Dr. Noufal R., Dr. Jithesh P. K., Dr. Francis J. Immatty, Dr. Binu T.V., Dr. Suji S. K., Mr. Rashid Ummer N. T., Mr. Harikrishnan P. R., Mr. Abdul Jaleel N., Dr. Abdu Rehman V.) and students (Ms. Anjitha Shanti, Ms. Menakshy jayaram, Ms. Rhea Jennifer, Ms. Deneesa Shibu and Mr.Vishnu Muraleedharan). The CGPC coordinated the placement drives by various companies and also imparted training to students related to placement during 2022-23. (Details as follows).

1. Placement statistics 2022-23 (as on 30 June 2023)

Dept.	No. of Offers	No. of Students	Salary Range	Major Companies
Civil Engg. (B. Tech)	21	17	2.0 - 6.2 LPA	AARBEE- Structures, L&T

Mechanical Engg. (B. Tech)	16	12	3.5 - 6.5 LPA	TECHNIP, L&T
Chemical Engg. (B. Tech)	7	6	3.0 – 4.0 LPA	TCS, COGNIAANT
Applied Electronics & Instr'n (B. Tech)	23	15	3,25 – 6 LPA	SCHNEIDER, QBURST
Electronics & Communication (B. Tech)	19	17	3.0- 5.5 LPA	QUEST, COGNIZANT
Total	86	67		

2. Training Activities 2022-23

Date	Programme	Duration	No. of Beneficiaries	Expenditure/Funding details
16,17 July'22	Trg. For Aptitude test, Interview-(Trg. Done by M/s Jay's Academy)	2 days	2023 Pass out students (183 Nos)	Rs.80,000/- PTA Welfare Fund
23,24 July'22	Trg. For Group Discussion, Resume Preparation- (Trg. Done by M/s Jay's Academy)	2 days	2023 Pass out students (185 Nos)	
20 Feb. '23	DAE (BARC) outreach Trg.	½ day	2023 Pass out students (70 Nos.)	NIL
09 March'23	Soft-Skills Trg- Govt. Employment Office	1 day	2024 Pass out students (278Nos.)	NIL
28-30 March'23	Trg. For Aptitude test, Interview, Group Discussion, Resume Preparation- (Trg. Done by M/s CGP Career Avenues)	3 days	2024 Pass out students (268Nos.)	Rs. 1,08,000/- PTA Welfare Fund

Additionally, CGPC played a pivotal role in arranging student scholarships for deserving students, instituted by Malayalee Engineers Association of North America. (MEANA). The Cell was also instrumental in coordinating two placement drives conducted by the District Employment Office Kozhikode.

6. ACTIVITY REPORT OF COUNSELLING AND GUIDANCE CELL 2022-23

Some students face mental stresses, mobile phone addiction, relationship issues, drug addiction, sleeplessness, and mild depression. Hence a Mental Health Consultant was appointed with an M.Phil. in Psychiatric Social Work, having several years of clinical

practice experience in counselling. This is done to ensure engineering college students' mental well-being. A newspaper ad was floated, and the counsellor was appointed after interviewing many candidates. The counsellor who was enthusiastic, friendly, and had a positive attitude was selected. The counsellor is Shejila B K, Bhagavathi Kandy. H.O, Punnassery. P.O, Narikkuni. Via, Kozhikode, Pin:673585, Kerala, as shown below.



The one-to-one counselling is going on four days a week in the counselling room on the campus. More sessions are arranged weekly for this whenever there is a need. Many students attended the counselling session and were happy with the sessions. Dr Ansu V is the convener of the counselling cell.

The counsellor addressed all the classes at the beginning of the sessions, as shown below.



Report of the counselling sessions

The counseling sessions for engineering students of Government Engineering College Kozhikode for this academic years have started in the college from 25th July 2022. As a result of the program "Introducing the Counselor" conducted in each department and each class with the Counselor and the Counseling Cell Convener, many students have started approaching the Counselor for counseling services. Both B.Tech and M.Tech students from each department and from every batch are availing counselling sessions. The number of students consulting the counselor for various mental health issues varies from day to day. Five to seven students are receiving counselling services each day.

A case history of the students will be taken on the first session, for which a structured case history taking format has been developed. The case history form includes sociodemographic details of the student, their expressed problems, medical diagnosis if any, history of the illness in present and past, their childhood history, provisional diagnosis and treatment plan. Considering the problem expressed and its severity structured assessment tools are used to diagnose the disorder. Conferring the assessment score and result the therapeutic modality will be designed and provided based on the need.

Reportedly students are facing various mental health issues. Due to which there is a significant decrease in academic performances of engineering students. So that the counsellor is providing an open space for all the students to talk to the counsellor about their problems without any hesitation or barriers. The counsellor is always following the principle of non- judgemental attitude and principle of confidentiality towards the students and towards their problems to ensure quality mental health services.

The problems expressed by the students are diverse and for each students the therapeutic approach and strategies will vary. There are numerous students approaching the counsellor to deal with their academic matters; such as poor concentration, memory issues while studying, lack of interest in reading and learning new theories, issues in accomplishing tasks, inability to complete assignments and records on time, easily distracted during classes and though studying. There are other students who used to approach the counsellor once the Examination Results are published in the website. The main reason for the sudden approach is due to failure in exams and the increase in number of added supplementary papers they have. Although there are students who avail the counselling services just before the commencement of examination due to their anxieties about the same. Some of the students are facing difficulties when they are asked to present a journal or to do their assigned seminars in front of the class with the presence of their tutor.

Mood disturbances are common among the students. There are many students who used to meet the counsellor to deal with their mood swings and mood related issues. Some of the students are having mild to moderate levels of depression. Those students are dealt with continuous therapy sessions at least once in a week.

Alcohol and other substance use among college students are critically increasing now a days. The students who have dependency and severely addicted to the substances are usually not ready to disclose it with their family, relatives, and teachers and with the counsellor too. But in our college the students with serious substance abuse are willingly and voluntarily availing the counselling services to get rid of their awful habit.

Relationship issues and interpersonal issues are reportedly high among college students. The positive side of the students in our college is they are easily building rapport with the counsellor and which resulted in sharing their relationship and interpersonal issues with the counsellor without any reluctance.

Family issues are severely affecting the mental health of each and every student. The separation of parents, divorce of the parents, other marital issues among parents, single parenting, authoritarian parenting, financial struggles of the family are making the students uncomfortable and it impairing their overall mental wellbeing.

Other reported significant issues of students are porn addiction, mobile addiction, issues with studying which leads them to think about discontinuation of the course, increased anger outburst, poor decision making, inability to communicate effectively, issues in problem solving, sleep disturbances, etc.

The students are provided with different therapies and approaches. They are;

1. Cognitive Behavioural Therapy
2. Dialectical Behaviour Therapy
3. Motivation Enhancement Therapy
4. Psychoeducation
5. Supportive Psychotherapy
6. Relaxation
7. Sleep hygiene
8. Attention Enhancement Therapy
9. Behaviour Therapy
10. Activity Schedule
11. Counselling

Several assessment tools are used to diagnose the problem of the students. They are;

1. BAI
2. BDI
3. Personality Assessment
4. Social anxiety scale
5. OCD scale
6. CDS
7. SDQ

The students are asked to attend follow up sessions to ensure mental wellbeing and to note their improvement.

7. ACTIVITIES OF KE 70, ISTE STUDENT CHAPTER 2022-2023

MISSION

ISTE inspires educators worldwide to use technology to innovate teaching and learning, accelerate good practice and solve tough problems in education by providing community, knowledge, and the ISTE standards, a framework for rethinking education and empowering learners.

VISION AND OBJECTIVES

ISTE's vision is that all educators are empowered to harness technology to accelerate innovation in teaching and learning and inspire learners to reach their greatest potential. The major objectives of ISTE are:

- Providing quality training programs to teachers and administrators of technical institutions to update their knowledge and skills in their fields of activity.
- Assist and contribute in the production and development of top-quality professional engineers and technicians needed by the industry and other organizations.
- Providing guidance and training to students to develop better learning skills and personality

ISTE activities are organized as general events or discipline specific events. The discipline specific events fall under five forums: Applied Electronics & Instrumentation, Chemical, Civil, Electronics & Communication and Mechanical. The activities of the ISTE Student Chapter during 2022-2023 academic year is listed below.

Details Activities 2022-23

S.No.	Date	Programme	Duration	No. of Beneficiaries	Expenditure/Funding details
GENERAL EVENTS					
1	19/03/2022	e-Football	4:30 PM	16	
2	20/12/2022	Pegasus (Chess tournament)	8:00 PM	7	
3	20/12/2022	Fusion360	4:30-5:30 PM	15	
4	22/12/2022	Hackeles	7:30-8:30 PM	36	
5	21/12/2022	Hugs to Bugs (Coding Quiz)	4:30 PM	12	
6	21/12/2022	Web Design	7-9 PM	5	
7	12/04/2023	Media Point	4:30 PM	7	
8	17/04/2023	Logolix	8 PM	25	
9	24/06/2023	Camp	5.30-9.30 PM	122	Rs.250/- per head, collected from participants
	25/06/2023	Camp	8.00 AM - 9.30 PM	122	
	26/06/2023	Camp	8.00 AM - 7.30 PM	122	
FORUM EVENTS					

Applied Electronics & Instrumentation Forum					
1	30/10/2022	Treasure Hunt	7:30 PM	78	
2	2/11/2022	Story Writing Competition	9 PM	6	
3	13/11/2022	Expynos (Quiz)	9 PM	33	
4	14/11/2022	Codeconia (Code correction competition)	7:30 PM	54	
Chemical Forum					
1	19/10/2022	Spell Down	4:30 PM	12	
2	2/11/2022	Hell-O-Ween (Photography competition)	1 PM	4	
3	2/11/2022	Trick or Treat (Doodle art competition)	9 PM	5	
4	16/11/2022	Ensayo (Written Ability Test)	4:30 PM	10	
5	13/12/2022	Online Webinar	8-8:30 PM	23	
6	14/04/2023	Denk Anders		5	
Civil Forum					
1	30/10/2022	La Physique (Quiz)	7:30 PM	44	
Electronics and Communication Forum					
1	2/11/2022	Ghoul's Night Out (Video making competition)	10 PM	3	
2	12/12/2022	Pattern Hunt	7:15 PM	80	
Mechanical Forum					
1	2/11/2022	Mask up Halloween (Mask making competition)	4:45 PM	4	
2	13/11/2022	Mr. Mechanic (Quiz)	8 PM	50	
3	14/03/2023	Gadgy Peddle (Marketing competition)		7	

A three days Techno-Management Camp (Aakrithi 23) was organized from 24.06.2023 to 26.06.2023.

The Camp had 94 registered participants and 28 students as Organizing team. A variety of events were conducted during the camp for the professional and personal development of the participants. The camp was conducted in a meticulous manner. The events of the camp included Introduction to AI Tools, Case Studies, Session with Mentalist, Group Discussion, Aptitude Training & Test, Mock Interview, Resume making, ISTE Alumni Interaction and many more.



Recognitions

Received **Best Student Chapter award** for the academic year 2021-2022, distributed in the annual convention held at Government Engineering College, Thrissur during 26th-27th March 2023. Also, Ms. Amrutha D, Electronics and Communication Engineering student was honoured with **Best Student** of ISTE Chapter. 43 students from this Chapter participated in the annual convention.



