



B.Tech. Artificial Intelligence and Data Science

JCT

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY



PICHANUR, COIMBATORE - 641105

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

SI.N o	Title of the collaborative	Name of the collaborating Agency	Name of the participant	Year of Collaborati	Duration
1	activity Internship	ALEXZA Tech	NITHEESH N	2022-2023	1.5.23-31.5.23
2	Internship	Nestsoft	ABDULLA A	2022-2023	1.7.22-30.7.22
3	Internship	ALEXZA Tech	ABHIJITH J	2022-2023	1.5.23-31.5.23
4	Internship	Nestsoft	ADHAVAN P	2022-2023	1.7.22-30.7.22
5	Internship	VERZEO	IFCAL DA	2022-2023	1.9.22-31.10.22
6	Internship	Nestsoft	AFSAL P A ALEN SHAJI	2022-2023	1.7.22-30.7.22
0	internantp	Theological and the second sec		2022 2023	26 04 23-28,5,23
7	Internship	Poonchola Technologies	ANAND MV	2022-2025	20.01.20 20.0.00
8	Internship	Nestsoft	ALWIN SAJIMON	2022-2023	1.7.22-30.7.22
9	Internship	ALEXZA Tech	ANEENA V P	2022-2023	1.5.23-31.5.23
10	Internship	VERZEO	ANIRUDH J	2022-2023	1.9.22 - 31.10.22
11	Internship	ALEXZA Tech	ARAVA BALAJI	2022-2023	1.5.23-31.5.23
12	Internship	Nestsoft	ARJUN DEV	2022-2023	1.7.22-30.7.22
13	Internship	Sysbreeze	ARJUN MURALI	2022-2023	1.7.22 - 21.7.22
14	Internship	VERZEO	ASHIN SABU	2022-2023	1.9.22 - 31.10.22
15	Internship	Sysbreeze	ASWIN M S	2022-2023	1.7.22 - 21.7.22
16	Internship	Nestsoft	ASWIN GEORGE	2022-2023	1.7.22-30.7.22
17	Internship	Sysbreeze	BHAVISH M	2022-2023	1.7.22 - 21.7.22
18	Internship	ALEXZA Tech	DHANUSH M R	2022-2023	1.5.23-31.5.23
19	Internship	Sysbreeze	DHANUSH R	2022-2023	1.7.22 - 21.7.22
20	Internship	Sysbreeze	DON M S	2022-2023	1.7.22 - 21.7.22
21	Internship	ALEXZA Tech	PRIYADARSHNI E	2022-2023	1.5.23-31.5.23
22	Internship	VERZEO	ESAL PRIVA S	2022-2023	1.9.22 - 31.10.22
23	Internship	ALEXZA Tech	HANISHAG	2022 2022	1 5 22 21 5 22

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24	Internship	ALEXZA Tech	GODDETI NARESH KUMAR REDDY	2022-2023	1.5.23-31.5.23
25 Internship Sysbreeze		GOWARTHANAN T	2022-2023	1.7.22 - 21.7.22	
26	Internship	Sysbreeze	HARIHARAN K	2022-2023	1.7.22 - 21.7.22
27	Internship	Nestsoft	HARIKRISHNA KR	2022-2023	1.7.22-30.7.22
28	Internship	VERZEO	DEVANAARAAYAN J B	2022-2023	1.9.22 - 31.10.22
29	Internship	Nestsoft	VISWATEJA K	2022-2023	1.7.22-30.7.22
30	Internship	Sysbreeze	KROLAGRANDHI CHATURVEDA SREE	2022-2023	
31	Internship	ALEXZA Tech	KURTZ LUKE NORONHA	2022-2023	1.5.23-31.5.23
32	Internship	ALEXZA Tech	MANJU M	2022-2023	1.5.23-31.5.23
33	Internship	ALEXZA Tech	MATHEWS M JAICO	2022-2023	1.5.23-31.5.23
34	Internship	Pantech E-Learning	JAWAHARLAL NEHRU M	2022-2023	26.4.23-28.5.23
35	Internship	Sysbreeze	MOHAMMED RAFIK A	2022-2023	1.7.22 - 21.7.22
36	Internship	Sysbreeze	MOHAMMED FATEEN SHABEER	2022-2023	1.7.22 - 21.7.22
37	Internship	Sysbreeze	MOHAMMED SHAHEER M	2022-2023	1.7.22 - 21.7.22
38	Internship	VERZEO	MOHANAPRASANTH R	2022-2023	1.9.22 - 31.10.22
39	Internship	Sysbreeze	MUTHU BARANI K	2022-2023	1.7.22 - 21.7.22
40	Internship	ALEXZA Tech	KUMMARI NAGABHUSANA	2022-2023	1.5.23-31.5.23
41	Internship	ALEXZA Tech	CHANDRASEKHAR N	2022-2023	1.5.23-31.5.23
42	Internship	Nestsoft	SRAVANIN	2022-2023	1.7.22-30.7.22
43	Internship	Nestsoft	PUDUPAKHAM ARKITTA NAAIDU	2022-2023	1.7.22-30.7.22

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DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

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44	Internship	ALEXZA Tech	BALAJI P	2022-2023	1.5.23-31.5.23
45	Internship	Sysbreeze	SAI PAVITHRA P	2022-2023	1.7.22 - 21.7.22
46	Internship	Nestsoft	RASHIK S	2022-2023	1.7.22-30.7.22
47	47 Internship Nestsoft		RATHEE MEENATCHI P	2022-2023	1.7.22-30.7.22
48	Internship	VERZEO	ROSHAN ROY	2022-2023	1.9.22 - 31.10.22
49	Internship	VERZEO	RUDRESH R	2022-2023	1.9.22 - 31.10.22
50	Internship	Nestsoft	SALETH KRITHIKA D	2022-2023	1.