Indian Society for Technical Education
GEC Kozhikode Student Chapter KE-70

ISTE KERALA SECTION AWARDS 2021 - 22



Receiving
**BEST STUDENT
CHAPTER AWARD**

f @ in iste_geck



Indian Society for Technical Education
GEC Kozhikode Student Chapter KE-70

ISTE KERALA SECTION AWARDS 2021 - 22



Receiving
BEST STUDENT AWARD

f @ in iste_geck

8 ACTIVITIES OF THE NATIONAL SERVICE SCHEME

8.1 Database of Unit Level Annual Report for the Year 2022- 23

- Name of the College : Govt Engineering College, Kozhikode
- Unit Number : 162
- Name of Programme Officer : Christeena Neethu Priya C Alex
- Mobile Number :
- Email ID :

No	Particulars	SC		ST		OBC		General	
								/ Others	
		M	F	M	F	M	F	M	F
1.	No of Volunteers Enrolled in 1 st Year	0	0	0	0	18	15	2	15
2.	No of Volunteers Continued in NSS in 2 nd Year	0	0	0	0	15	17	7	4
Total		0	0	0	0	33	32	9	19

8.1.1 Details of Account Settlements

- Special Camp

Submitted

Performance/ Achievements (2022-23):

No.	Parameter	2015-16
1.	Plantation:	
	a) No. of plantation programmes organised.	1
	b) No. of Saplings planted in these programmes.	500

2.	Blood Donation:	
	a) No. of Blood Donation Camps organised.	2
	b) Blood Donated in the Camps (No. of Units).	168
3.	Literacy:	
	a) No. of Literacy programmes/drives organised	1
	b) No. of Persons made fully literate.	25
	c) No. of adopted villages/slums made fully literate.	1
4.	Health/Eye/Immunisation Camps:	
	a) No. of Camps organized	Nil
5.	Awareness Programmes/ Rallies/ Campaigns organised:	
	a) AIDS Awareness (No. of Programmes)	2
	b) Environment Awareness (No. of Programmes)	2
	c) Other Awareness Programmes (Please indicate the name of the Awareness Programme and number of programmes organised.	
	Blood Donation Awareness	1
	Organ donation Awareness	Nil
	Water Born Disease Awareness Programme	Nil
	Anti-Drug/ Anti Addiction programme	3
	Water Source Conservation Awareness	1
	Intellectual Property Right Awareness	1
	RTI Awareness	Nil
	Road Safety Awareness	1

Awareness Programme on Safety Measures to Train Passengers	Nil
Monsoon Epidemic Awareness	Nil
Legal Awareness	1
Emigration Awareness Programme	Nil
Cancer Awareness	2

8.1.2 Details of Special Camp Conducted 2022-23

- **Date :** February 25 - March 3,2023
- **Venue :** St.Mary's High School, Kakkadampoyil,Kozhikode
- **Project :** Digital Literacy
- **Achievements :** Provided Digital Literacy to various sectors of the locality in consideration to their daily life needs,ie volunteers organised and conducted classes on various topics like the usage of Googlepay , KSRTC booking, KSEB bill payment etc at Karimbin colony, a tribal colony situated in the Kakkadampoyil panchayat;topics like digital payments, Government sites , scholarships etc for villagers through SHG's and Kudumasree;topics like PowerPoint, Google forms , MS Excel etc for highschool students.The students were also taught and made aware of various scholarships useful and applicable to them.

8.1.3 Details of Programmes Conducted under Swach Bharath Abhiyan

Date : 29/11/2022

Venue : Govt Engineering College campus and premises

Projects : Cleaning and plastic waste collection

Achievements : Made the college campus clean and awareness among the students of keeping the Campus clean

Date : 16/07/2022

Venue : UHC West hill

Projects : Cleaning and Repairing

Achievements : The hospital which was utilized by about 100 people daily was in a stage of leakage .Also the foul smell due to the fungus were suffocating, after the cleaning and Partial Painting we were able to convert the place into warm and clean which helped the people who use the Health Centre a Lot.

Details of Regular Activities 2022 -23

Date	Programme	Duration	Beneficiaries
09/06/22	RED WINGS - BLOOD DONATION CAMP	6 Hrs	82
19/06/22	UDYANAM	6 Hrs	100
25/06/22	PATHEYAM	5 Hrs	60

27/06/22	VASTHRASHEKHARA	5 Hrs	40
27/06/22	REVIEW WRITING COMPETITION (READING DAY)	3 Hrs	40
16/07/22	Revamp- Health Centre Cleaning	6 Hrs	100
16/07/22	SHAPPADU	5 Hrs	100
26/07/22	SENT OFF CEREMONY	4 Hrs	100
17/08/22	Blood donation	5 Hrs	100
10/09/22	Blood Donation	3 Hrs	100
24/09/22	NSS DAY CELEBRATION	4 Hrs	200
24/09/22	GENERAL ORIENTATION	4 Hrs	150
24/09/22	ANNUAL MEET	2 Hrs	200
27/09/22	GO SEE SHARE - PODCAST	2 Hrs	200
30/09/22	Shappadu	3 Hrs	40
01/10/22	Blood Donation	3 Hrs	60
02/10/22	NSS day – Campus cleaning	8 Hrs	100
02/10/22	Poster making competition	8 Hrs	200
02/10/22	CAMPUS CLEANING	4 Hrs	200
02/10/22	BA-BAPU @153	2 Hrs	40
05/10/22	Letter writing competition	2 Hrs	100
06/10/22	Campus and Drug Abuse	2 Hrs	100
06/10/22	Shappadu	3 Hrs	50
11/10/22	Extempore competition	2 Hrs	40
14/10/22	Shappadu	3 hrs	50
19/10/22	Flashmob	2 Hrs	100
19/10/22	VIMUKTHI	2 Hrs	100
20/10/22	Maths quiz	2 Hrs	40
21/10/22	Shappadu	3 Hrs	50
25/10/22	Palavar	2 Hrs	60
27/10/22	POROTTAYUM BEEFUM	2 Hrs	60
28/10/22	Shappadu	3 Hrs	50
01/11/22	Anti-Drug Awareness Chain	2 Hrs	400
01/11/22	Blood donation	3 Hrs	50
13/11/22	ATHIJEEVANA	6 Hrs	150

14/11/22	RETRO STORY	2 Hrs	100
18/11/22	Shappadu	3 Hrs	300
15/11/22	NSS Room Cleaning	2 Hrs	40
19/11/22	Nirangal (Hope)-DAY 1	6 Hrs	40
20/11/22	Nirangal (Hope)-DAY 2	6 Hrs	40
25/11/22	Shappadu	3 Hrs	50
26/11/22	Padheyam @ Snehalayam	6 Hrs	50
27/11/22	Nirangal @ Hope -Day 3	6 Hrs	40
29/11/22	Campus cleaning drive	3 Hrs	200
01/12/22	Blood donation	3 Hrs	50
01/12/22	Awareness Wall-Aids Day	2 Hrs	100
02/12/22	Shappadu	3 Hrs	50
04/12/22	NAVY DAY	2 Hrs	40
09/12/22	Shappadu	3 Hrs	50
10/12/22	Nirangal (Anganwadi) - DAY 1	6 Hrs	40
11/12/22	Nirangal (Anganwadi) - DAY 2	6 Hrs	40
23/12/22	Shappadu	3 Hrs	50
23/12/22	Padheyam @ POOR HOMES Society	6 Hrs	60
01/01/23	Blood Donation	3 Hrs	40
01/01/23	Aarambashoorathvam	2 Hrs	50
06/01/23	Shappadu	3 Hrs	50
26/01/23	Republic day quiz	2 Hrs	60
26/01/23	Republic Day Celebration	2 Hrs	60
07/02/23	Blood Donation	3 Hrs	50
10/02/23	Shappadu	3 Hrs	50
14/02/23	Pulwama Attack	2 Hrs	80
15/02/23	World Cancer Day- Flashmob	2 Hrs	100
17/02/23	Shappadu	3 Hrs	50
18/02/23	NSS Corner Making	2 Hrs	120
24/02/23	Shappadu	3 Hrs	50
03/03/23	Shappadu	3 Hrs	50

04/03/23	NATPAC Survey	2 Hrs	40
09/03/23	jwala - Self defence	2 Hrs	80
10/03/23	Shappadu	3 Hrs	50
14/03/23	Free Recall Memory Test	2 Hrs	50
14/03/23	Blood Donation	3 Hrs	50
21/03/23	Spandanam – Pre Works	2 Hrs	60
21/03/23	PHOTOGRAPHY COMPETITION	2 Hrs	40
22/03/23	Spandhanam	6 Hrs	150
30/03/23	EXTEMPORE COMPETITION	2 Hrs	80
31/03/23	NRPF - Orientation	2 Hrs	100
31/03/23	Shappadu	3 Hrs	50
03/04/23	Blood Donation	3 Hrs	50
19/04/23	KTU Care - Orientation	2 Hrs	100
20/04/23	EID Kit Distribution	4 Hrs	80
25/04/23	Rudhirasena - Orientation	2 Hrs	100
28/04/23	Shappadu	3 Hrs	50
05/05/23	PREHRANA	2 Hrs	120

8.1.4 Details of Volunteers Participated in State Level/Inter University Camps (if any)

Name	Gender	Enrollment Number	Venue
AGIL H	Male	162032021	Federal Institute of Science And Technology, Angamaly
FATHIMATH SHAFNA.P.T	Female	162082021	
AVANI SATHYAN	Female	162012021	Viswajyothi College of Engineering and Technology, Vazhakulam
MOHAMED	Male	162582021	

MUSTHAFA			
SHAMILA P	Female	162092021	Sree Narayana Institute of Technology,Adoor
FEMINSHA SHERIN	Female	162332021	
BINOY EZACK	Male	162682021	College of engineering chengannur
VISHNU.K	Male	162662021	Younus College Of Engineering & Technology College in Kollam
MUHAMMED JASIM K N	Male	162442022	College of Engineering Trivandrum (CET)
MUHAMMED NIYAS K T	Male	162482022	
MUHEEDA MAHEED	Female	162372022	
SONA MATHEW	Female	162502022	
RISWAN KABEER	Male	162332022	LBS Institute Of Technology for Women Thiruvananthapuram

8.1.5 Details of Volunteers Participated in Directorate National Level Camps (if any)

Name	Gender	Enrollment Number	Venue
------	--------	-------------------	-------

AGIL H	Male	162032021	INDORE, Madhya Pradesh
--------	------	-----------	------------------------

8.2 Database of Unit Level Annual Report for the Year 2022- 23

- Name of the College : Govt Engineering College, Kozhikode
- Unit Number : 258
- Name of Programme Officer : Dhaneesh K P
- Mobile Number : 9496470811
- Email ID : dhaneeshkpchem@gmail.com

No	Particulars	SC		ST		OBC		General	
								/ Others	
		M	F	M	F	M	F	M	F
1.	No of Volunteers Enrolled in 1 st Year	1	6	0	0	9	17	10	7
2.	No of Volunteers Continued in NSS in 2 nd Year	1	1	0	0	13	18	8	6
Total		2	7	0	0	22	35	18	13

8.2.1 Details of Account Settlements

- Special Camp

Submitted

Performance/ Achievements (2022-23):

No.	Parameter	2015-16
-----	-----------	---------

1.	Plantation:	
	a) No. of plantation programmes organised.	1
	b) No. of Saplings planted in these programmes.	500
2.	Blood Donation:	
	a) No. of Blood Donation Camps organised.	2
	b) Blood Donated in the Camps (No. of Units).	168
3.	Literacy:	
	a) No. of Literacy programmes/drives organised	1
	b) No. of Persons made fully literate.	25
	c) No. of adopted villages/slums made fully literate.	1
4.	Health/Eye/Immunisation Camps:	
	a) No. of Camps organized	Nil
5.	Awareness Programmes/ Rallies/ Campaigns organised:	
	a) AIDS Awareness (No. of Programmes)	2
	b) Environment Awareness (No. of Programmes)	2
	c) Other Awareness Programmes (Please indicate the name of the Awareness Programme and number of programmes organised.	
	Blood Donation Awareness	1
	Organ donation Awareness	Nil
	Water Born Disease Awareness Programme	Nil
	Anti-Drug/ Anti Addiction programme	3
	Water Source Conservation Awareness	1

Intellectual Property Right Awareness	1
RTI Awareness	Nil
Road Safety Awareness	1
Awareness Programme on Safety Measures to Train Passengers	Nil
Monsoon Epidemic Awareness	Nil
Legal Awareness	1
Emigration Awareness Programme	Nil
Cancer Awareness	2

8.2.2 Details of Special Camp Conducted 2022-23

- **Date :** February 25 - March 3,2023
- **Venue :** St.Mary's High School, Kakkadampoyil,Kozhikode
- **Project :** Digital Literacy
- **Achievements :** Provided Digital Literacy to various sectors of the locality in consideration to their daily life needs,ie volunteers organised and conducted classes on various topics like the usage of Googlepay , KSRTC booking, KSEB bill payment etc at Karimbin colony, a tribal colony situated in the Kakkadampoyil panchayat;topics like digital payments, Government sites , scholarships etc for villagers through SHG's and Kudumasree;topics like PowerPoint, Google forms , MS Excel etc for highschool students.The students were also taught and made aware of various scholarships useful and applicable to them.

8.2.3 Details of Programmes Conducted under Swach Bharath Abhiyan

Date : 29/11/2022

Venue : Govt Engineering College campus and premises

Projects : Cleaning and plastic waste collection

Achievements : Made the college campus clean and awareness among the students of keeping the Campus clean

Date : 16/07/2022

Venue : UHC West hill

Projects : Cleaning and Repairing

Achievements : The hospital which was utilized by about 100 people daily was in a stage of leakage Also the foul smell due to the fungus were suffocating, after the cleaning and Partial Painting we were able to convert the place into warm and clean. Which Helped the people who use the Health Centre a Lot.

Details of Regular Activities 2022 -23

Date	Programme	Duration	Beneficiaries
09/06/22	RED WINGS - BLOOD DONATION CAMP	6 Hrs	82
19/06/22	UDYANAM	6 Hrs	100
25/06/22	PATHEYAM	5 Hrs	60
27/06/22	VASTHRASHEKHARA	5 Hrs	40
27/06/22	REVIEW WRITING COMPETITION (READING DAY)	3 Hrs	40
16/07/22	Revamp- Health Centre Cleaning	6 Hrs	100
16/07/22	SHAPPADU	5 Hrs	100
26/07/22	SENT OFF CEREMONY	4 Hrs	100
17/08/22	Blood donation	5 Hrs	100
10/09/22	Blood Donation	3 Hrs	100
24/09/22	NSS DAY CELEBRATION	4 Hrs	200
24/09/22	GENERAL ORIENTATION	4 Hrs	150
24/09/22	ANNUAL MEET	2 Hrs	200
27/09/22	GO SEE SHARE - PODCAST	2 Hrs	200
30/09/22	Shappadu	3 Hrs	40
01/10/22	Blood Donation	3 Hrs	60
02/10/22	NSS day – Campus cleaning	8 Hrs	100
02/10/22	Poster making competition	8 Hrs	200
02/10/22	CAMPUS CLEANING	4 Hrs	200
02/10/22	BA-BAPU @153	2 Hrs	40
05/10/22	Letter writing competition	2 Hrs	100
06/10/22	Campus and Drug Abuse	2 Hrs	100
06/10/22	Shappadu	3 Hrs	50
11/10/22	Extempore competition	2 Hrs	40
14/10/22	Shappadu	3 hrs	50
19/10/22	Flashmob	2 Hrs	100
19/10/22	VIMUKTHI	2 Hrs	100
20/10/22	Maths quiz	2 Hrs	40
21/10/22	Shappadu	3 Hrs	50
25/10/22	Palavar	2 Hrs	60

27/10/22	POROTTAYUM BEEFUM	2 Hrs	60
28/10/22	Shappadu	3 Hrs	50
01/11/22	Anti-Drug Awareness Chain	2 Hrs	400
01/11/22	Blood donation	3 Hrs	50
13/11/22	ATHIJEEVANA	6 Hrs	150
14/11/22	RETRO STORY	2 Hrs	100
18/11/22	Shappadu	3 Hrs	300
15/11/22	NSS Room Cleaning	2 Hrs	40
19/11/22	Nirangal (Hope)-DAY 1	6 Hrs	40
20/11/22	Nirangal (Hope)-DAY 2	6 Hrs	40
25/11/22	Shappadu	3 Hrs	50
26/11/22	Padheyam @ Snehalayam	6 Hrs	50
27/11/22	Nirangal @ Hope -Day 3	6 Hrs	40
29/11/22	Campus cleaning drive	3 Hrs	200
01/12/22	Blood donation	3 Hrs	50
01/12/22	Awareness Wall-Aids Day	2 Hrs	100
02/12/22	Shappadu	3 Hrs	50
04/12/22	NAVY DAY	2 Hrs	40
09/12/22	Shappadu	3 Hrs	50
10/12/22	Nirangal (Anganwadi) - DAY 1	6 Hrs	40
11/12/22	Nirangal (Anganwadi) - DAY 2	6 Hrs	40
23/12/22	Shappadu	3 Hrs	50
23/12/22	Padheyam @ POOR HOMES Society	6 Hrs	60
01/01/23	Blood Donation	3 Hrs	40
01/01/23	Aarambashoorathvam	2 Hrs	50
06/01/23	Shappadu	3 Hrs	50
26/01/23	Republic day quiz	2 Hrs	60
26/01/23	Republic Day Celebration	2 Hrs	60
07/02/23	Blood Donation	3 Hrs	50
10/02/23	Shappadu	3 Hrs	50
14/02/23	Pulwama Attack	2 Hrs	80
15/02/23	World Cancer Day- Flashmob	2 Hrs	100

17/02/23	Shappadu	3 Hrs	50
18/02/23	NSS Corner Making	2 Hrs	120
24/02/23	Shappadu	3 Hrs	50
03/03/23	Shappadu	3 Hrs	50
04/03/23	NATPAC Survey	2 Hrs	40
09/03/23	jwala - Self defence	2 Hrs	80
10/03/23	Shappadu	3 Hrs	50
14/03/23	Free Recall Memory Test	2 Hrs	50
14/03/23	Blood Donation	3 Hrs	50
21/03/23	Spandanam – Pre Works	2 Hrs	60
21/03/23	PHOTOGRAPHY COMPETITION	2 Hrs	40
22/03/23	Spandhanam	6 Hrs	150
30/03/23	EXTEMPORE COMPETITION	2 Hrs	80
31/03/23	NRPF - Orientation	2 Hrs	100
31/03/23	Shappadu	3 Hrs	50
03/04/23	Blood Donation	3 Hrs	50
19/04/23	KTU Care - Orientation	2 Hrs	100
20/04/23	EID Kit Distribution	4 Hrs	80
25/04/23	Rudhirasena - Orientation	2 Hrs	100
28/04/23	Shappadu	3 Hrs	50
05/05/23	PREHRANA	2 Hrs	120

8.2.4 Details of Volunteers Participated in National Integration Camps (if any)

Name	Gender	Enrollment Number	Venue
HARIKRISHNAN E.L.	Male	258062021	Rashtrasant Tukadoji Maharaj Nagpur University

SNEHA MARY SUNNY	Female	258292021	Mar Baselios Christian College of Engineering & Technology, Kuttikkanam, Peermade
---------------------	--------	-----------	---

Name	Gender	Enrollment Number	Venue
SREEHARI N S	Male	258052021	Federal Institute of Science And Technology, Angamaly
SNEHA MARY SUNNY	Female	258292021	
ANAGH P	Male	258132021	Viswajyothi College of Engineering and Technology, Vazhakulam
NANDHITA C P	Female	258522021	
RAMEES BABU	Male	258582021	Sree Narayana Institute of Technology,Adoor
HARIKRISHNAN E.L.	Male	258062021	Amal Jyothi College of Engineering kanjirappally
NANDANA LAKSHMANAN	Female	258402021	Amal Jyothi College of Engineering kanjirappally/Government Engineering College Trissur
KARTHIK C K	Male	258082021	Government Engineering College Trissur
MUHAMMED SHAMEEL S	Male	258502022	College of Engineering Trivandrum (CET)
JINCY C	Female	258382022	

8.2.5 Details of Volunteers Participated in Directorate Level/ University Level Camps (if any)

Name	Gender	Enrollment Number	Venue
NANDANA LAKSHMANAN	Female	258402021	Swamy Saswathikananda College,Poothotta

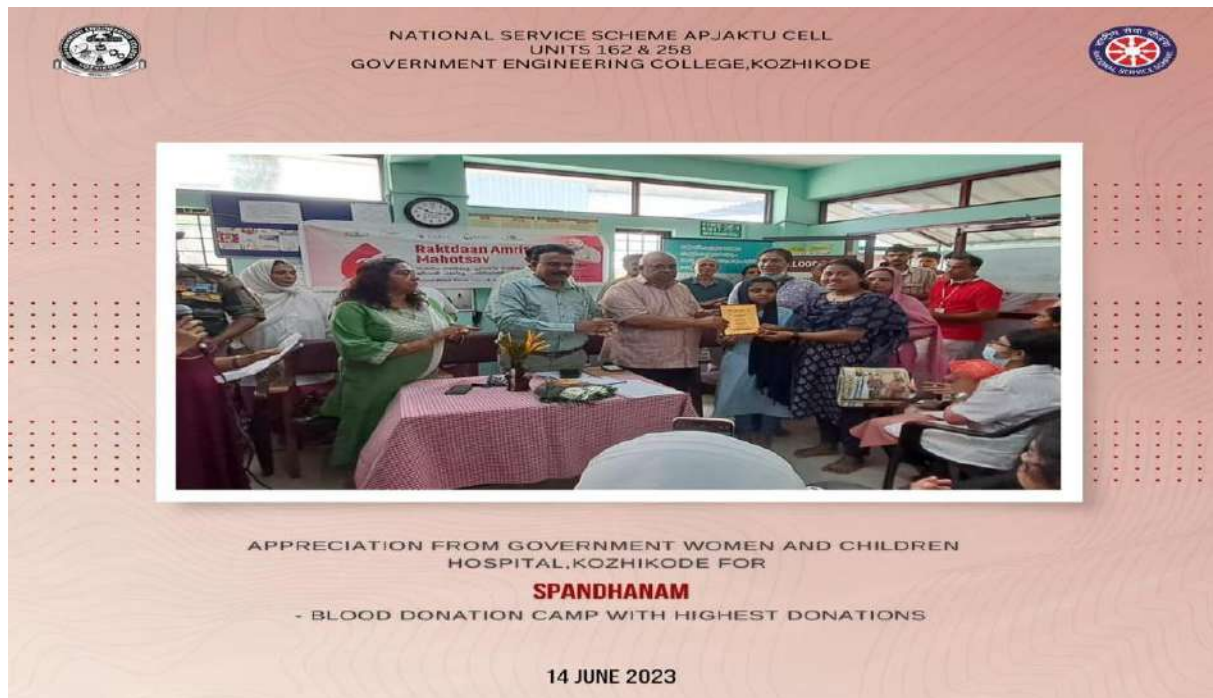
8.3 Achievements

Nss Unit 162 has recieved Best Unit and Best Programme Officer Award (Unit 162, Prof. Rashid Ummer N T) APJAKTU NSS Directorate level for the year 2021-22.The award is for the excellence in Activities & Contributions for the Community during the period 2021-22.



National Service Scheme APJAKTU Cell (Units 162 & 258) of Government Engineering College, Kozhikode has received an award for 'Highest collection

from one camp' on World Blood Donor Day on 14th June from Government Women and Children hospital, Kozhikode.



Harikrishnan E L of S6 Chemical Engineering (unit 258) have been selected as one of the 5 male volunteers representing State NSS in the National Integration camp held at Nagpur from 26th February to 4th March 2023.



9.Activity Report Scheme for Her Empowerment (SHE) 2022-2023

Inauguration of SHE GECK

Name of the Event: Inauguration of SHE CELL Govt. Engineering College in Kozhikode, and Debate Competition

Date: February 9, 2023 Thursday

Venue: Govt. Engineering College, Kozhikode Time: 10:30 AM to 2:30 PM

Detailed Report of the Programme: The programme was hosted by Anjana A. Nair, S4 EC. The function started with prayer by the college choir team. Dr. Sajith PP, principal of GECK, officially welcomed the gathering. Later, Dr. Manju M. S., the coordinator of SHE GECK, presented an overview of SHE. The presidential address was delivered by Kozhikode Municipal Corporation councillor Smt. C.S. Satyabhama. SHE Geck was inaugurated by Dr. S. Jayasree, honourable Kozhikode municipal corporation health standing committee chairperson, by lighting the lamp. Her speech was motivating and inspiring to the students. She emphasized that acquiring knowledge and skills is the proven path to empowerment. Dr. Vandana Sredharan, the state coordinator of SHE delivered a felicitating address giving an outline of the inception and growth of SHE in GCE Kannur. Sri Basheer PTA vice president, Dr. Anirudan P, placement officer at GECKKD, and Ms. Parvathy VR, representative of College Union also felicitated the function. Mrs. Ranji Karuna, co-coordinator of She GECK delivered the vote of thanks. The college teaching and non-teaching staff and students attended the function.

After the inaugural ceremony, Ms. Nileena Atholi, Sub Editor, Mathrubhumi Printing and Publishing Company Ltd., Kozhikode delivered a session on "Effective communication in debating". As part of the session a debate competition was conducted. Deneesa, fourth-year AIE student, moderated the competition. The competition was judged by Ms. Nileena Atholi, Ms. Nasma Noor, Assistant Professor, Department of Civil engineering and Mrs. Shyba A, Assistant Professor, Department of Civil engineering. Around twenty students participated in the competition. The debate was conducted in three rounds. The winning team was given a cash prize of Rs. 1,000/-





EXPERT TALK

Date: March 8 ,2023

Venue:

Placement Hall,

Time: 2:00 AM to

3:30 PM

Detailed Report of the Programme:

SHE GECK in collaboration with WOMEN CELL GECK conducted an Expert Talk session.

The programme was hosted by Parvathy U S, S4 ME. The function started with a prayer by the college choir team. Women cell Member, Ms. Shahara Munarva, officially welcomed the gathering. Felicitation was given by principal Dr. Leena Mary. The speakers for the day were psychologist Renitta Monica Rodrigues, Clinical Psychologist of Seethalayam, Govt. District Homoeo Hospital, Kozhikode and Dr. Deepthi K ,Medical officer, National Ayush Mission, Govt. District Homoeo Hospital, Kozhikode. As a part of making the students aware of the capabilities and the wonders they could do as women, the talks titled “Innovations and technology for gender equality” and “Know thyself” were delivered by the speakers respectively. Dr. Deepthi talked about women’s health and hygiene and explained the significance of maintaining menstrual hygiene and following a nutritious diet. Dr. Renitta elaborated on the importance of mental health for innovative and critical thinking. After the session the speakers interacted with the audience and cleared their doubts. The program ended with a vote of thanks by Ms. Lakshmi S Nair, Chair of SHE GECK

Topic : **Innovation and technology for gender equality, Know thyself**

Speakers: 1 . Ms. Renitta Monica Rodrigues

2 . Dr Deepthi K



10 ACTIVITYREPORT ON THE ANTI-NARCOTIC CELL

1. The anti-narcotic campaign held on 19 October 2022, 10.30 am at Government Engineering College Kozhikode

Government Engineering College, Kozhikode, in coordination with VIMUKTHI - the de-addiction mission started by Kerala State Excise Department and CLIJEO, Legal Aid Clinic, Govt. Law College Kozhikode launched an Anti-drug campaign and awareness program on 19 October 2022 to eradicate drug abuse among students. The program was conducted in the placement hall of the college and was presided over by Dr Sajith P P, Principal, Government Engineering College, Kozhikode. Anti-Narcotic cell coordinator, Dr. Ansu. V welcomed the guests and addressed the students, spreading the awareness message through his speech. He shared his concern about the risk of mental health issues like anxiety, depression etc., among the youth caused due to excessive drug usage. He also stated that the campaign aims to mobilise support and inspire students to act against drug use.

The function was inaugurated by Sameer Kishen IAS, Assistant Collector, Kozhikode, who motivated the students about the importance and significance of leading a healthy and mindful life. Shri. Abu Abraham, Chief excise commissioner, Kozhikode was the chief guest of the gathering and Smt. Anjali P Nair, faculty Co-ordinator, CLIJEO, delivered an Anti-drug awareness speech to educate our students on the importance of preventing intoxication and total intoxication from society. She highlighted the horrific experiences of drug addiction and its impact on family and society. She also mentioned the laws and actions taken against drug usage.

Shri. Basheer, PTA president, GECK, Shri. Elias M Eldhose, General Secretary, College Union, GECK, offered congratulations and ensured their full support and participation in eradicating the use of drugs on campus. The function was concluded by Shri. Rashid Ummer N T, NSS program officer, GECK. He assured the support of the team of NSS Volunteers, GECK, to make this campaign successful while delivering the vote of thanks. The function was followed by flash mobs conducted by Government Engineering College Kozhikode students and Government Law College Kozhikode. More awareness programs are planned for the future.



1 Inauguration ceremony



2. Chief Guest Shri. Sameer Kishen addressing the audience



3. Anti-drug awareness speech by Smt. Anjali P Nair, Faculty Co-ordinator, CLIJEO



4. The Audience



Flash mob by students of Government Engineering College and Government Law College Kozhikode

2. Talk on Anti-Narcotics by E Jayarajan, Sub inspector, Nadakkavu police station on 27 October 2022 at Government Engineering College Kozhikode

YouTube Link: <https://youtu.be/ZtXf0-Dmavs>



GOVERNMENT ENGINEERING COLLEGE KOZHIKODE
INDUCTION PROGRAMME

TALK ON

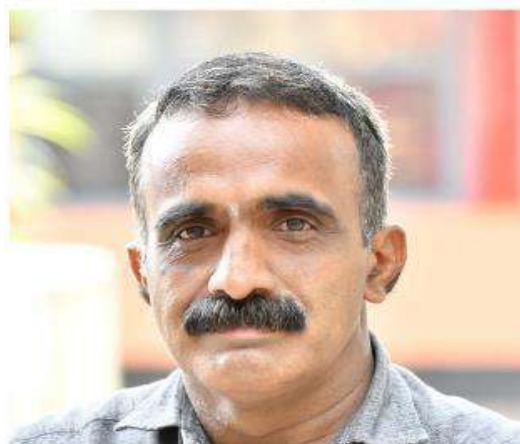
Anti Narcotics

BY

E Jayarajan

Sub inspector of police

Nadakkavu police station



27 OCT. 2022, 2.30 PM

A talk on Anti-Narcotics was arranged by E Jayarajan sub-inspector, Nadakkavu police station, on 27 October at 2.30 pm at the induction program for all the students of first-year students. He discussed the dangers of using narcotics and how to prevent them. This talk was liked by the students very much, as per the feedback.



3. Talk on 'CAMPUS AND DRUG ABUSE' by Dr Ramash Kuttiyil Asst. Professor of Department of Psychiatry, Medical College, Kozhikode, on 6 October 2022
" Don't be a slave to drugs; don't let the chemicals be a master of your life ."

NSS APJAKTU Cell Unit (162 & 258) Government Engineering College, Kozhikode, in association with the anti-narcotic cell of geck and college union geck, is conducted a webinar handled by Dr Ramash Kuttiyil Asst. Professor of Department of Psychiatry, Medical College, Kozhikode.

Venue: Google meet, <https://meet.google.com/kxg-ogfd-icn>

Drug abuse leads to various social, physical and emotional problems. The session deals with the addiction of college students to drugs, its side effects, hazards and consequences and how to work on it.



4. Human chain to create awareness on Anti-Narcotics at Government Engineering College Kozhikode on 1 November 2022, 3 pm to 4.30 pm

A human chain was organised to create awareness of Anti-Narcotics at Government Engineering College Kozhikode and on the nearby roads on 1 November 2022, from 3 to 4.30 pm, including the staff, faculty, students and parents. A flash mob was also conducted after the human chain.





5 Shejila, clinical phycologist took two sessions on 27 October 2022, 9.30 am and 1.30 pm, for all the students of the first year on mental well-being, emotional stability, and the harmful effects of drug abuse

Youtube video: <https://youtu.be/hn58wDtYZ1o>

The counsellor also provides personal counselling sessions to the students four days a week at our campus.



6.Regular classes are also organised by Sri Biju, Anti narcotic cell of the Nallalam police.

As per recent newspaper reports, drug abuse cases are rising among Kerala's school and college students. Hence, an Anti-Narcotic cell is formed in our institute. Counselling is arranged for students who are facing drug addiction-related problems. The Narcotic cell of Kerala police, Kozhikode, was requested to take awareness programs at our institution to safeguard our students against drug usage. As per our request, they are conducting regular sessions for the students. Sri Biju of Narcotic cell has taken classes with other police officers for first-year students. The classes by Sri Biju were excellent. More classes are planned for the future for all the remaining students. Dr Ansu V is the convener of the cell. The photos of the sessions are given below.



7. Anti-narcotic campaign in association with YUVATHARANG, CLIJEO, Government Law College Kozhikode, Government Engineering College Kozhikode, VIMUKTHI, and YODHAV, Kerala police held on 13 November 2022, 2.30 pm at Kutichira

YUVATHARANG, CLIJEO, VIMUKTHI, Yodhavu, and Government Engineering College Kozhikode organised an Anti-Narcotic Campaign for awareness of the harmful effects of drug usage in society. The inaugural ceremony of the same was conducted at Kuttichira open stage on 13 November 2022 from 2.30 pm onwards. The campaign will last for one and a half months until 27 December. The inaugural ceremony started with an awareness procession from Grand Auditorium at 02.30 pm flagged off by Sri P Rajesh, Inspector of Police & SHO, Chemmangad. Shree B V Muhammed Ashraf, General Secretary of Yuvatharang, welcomed the dignitaries and gathering. All the speakers conveyed the increase in the usage of drugs among the youth as the primary concern that demands such general awareness programs to address the harmful effects of its usage in society. Shree A V Rasheed Ali presided over the function. Later in the evening, Shri M K Raghavan, a Member of the Parliament, officially inaugurated the campaign and addressed the gathering. He conveyed that to counteract the increase in drug usage, the source of its supply has to be identified and removed. He also recommended stronger checks at all state boundaries, including buses and cars. The Chief Guest Advocate, Shukoor (Film fame), raised his concern that several people are getting involved in drug cases recently and getting their life spoiled. He pointed out that once a person gets involved, the public invariably sees them as a criminal and suggests they should be given a chance to improve their life after relieving the case. The honourable guest Shree P Bijuraj, Assistant Commissioner of Police, also addressed that the usage of drugs among the youth has increased expeditiously, and several cases are being reported. He suggested that the police, excise, and society should work hand in hand together to resolve this problem. Shree K Moideen Koya (Counselor), Dr Krishnakumar N (Principal, Govt Law College), Dr Ansu V (Asst Prof & Convenor, Govt Engg College), Shree Jalaludheen N (Civil Excise Officer) felicitated the event. Dr Ansu V addressed concerns about drug usage, even among school children, and its harmful effects. He suggested that the youth should be actively involved in sports and games; daily family time is necessary to keep the children from Narcotics. The vote of thanks for the awareness campaign was delivered by Shuhaib, and CLIJEO, Government Law College.

കാലപ്രതിപാദി
2022 നവംബർ 13

<p>2.30 PM : വീളംബല ജോലി ഓഫീസ് (ഗ്രാൻറ് ഓഫീസററിയം) ശ്രീ. പി. മോളെ (Inspector of Police & SHO, Chemmangad)</p> <p>4.00 PM : കുട്ടിമുറി ഓഫീസ് ശ്രീ. ബി.വി. മോഹൻ അഷ്വിൻ (ജനറൽ സെക്രട്ടറി, യുവജനം)</p> <p>അദ്ധ്യക്ഷൻ : ശ്രീ. എ.പി. വർഗ്ഗീസ് (ഡയറക്ടർ, യുവജനം)</p> <p>ഉദ്യോഗസ്ഥൻ : ശ്രീ. എം.കെ. രാഘവൻ എം.പി</p> <p>മുഖ്യാതിഥി : അഡ്വ. കൃഷ്ണൻ (നോ ഓർ കേസ് കോർട്ട് ഓഫീസ്)</p> <p>വിശിഷ്ടാതിഥി : ശ്രീ. പി. ബിജുരാജ് (നോ. ഓ. കേസ് കോർട്ട് ഓഫീസ്, കോർട്ട് ഓഫീസ്)</p> <p>ആശ്വാസം : ശ്രീ. കെ. മോഹൻ കോയ (നോ. കേസ് കോർട്ട് ഓഫീസ്, കോർട്ട് ഓഫീസ്)</p> <p>2. ഡോ. കൃഷ്ണകുമാർ എൻ (നോ. കേസ് കോർട്ട് ഓഫീസ്, കോർട്ട് ഓഫീസ്)</p> <p>3. ഡോ. അനന്തൻ (നോ. കേസ് കോർട്ട് ഓഫീസ്, കോർട്ട് ഓഫീസ്)</p> <p>4. ശ്രീ. മോഹൻ (നോ. കേസ് കോർട്ട് ഓഫീസ്, കോർട്ട് ഓഫീസ്)</p> <p>നന്ദി : ശ്രീമതി അമലാ പി. നായർ (നോ. കേസ് കോർട്ട് ഓഫീസ്, കോർട്ട് ഓഫീസ്)</p>	         
--	---

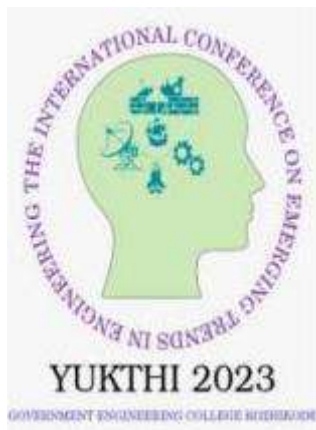
കിരോ
തിരുവനന്തപുരം ജില്ല

0495 2732880
 0447889257 | 0446115326 | 0746062805
 0447881200 | 0906870033 | 8043805561
 loganabgk@gmail.com



Regular anti-narcotic awareness messages are shared with the students, parents, and faculty on social media platforms almost every day.

12. A Report on International Conference on Emerging Trends in Engineering -YUKTHI 2023



Government Engineering College Kozhikode successfully conducted the first edition of International conference on Emerging Trends in Engineering Yukthi in the year 2021. The second edition, Yukthi 2023 was a successful attempt to further explore the avenues in technology through conducting events such as paper presentations, panel discussions, webinars etc. with the active participation of researchers across the Globe. Yukthi 2023 was envisaged to act as a venue for the confluence of the latest ideas, thoughts and innovations of talented minds all over the world. The International Conference was held **10th to 12th April 2023** in the hybrid mode using both online method and in-person modes. Yukthi 2023 also has additional tracks on special topics.

Subtracks

The conference consisted of 4 subtracks organized by the 4 engineering departments of the institute.

- a) *International Conference on Emerging Trends in Signal Processing* by the Dept. of Applied Electronics

The conference invited papers on the following fields:

Signal Processing (Audio, Image and Video), Computer Vision, Embedded Systems, VLSI Design, Nano-Electronics, Optoelectronics, Networking, RF Design, Wireless Systems, Communication Systems, Instrumentation Systems, Kinematics, Dynamics and Control of Legged, Wheeled and Tracked Robots, Vision based Systems, Advances in Sensors and Actuators.

Algorithms and Data Structures, Cryptography, Machine Learning, Natural Language Processing, Parallel and Distributed Computing, Computer Networks.

- b) *International Conference on Sustainable Solutions for Infrastructure Development* by the Dept. of Civil Engineering

The conference invited papers on the following fields:

Structural Engineering, Computer Applications in Civil Engineering, Structural Health Monitoring, Geotechnical Engineering, Hydraulics and Water Resources Engineering, Green-Engineering, Environmental Engineering and Geoinformatics, Traffic and Transportation Engineering.

c) *International Conference on Process Engineering and Sustainable Technology – (STEP 2023)* by the Dept. of Chemical Engineering.

The conference invited papers on the following fields:

Green Technologies, Biotechnology, Process Design and Safety, Novel Materials, Process Control and Automation, Process Intensification, Nanotechnology, Food and Pharmaceuticals, Catalysis, Polymer Technology, Computational Fluid Dynamics

d) *International Conference on Mechanical Engineering and Energy Technologies-(URJA 2023)* by the Dept. of Mechanical Engineering

The conference invited papers on the following fields:

Thermal Engineering, Fluids and Energy Engineering, Mechanical Design, Materials and Manufacturing, Industrial Engineering and Optimization, Tribology, Nanoscience and Technology

Organisers

The event was effectively organised by the team consisting of faculty members from all the departments of the college. The advisory committee consisted of eminent professors from universities around the globe.

Patron

Dr. Byjubai T. P., Director of Technical Education,
Govt. of Kerala

Chairman

Dr. Sajith P. P., Principal (in Charge), GEC Kozhikode

General Convener

Prof. Sindhu N., Assistant Professor, Dept. of CH, GECK

Organizing Secretary

Dr. Sudheesh R. S., Associate Professor, Dept. of ME, GECK

Conference Coordinators

Dr. Shajee Mohan B. S. & Dr. Abdul Rahman V. (AE&I)

Dr. Pradeep M. Kamath & Prof. Fouad Ebn Muhammed Abdulla (ME)

Prof. Shyja M & Prof. Dhaneesh K. P. (CH)

Prof. Nasma Noor & Prof. Raji Karuna. (CE)

Advisory Committee

Dr. Erwin Fuhrer, Karlsruhe Institute of technology, Germany

Dr. Muhammad Saleem, Jubail Industrial College, Royal Commission for Jubail and Yanbu,

Saudi Arabia

Dr. Nishanth G. Chemmangattuvalappil, University of Nottingham Malaysia

Dr. Sandeep Mouvanal, University of Nottingham, UK

Dr. Vijay John, RIKEN, Japan

Dr. Xavier Serra, University of Pompeu Fabra, Barcelona, Spain

Dr. Athira P, IIT Palakkad

Dr. C. Chandrasekhar, IIT Madras

Dr. John Joseph, IIT Guwahati

Dr. L. S. Ganesh, IIT Madras(Retd.)
Dr. Navin Gopinathan, IIT Ropar
Dr. N Siva prasad, IIT Madras(Retd.) GITAM University
Dr. Sarit Das, IIT Madras
Dr. T Thyagaraj, IIT Madras
Dr. Elizabeth Elias, NIT Calicut(Retd.), Sahridaya College of Engineering & Technology,
Thrissur
Dr. George K Varghese, NITCalicut
Dr. M.V.L.R. Anjaneyulu, NIT Calicut
Dr. Vaishakh Nair, NIT Surathkal
Dr. V Sivasubramanian, NIT Calicut

Official Sponsors

The conference was sponsored by TEQIP-Phase II. An amount of Rs. 10 lakhs was allocated with the consent and support of the Board of Governors of GEC, Kozhikode.

The kit for the participants was sponsored by Matterlab owned by the Uralungal Labour Contract Co-operative Society Ltd.

Registration Fee

The conference committee fixed the following rates for participation in the event.

Registration Fee

Industrial Delegates/Research Scholars: Rs. 2500/-

/Academicians/Students

Participation: Rs. 500/-

Foreign Delegates: \$75/-

Publication Partner

The globally renowned publisher Elsevier SSRN was selected publishing the papers selected for the conference.



Publicity Partner

The agency “All conference Alerts” played an active role in providing publicity for the conference among researchers and academicians.



Press Meet

A press meet was held at Calicut Press club on 9th April 2023 in connection with Yukthi 2023. The meet briefed the press about the conference and its relevance for the academic community.



Fig. 1: Press meet held at Calicut Press Club on 9th April 2023

Inauguration of YUKTHI 2023

The conference started with formal inauguration of the event on 10th April 2023 at 10.00 am at the newly constructed seminar hall of the department of mechanical engineering. The inaugural ceremony started with a prayer followed by Welcome Address by the organizing secretary, Dr Sudheesh R S and Presidential address by Dr Sajith P P, the Principal in charge GEC Kozhikode. The conference was inaugurated by the chairman of BOG, Dr L S Ganesh by opening the book of abstracts followed by the inaugural address. Dr Sandeepkumar M, and Dr Erwin Furher felicitated the function. The inaugural session concluded with a vote of thanks by Prof Sindhu N.

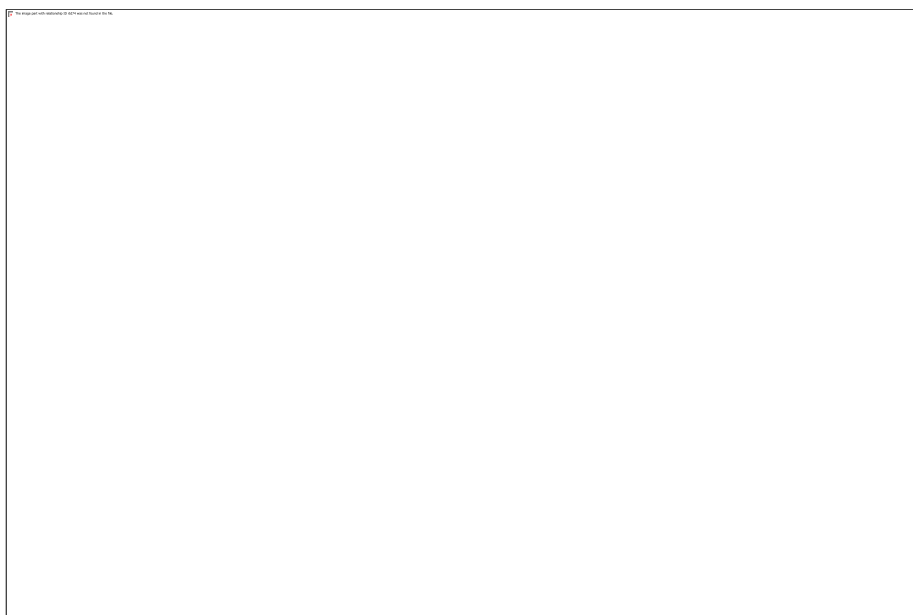


Fig. 1: Inauguration of the Conference by releasing the Book of Abstracts

The inaugural session was followed by keynote address by Prof. L S Ganesh, Former HOD, department of management studies, IIT Madras & chairman of BOG GEC Kozhikode. The topic of the talk was titled “Human Society, Development, Natural Systems and the Sustainability Imperative: What should Science, Engineering and Technology do?”

The talk dealt with the central role played by Science, Engineering and Technology in the evolution of our modern world. The progress of human species on many existential dimensions include life expectancy, availability of food, clothing, shelter, access to education, healthcare, and various social services, except to the poorest of the poor. However, the contemporary concerns about climate change, the state of our natural environment, and the threats to our very survival as a species reflect a clear and present adverse risk. Debates on Sustainability abound.



Fig. 2: Prof. L S Ganesh delivering the Expert Lecture

The talk first distinguished between Science, Engineering and Technology and pointed to Technology's influences on human society and our natural environment. It then focussed on our quest for a circular economy, in which the concept of waste will become irrelevant. Whether our species will realize its aims of sustainability or will plummet to its doom will depend upon how the challenge of sustainability will be effectively tackled.

Expert Talks in the four departments

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

MECHANICAL ENGINEERING AND ENERGY TECHNOLOGIES (URJA-23)

KEY NOTE

Application of computational fluid
dynamics for thermal management



DR. SANDEEP MOUVANAL
Senior researcher
University of Nottingham UK

Department of Mechanical Engineering



ON MONDAY,
10 APRIL 2023



GOVT ENGINEERING
COLLEGE KOZHIKODE



STARTS AT 11:00 AM

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

EMERGING TRENDS IN SIGNAL
PROCESSING

KEY NOTE

Visual forecasting



DR. RANJITH RAM
PROFESSOR
GOVT ENGINEERING COLLEGE KANNUR

Department of Applied Electronics & instrumentation



ON TUESDAY,
11 APRIL 2023



GOVT ENGINEERING
COLLEGE KOZHIKODE



STARTS AT 02:00 PM

INTERNATIONAL CONFERENCE ON
EMERGING TRENDS IN ENGINEERING

EMERGING TRENDS IN SIGNAL
PROCESSING

KEY NOTE

Recent trends in video analytics



DR. SURESH K
PROFESSOR
GOVT ENGINEERING COLLEGE WAYANAD

 ON MONDAY,
10 APRIL 2023

 GOVT ENGINEERING
COLLEGE KOZHIKODE

 STARTS AT 02:00 PM

Department of Applied Electronics & Instrumentation

INTERNATIONAL CONFERENCE ON
EMERGING TRENDS IN ENGINEERING

EMERGING TRENDS IN SIGNAL
PROCESSING

KEY NOTE

Challenges & applications of magnetic
resonance imaging in biomedical research



DR. ERWIN FURHER
Karlsruhe Institute of technology

 ON TUESDAY,
11 APRIL 2023

 GOVT ENGINEERING
COLLEGE KOZHIKODE

 STARTS AT 10:00 AM

Department of Applied Electronics & Instrumentation

116

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

EMERGING TRENDS IN SIGNAL PROCESSING

KEY NOTE

Data engineering



DR. SAJI K MATHEW
PROFESSOR
DoMs, IIT MADRAS



ON WEDNESDAY,
12 APRIL 2023



GOVT ENGINEERING
COLLEGE KOZHIKODE



STARTS AT 10:00 AM

Department of Applied Electronics & Instrumentation

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

MECHANICAL ENGINEERING AND ENERGY TECHNOLOGIES (URJA-23)

KEY NOTE

Human society, development, natural systems and
sustainability imperative:
What should science, engineering and technology do?



PROF. L S GANESH
ICFAR, Hyderabad (former professor and HOD)
Dept of management studies IIT MADRAS



ON MONDAY,
10 APRIL 2023



GOVT ENGINEERING
COLLEGE KOZHIKODE



STARTS AT 10:00 AM

Department of Mechanical Engineering

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

MECHANICAL ENGINEERING AND ENERGY TECHNOLOGIES (URJA-23)

KEY NOTE

**Modern mobile manipulators in
industry and others**



DR. SANTHAKUMAR MOHAN
Associate professor
IIT PALAKAD



ON TUESDAY,
11 APRIL 2023



GOVT ENGINEERING
COLLEGE KOZHIKODE



10:00 AM TO 11:00 AM

Department of Mechanical Engineering

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

SUSTAINABLE SOLUTIONS FOR INFRASTRUCTURE DEVELOPMENT

KEY NOTE

Recent developments in the design of
cold formed steel compression members



DR. M. V. ANIL KUMAR
Associate Professor, IIT Palakkad

ON TUESDAY, 11 APRIL
2023

GEC KOZHIKODE

START AT 10 AM

DEPARTMENT OF CIVIL ENGINEERING

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

MECHANICAL ENGINEERING AND ENERGY TECHNOLOGIES (URJA-23)

KEY NOTE

**Deconstructing cricket using
mechanics**



DR. GANESH NATARAJAN

Associate professor
IIT PALAKAD



ON TUESDAY,
11 APRIL 2023



GOVT ENGINEERING
COLLEGE KOZHIKODE



01:30 PM TO 02:30 PM

Department of Mechanical Engineering

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

SUSTAINABLE SOLUTIONS FOR INFRASTRUCTURE DEVELOPMENT

ONLINE KEY NOTE

**Green building concept: A concept for
an optimized design to use the natural
resources efficiently**



ON 11 APRIL 2023



GEC KOZHIKODE



START AT 2 PM

DR. MUHAMMAD SALEEM

JUBAIL INDUSTRIAL COLLEGE, SAUDI ARABIA
ASSO. PROFESSOR

DEPARTMENT OF CIVIL ENGINEERING

INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

SUSTAINABLE SOLUTIONS FOR INFRASTRUCTURE DEVELOPMENT

KEY NOTE

Climate change : Regional Impact



DR. ATHIRA P.

Assistant Professor, IIT Palakkad



ON WEDNESDAY, 11 APRIL
2023



GEC KOZHIKODE



START AT 10 AM

DEPARTMENT OF CIVIL ENGINEERING



INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

PROCESS ENGINEERING AND SUSTAINABLE TECHNOLOGY

KEY NOTE

**Computer Aided Methods for Sustainable
Chemical Product Design**



DR. NISHANTH CHEMMANGATTUVALAPPIL
Professor, Department of Chemical and Environmental
Engineering, University of Nottingham Malaysia

ON WEDNESDAY, 12 APRIL
2023

GEC KOZHIKODE

START AT 10 AM

DEPARTMENT OF CHEMICAL ENGINEERING



INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN ENGINEERING

PROCESS ENGINEERING AND SUSTAINABLE TECHNOLOGY

KEY NOTE

**A small step towards developing edible and
sustainable fat substitutes**



DR. ALAN RANJIT JACOB
Asst. Professor, IIT Hyderabad

ON TUESDAY, 11 APRIL
2023

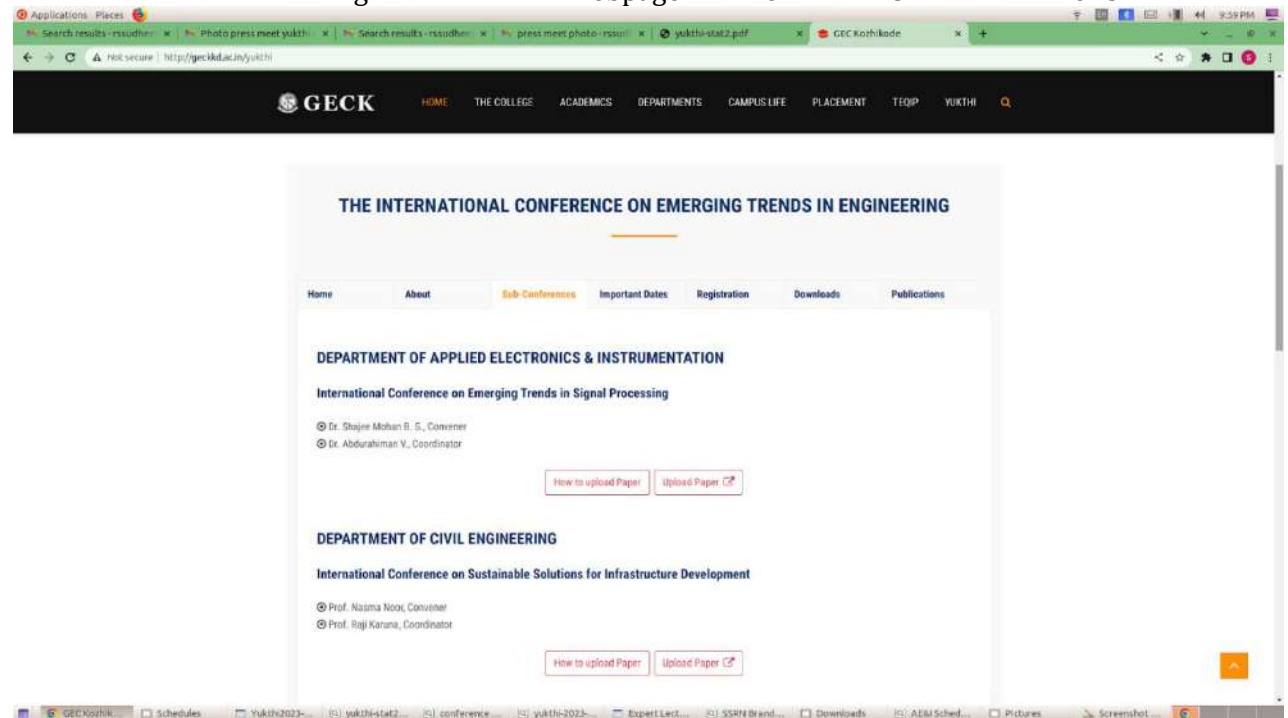
GEC KOZHIKODE

START AT 10 AM

DEPARTMENT OF CHEMICAL ENGINEERING

Conference Website

Fig. 4: Webpage of YUKTHI 2023



Program Schedule of the sub-tracks

Table 1: Program Schedule of Emerging Trends in Engineering (AE & I)

Day 1	10-04-2023	Venue: Edusat Room, Second Floor, Main Block	Time (1.30-4.30pm)
Expert Talk : DR. SURESH K, PROFESSOR IN ELECTRONICS AND COMMUNICATION ENGINEERING, GOVERNMENT ENGINEERING COLLEGE WAYANAD			
Topic:	RECENT TRENDS IN VIDEO ANALYTICS		
	PAPER PRESENTATION		
SINo	Paper id	Paper Title	Author
1	SP153	BREAKING DOWN LANGUAGE BARRIERS: A REVIEW OF SPEECH-TO-TEXT TRANSLATION TECHNIQUES AND DATASETS	AATHIRA ANIL
2	SP161	REVIEW OF TEXT SUMMARIZATION ALGORITHM USING DIFFERENT DEEP RECURRENT NETWORKS	GOPIKA A S
3	SP162	A REVIEW OF GENERATIVE ADVERSARIAL NETWORKS FOR TEXT-TO-IMAGE SYNTHESIS	AHAMMED FAYADH P M
4	SP149	SENTIMENT ANALYSIS IN SOCIAL MEDIA TEXT CHATS USING DEEP LEARNING MODELS	SOORYADAS M
5	SP148	MUSIC INFORMATION RETRIEVAL USING HYBRID FEATURES	MIDHUN C

Day 2	11-04-2023	Venue : Edusat Room, Second Floor, Main Block	Time (9.30am-12.30pm)
Expert Talk : DR. ERWIN FUHRER, VISITING PROFESSOR, IIT MANDI, HIMACHAL PRADESH			
Topic :	CHALLENGES AND APPLICATIONS OF MAGNETIC RESONANCE IMAGING IN BIOMEDICAL RESEARCH		
	PAPER PRESENTATION		
SINo	Paper id	Paper Title	Author
1	SP070	DEEP LEARNING BASED GASTRIC CANCER DIAGNOSIS: A REVIEW	LENIN SURENDRAN M.
2	SP081	SKIN LESION DETECTION: A REVIEW	RISHIRAJ P.
3	SP080	FABRIC DEFECT DETECTION : A REVIEW	NEETHU PAVITHRAN C.
4	SP178	MECHANICAL FREQUENCY ESTIMATION OF A TRANSMISSION LINE	APARNA M S
5	SP151	A REVIEW PAPER ON MACHINE LEARNING METHODS ON COVID-19 DETECTION USING COUGH SOUND ANALYSIS	FATHIMA SHAMNA V
6	SP152	SURVEY ON LUNG CANCER DETECTION AND CLASSIFICATION	FATHIMA MINSHA

DAY 2	11-04-2023	Venue : Edusat Room, Second Floor, Main Block	Time (1.30-4.30pm)
EXPERT TALK : DR. RANJITH RAM, PROFESSOR IN ELECTRONICS AND COMMUNICATION ENGINEERING, GOVERNMENT COLLEGE OF ENGINEERING KANNUR			
Topic	PRECOGNITION: VISUAL FORECASTING		
	PAPER PRESENTATION		
SINo	Paper id	Paper Title	Author
1	SP146	FAKE NEWS DETECTION USING DEEP LEARNING ARCHITECTURE	NISA P
2	SP111	DESIGN AND IMPLEMENTATION OF SOLAR POWERED INTELLIGENT MOVING VEHICLE FOR RAILWAY TRACK-CRACK AND OBSTACLE DETECTION	FATHIMA SANA P
3	SP145	RAIL SURFACE DEFECT DETECTION AND LOCALISATION SYSTEM	BINSIYA C
4	SP144	A REVIEW ON DEMYSTIFYING DEEPFAKES IN VIDEOS	ASIYA RAHNA T P
5	SP147	REVIEW ON MACHINE LEARNING TECHNIQUES FOR WEED DETECTION	NAMITHA M
6	SP179	MALPRACTICE DETECTION IN EXAMINATION HALL USING MACHINE LEARNING ALGORITHMS	ANJU NANDAKUMAR

DAY 3	12-04-2023	Venue : Edusat Room, Second Floor, Main Block	Time (9.30am - 12.30pm)
EXPERT TALK : Dr. SAJI K. MATHEW, PROFFESOR, DoMS, IIT MADRAS			
Topic	DATA ENGINEERING		
	PAPER PRESENTATION		
SINo	Paper id	Paper Title	Author
1	SP164	FEATURE REDUCTION AND OPTIMIZATION USING LEARNT KERNEL MATRIX	STEPHY J S
2	SP150	A DEEP LEARNING BASED INTRUSION DETECTION FOR INTERNET OF THINGS	VYGA M
3	SP058	PERFORMANCE ANALYSIS OF ATTENTION MECHANISM IN IMAGE CAPTIONING USING DEEP LEARNING METHODS	ANJITHA MP
4	SP074	MEDICINAL PLANT CLASSIFICATION: A REVIEW	MEGHNA SUDHARMAN
5	SP006	AN EMPIRICAL STUDY FOR IMAGE STEGANOGRAPHY AND STEGANALYSIS: A CHALLENGING OVERVIEW.	VIJITHA GOPINATH
6	SP173	ARTIFICIAL NEURAL NETWORK BASED DIABETES PREDICTION MODEL AND REDUCING IMPACT OF CLASS IMBALANCE ON ITS PERFORMANCE	PRIYABARTA SAHU (ONLINE MODE)

Table 2: Program Schedule of Sustainable Solutions for Infrastructure Development(CE)

Emerging Trends in Engineering, YUKTHI 2023 (10-12 April 2023)
Department of Civil Engineering, Government Engineering College, Kozhikode
INTERNATIONAL CONFERENCE ON SUSTAINABLE SOLUTIONS FOR INFRA STRUCTURE DEVELOPMENT

PROGRAMME SCHEDULE

DAY 1- 10/04/2023 Monday -10:00 AM to 1:00 PM	Venue: Mechanical Engineering - Seminar Hall
--	---

INAUGURATION

Keynote:	Prof. L S Ganesh
	"Human Society, Development, Natural Systems and the Sustainability Imperative: What should Science, Engineering and Technology do?"
Keynote:	Dr. Sandeep Mouvanal
	"Applications of Computational Fluid Dynamics"

DAY 2- 11/04/2023 Tuesday -10:00 AM to 1:00 PM	Venue: SDPK Hall
---	-------------------------

Session 1: Subtrack on Structural Engineering

Keynote:	Dr. M. V. Anil Kumar , IIT Palakkad
	"Recent developments in the design of cold formed steel compression members"
Chair:	Dr. M Abdul Akbar, NIT Calicut
Co-Chair:	Dr. Anjana Santhakumar, GEC Kozhikode

Sl. No.	Paper Id	Title	Primary Author
1	102	Seismic Response Evaluation Of Irregular 6-Storey Buckling Restrained Braced Frame	Muhammed Jasir T
2	96	Post-Fire Behavior Of Cold Formed High-Strength Steel Tubular T-Joints Stiffened With Internal Rings	Vysakh V.S
3	87	Structural Health Monitoring Of A Single Vertical Pole In Coastal Area	Nasiyamol S
4	91	Effects On Shear And Flexural Capacity Of Corroded Prestressed Concrete Beams	Vysakh V.S
5	130	Effect Of Buckling Restrained Braces As Lateral Load Resisting System For A Rc Structure In Zone V - A Seismic Resistance Study	Bharathi Ganesh
6	4	Seismic Evaluation And Retrofitting Of Rc Corroded Structures Using Sap2000 Software In Accordance With Different Indian Guidelines	Aman Mr. Kumar

DAY 2- 11/04/2023 -Tuesday-1:30 PM to 4:30 PM	Venue: SDPK Hall
--	-------------------------

Session 2 : Subtrack on Materials and Technology

Keynote:	Dr. Muhammad Saleem, Jubail Industrial College, KSA
	"Green Building: A concept for an optimized design to use the natural resources efficiently"
Chair:	Dr. Aslam Kunhi Mohamed, IIT Madras
Co-Chair:	Dr. Rahmathulla Noufal E, GEC Kozhikode

Sl. No.	Paper Id	Title	Author
1	44	Ranking of Human Factors Influencing Safety Performance in Kerala Construction Industry	Akhila Surendran
2	8	Blend of IoT and Extended Reality for Safety in Construction – Trend of Technology	Bharathi Ganesh
3	47	Comparative analysis of major green building rating systems and development of green building checklist	Amrutha P
4	45	BIM Collaboration Proposal for KMRL	Dona James
5	89	Application of Building Information Modelling (BIM) System for Building Construction Project	Kshitij P Upalkar
6	140	Effect of coir fibre on alccofine stabilized soil	Surya A
7	72	Willingness to Pay for Parking for Medium Sized City	Muneera C P
8	46	BIM-based BOQ Estimation & Its Comparison with Conventional Method - A Proposal for KMRL	Dyna James
9	136	Mechanical and Infiltration Characteristics of Pervious Concrete Pavement Incorporating Recycled Asphalt Pavement Aggregates	Ann Mary Kuruvila
10	143	Utilization Of Non-Woven Geotextile Sheets In Soil Stabilization	Sneha James

Table 3: Program Schedule of *Process Engineering and Sustainable Technology – STEP 2023(ChE)*

DAY 3- 12/04/2023 -Wednesday-10:00 AM to 1:30 PM			Venue: SDPK Hall
Session 3: Subtrack on Water Resources and Environmental engineering			
Keynote:	Dr. Athira P, IIT Palakkad		
	"Climate Change: Regional Impact"		
Chair:	Dr. George K Varghese, NIT Calicut		
Co-Chair:	Dr. Sharannya T M, KSCSTE CWRDM		

Sl. No.	Paper Id	Title	Author
1	24	Analysis Of Trends And Teleconnections Between Streamflow And Global Climatic Indices In Chalakudy River Basin	Bincy Chandran P
2	40	Photocatalytic Removal Of Acetaminophen Using Green Synthesized Zinc Oxide Nanoparticle	Nayanathara O S
3	59	Drinking Suitability And Source Apportionment Of Physical Parameters In Surface Water In Mahanadi Basin, Odisha	Abhijeet Das
4	60	Meteorological Drought Analysis Under Climate Change Scenario Using SPI Index	Nimisha K
5	82	Water Mains Bursting Prediction And Classification Using AI	Parthan N
6	97	Real Time Water Quality Monitoring Using Tiny ML	Kavya V R
7	177	Study On Effectiveness Of Tetrapot As Coastal Protection Structure.	Amal Salam
8	180	A Step Towards Pollution Abatement Of Kallai River Basin – A Case Study	Chaithanya K K



Emerging Trends in Engineering, YUKTHI 2023 (10-12 April 2023)

Department of Chemical Engineering, Government Engineering College, Kozhikode

International Conference on Process Engineering and Sustainable Technology (STEP 2023)



Day 1	10-04-2023	Venue: Mechanical Engineering Seminar Hall	
Keynote:		Human Society, Development, Natural Systems and the Sustainability Imperative: What should Science, Engineering and Technology do?	Time: 10.00 AM - 11.00 AM
Speaker:		Prof. L S Ganesh (ICFAI, Hyderabad, former Professor & HOD, Department of Management Studies, IIT Madras)	
Keynote:		Applications of Computational Fluid Dynamics for Thermal Management	Time: 11.00 AM - 12.00 AM
Speaker:		Dr. Sandeep Mouvanal, (Senior Researcher, University of Nottingham, UK)	
LUNCH BREAK			
Day 1	10-04-2023	Venue: Placement Hall (Main Block, Ground Floor)	Time: 01.30 PM - 03.00 PM
		Paper Presentation (Session 1)	
Sl. No.	Paper ID	Paper Title	Author
1	32	Comparison of electrospun polyurethane membrane and dip coated electrospun polyurethane membrane in chromium removal.	Parvathy Pavithran
2	77	Waste to value added : keratin nanoparticle synthesis and application- a review	Nikhila Mukundan
3	75	TiO ₂ as a photocatalyst for wastewater treatment - a review	Nanditha P P
4	108	Characterization of pineapple leaf fibers and their suitability for biocomposite preparation	Sabitha Sathyan
5	107	Preparation and Characterization of Biochar from Banana Stem for the Treatment of Textile Dye	Fahmidha Sherin P
6	106	Oil palm biomass as a potential heavy metal adsorbent:- a review	Febin Mathew



Emerging Trends in Engineering, YUKTHI 2023 (10-12 April 2023)

Department of Chemical Engineering, Government Engineering College, Kozhikode



International Conference on Process Engineering and Sustainable Technology (STEP 2023)

Day 2	11-04-2023	Venue: Placement Hall (Main Block, Ground Floor)	Time: 10.00 AM-11.00 AM
Keynote:		A small step towards developing edible and sustainable fat substitutes	
Speaker:		Dr. Alan Ranjit Jacob (Assistant Professor, IIT Hyderabad)	
		Paper Presentation (Session 2)	Time: 11.15 AM - 12.45 PM
Sl. No.	Paper ID	Paper Title	Author
1	65	A critical overview of use of biodiesel as an alternative fuel: Techno - economic perspective	Pooja Pandurang Sanap
2	86	Recovery of protein from waste dairy milk; A Review	Alisha babu
3	157	Optimization and production of biodiesel using microbial oil from chlorella vulgaris	Jisa Jose
4	92	Biochar and their application as transesterification catalyst: A review	Pooja P
5	120	Synthesis and characterization of micro-encapsulated phase change material for thermal energy storage applications.	Aishwarya B Salve
6	115	Zeolite synthesis from waste materials and its recent applications: - a review	Deepika D



Emerging Trends in Engineering, YUKTHI 2023 (10-12 April 2023)

Department of Chemical Engineering, Government Engineering College, Kozhikode



International Conference on Process Engineering and Sustainable Technology (STEP 2023)

Day 2	11-04-2023	Venue: Placement Hall (Main Block, Ground Floor)	Time: 01.30 PM-3.00 PM
		Paper Presentation (Session 3)	
Sl. No.	Paper ID	Paper Title	Author
1	112	Comparative study of corrosion inhibitors from natural and chemical means	Sana Musthafa B
2	121	Oil Separation using Modified Kapok fiber from different sources of Waste water- A Review paper	Abhirami C B
3	113	MFC production & rain fastness analysis in pesticides	Eldho Kuriakose
4	119	Lignin based adsorbent for removal of pollutants: a review	Aparna C Kishor
5	110	Extraction of Keratin from Different Sources: A Comparative Study	Anzeem Nisar Abdulla
6	7	Purification and Characterization of Fullerene Molecules	Gokul Chandran



Emerging Trends in Engineering, YUKTHI 2023 (10-12 April 2023)

Department of Chemical Engineering, Government Engineering College, Kozhikode

International Conference on Process Engineering and Sustainable Technology (STEP 2023)



Day 2	11-04-2023	Venue: Placement Hall (Main Block, Ground Floor)	Time: 03.00 PM-4.30 PM
Paper Presentation (Session 4)			
Sl. No.	Paper ID	Paper Title	Author
1	67	Steam gasification of municipal solid waste for hydrogen production	Tija C Jaison
2	49	Mitigation of accidental chlorine release from storage pressure vessels	Ejjas Ahammed
3	69	Carbon dioxide capture using ionic liquid: a simulation study	Amrutha K
4	101	Simulation of Titanium Dioxide Production Using UniSim Design R480	Hafna P
5	105	Experimental and Modeling studies of Carbon dioxide Adsorption on Silica Aerogel Packed Bed System	Dr. Minju N
6	93	Simulation model for hydrogen production via reforming of biomass gasification tar	Nanditha P P



Emerging Trends in Engineering, YUKTHI 2023 (10-12 April 2023)

Department of Chemical Engineering, Government Engineering College, Kozhikode

International Conference on Process Engineering and Sustainable Technology (STEP 2023)



Day 3	12-04-2023	Venue: Placement Hall (Main Block, Ground Floor)	
Keynote:		Computer-Aided Methods for Sustainable Chemical Product Design	Time: 10.00 AM-11.00 AM
Speaker:		Dr. Nishanth Chemmangattuvalappil (Professor, University of Nottingham)	
Paper Presentation (Session 5)			Time: 11.00 AM-01.00 PM
Sl. No.	Paper ID	Paper Title	Author
1	156	Comparison of electrospun polyurethane membrane using GO and Silane modified GO for oil-water sorption	Riya Mariyam John
2	118	A Comprehensive Review Of Experimental Investigations On Potential Antimicrobial Agents For Biofilm Reduction	Parvathy V R
3	158	Photocatalytic Degradation of Reactive Red and Toluidine Blue Dyes Using Zinc Ferrite Perovskite Nanoparticles	Libin George
4	103	Study And Development Of Modified Wheat Bran For Dye Removal From Wastewater	Sana Hameed T
5	117	Extraction and Characterization of natural pigment curcumin; A review	Uthara K U
6	122	Preparation and characterization of bioadsorbent from saw dust for the removal of Cd ²⁺ ions from water	Srilekshmi M
7	116	A review of unsaturated polyester resin-based adhesives	Anagha P S

Table 4: Program schedule of Mechanical Engineering and Energy Technologies-(URJA 2023)

Day 1	10-04-2023	Venue : Mechanical Engineering Seminar Hall	Time (1.30-4.30pm)	
		PAPER PRESENTATION		
SINo	Paper id	Paper Title	Author	
1	3	THE EFFECT OF PRESSURE ON PHASE TRANSITIONS AND PROPERTIES OF CALCIUM TUNGSTATE SOLID - STATE MATERIAL FOR LASER APPLICATIONS USING FIRST PRINCIPLES STUDY	NABILA TABASSUM	Chair :DrG Venugopal Co Chair : Dr Jithesh P K
2	11	PARTICLE EMBEDDED FINITE ELEMENT MODEL FOR HYBRID FILLER COMPOSITE	ASWATHI A NARAYANAN	
3	28	FLUID FLOW AND HEAT TRANSFER CHARACTERISTICS OF HEAT EXCHANGER EQUIPPED WITH Y-TWISTED TAPE INSERT	ALFHAN K T	
4	42	INFLUENCE OF ALUMINIUM NANOPARTICLES ON C-STAR OF ISROSENE OXYGEN COMBUSTION	AL AMEEN H	
5	109	A SYSTEMATIC REVIEW AND ANALYSIS OF SOFT ROBOTIC GRIPPERS BASED ON SOFT COMPONENTS, FABRICATION AND APPLICATIONS	SURAJ R	
6	174	COMPARATIVE ANALYSIS OF SOLAR DRYER WITH AND WITHOUT WASTE HEAT RECOVERY SYSTEM	PRAJEETH KUMAR K. P.	
7	176	PROPERTY VARIATIONS OF VEGETABLE OIL (COCONUT OIL) COMPOUNDED WITH CU, CE AND TI NANOPARTICLE OXIDES	SUBIN MICHAEL	

Day 2	11-04-2023	Venue : Mechanical Engineering Seminar Hall		Time (9.30-12.30pm)	
Expert Talk : Dr. Shanthakumaran Mohan, IIT Palakkad					
Topic :	MODERN MOBILE MANIPULATORS IN INDUSTRY AND OTHERS				
	PAPER PRESENTATION				
SlNo	Paper id	Paper Title	Author		
1	13	REVIEW ON TORREFACTION PROCESS AND ITS APPLICATION	ADARSH PRABHAKARAN		Chair :Dr KK Ramachandran Co Chair : Dr Anirudhan P
2	21	A COMPARATIVE STUDY ON SURFACE GENERATION CHARACTERSTICS IN NICKEL BASED SUPERALLOY MANUFACTURING: A REVIEW	SAYANDH M O		
3	41	REVIEW ON ALUMINIUM ALLOYS AND ITS TURNING PROCESS	KIRAN PRADEEP		
4	99	THERMO-MECHANICAL AND SURFACE CHARACTERIZATION OF MICROSCALE SURFACE COATING PRODUCED BY THERMAL SPRAY COATING TECHNIQUE	RUBEN JOSE TOM		
5	125	ANALYTICAL APPROACH TO FORCE CALCULATION FOR HELICAL SCREW ROTORS	KETAN K PATIL		
6	127	DESIGN, VERIFICATION AND OPTIMIZATION OF BASE FRAME FOR AN OIL INJECTED SCREW COMPRESSOR.	ANIKET DANDAGE		
7	159	ADVANCEMENTS IN TECHNOLOGY ENABLING INTELLIGENT WELDING SYSTEMS: A COMPREHENSIVE REVIEW	NIKHIL ASOK N		

Day 2	11-04-2023	Venue : Mechanical Engineering Seminar Hall		Time (1.30-4.30pm)	
Expert talk : Dr Ganesh Natarajan, IIT Palakkad					
Topic	DECONSTRUCTING CRICKET USING MECHANICS				
	PAPER PRESENTATION				
SINo	Paper id	Paper Title	Author		
1	51	REVIEW OF BLOCKCHAIN BASED FOOD SUPPLY CHAIN	SOURAV CHANDRASEKHARAN	Chair :Dr Vinay V Panicker Co Chair : Dr .Frands J Emmatty	
2	126	COMPARISON OF RUBBER TAPPING METHODS FOR ERGONOMIC ASSESSMENT OF WORK-RELATED MUSCULOSKELETAL DISORDERS (WMSDS)	JYOTHIRAJ B G		
3	163	IMPACT OF OIL PRICE, GOLD PRICE, DOLLAR INDEX AND EXCHANGE RATE ON INDIAN STOCK MARKET	MEGHA A		
4	167	EXAMINING THE HERD BEHAVIOR OF DIFFERENT ASSET CLASSES	GOURI G H		
5	168	ANALYSIS FOR OPTIMISATION OF FACTORS INFLUENCING THE CAPITAL STRUCTURE OF INDIAN CEMENT INDUSTRY SECTOR	POOJA US		
6	169	OPTIMIZATION OF TRADING STRATEGIES ON INDIAN STOCK MARKET SYSTEM USING MOVING AVERAGE CONVERGENCE DIVERGENCE (MACD) INDICATOR	MEKHA S		
7	170	A REVIEW ON BANKRUPTCY PREDICTION USING MACHINE LEARNING TECHNIQUES	RUFSANA AR		
8	172	ANNOUNCEMENT IMPACT OF MEGA SPORTING GAMES ON HOST COUNTRY'S STOCK MARKET	NAVYA PAVITHRAN		

Chair :Dr Vinay V Panicker Co Chair: Dr .Francis J Emnatty

Statistics of papers submitted

Track	No. of submissions	No. of Accepted	Registered
Emerging Trends in Signal Processing	48	23	23
Sustainable solutions for Infrastructure Development	47	24	24
Process Engineering Sustainable Technology	34	31	31
Mechanical Engineering and Energy Technologies	29	19	19
Total	158	97	97

13. ACTIVITY REPORT OF CoRAL unit, Govt. Engg.College Kozhikode

CoRAL unit of GEC Kozhikode successfully conducted two of workshops and two visits during the academic year 2023-24.

Workshop 1: Interaction with Industry representatives, Industries centre

Date: 21.02.23

A brainstorming session involving industry representatives, Industry facilitation agency namely District Industries Centre(DIC), students and professors of GEC Kozhikode was held on 21.02.23.

The meeting was graced by *Mr. Paul Varghese(Hawalker Hawaii), Mr. Babu Maliyekal(Winwheels), and Mr. Gireesh(District Industry Centre)*. The meeting was inaugurated by the Principal Prof. Sajith P P. Mr. Gireesh (DIC) started the session detailing scopes of entrepreneurship, their rights and benefits, criterion for licensing etc. As entrepreneurship involves environmental, social, and economical responsibility, it is important to make them aware of their rights, duties and benefits in these perspectives.

Workshop 2: Two day “Hands on workshop on Raspberry and Arduino”

Date: 14.03.23, 15.03.23

As automation is a major area of focus in industry, the workshop on automation can be of great use in industry collaboration. With this in view, a two day hands on training was provided to 45 number of students from Applied electronics engg., Electronics and Communication engg., Chemical engg., Mechanical engg., and Civil engg.,

Industrial Visit to VKC Plant, Kinaloor, Kozhikode

Date:06.03.23

The team consisted of 6 students from the streams of mechanical engg., chemical engg. and electronics engg., accompanied by 3 faculty members. The visit extended for around 4 hours with a detailed study on the processes of footwear manufacturing. A number of issues associated with the manufacturing process was identified and recorded for further follow-up action. The observations made by the students during the visit is mentioned below.

- The Deposition forming in the mold is still a baffling problem for the industry and additional maintenance has to be done.
- The recycling of waste PU to new PU is still to be achieved.
- The packaging of the footwear is not eco-friendly.
- The safety in handling the machine parts and the chemicals should be thoroughly inspected and updated.
- Harnessing and use of renewable energy like solar energy should be entertained.
- The use of automation in most of the manufacturing and packaging processes should be entertained.

Industrial Visit to “Orion Batteries”, Poovattuparamba,Kozhikode

Date:07.03.23

The team consisted of 6 students from the streams of mechanical engg., chemical engg. and electronics engg., accompanied by 3 faculty members. Orion batteries along with manufacture of batteries, is currently diversifying into manufacturing of roof tiles from plastics. The students identified the following as areas for collaborative efforts.

The roofs that were made of non-recyclable plastics which are eco-friendly, unbreakable, and also recyclable has its colour fading. Tests on following need to be conducted.

Water absorption, UV Resistance, Density, Differential scanning calorimetry, Tensile Strength, Durability

Depreciation of cutting blades in motor

Moltened roof tiles has flashes on its edges. Need for a machine that removes flashes without using much manpower is identified.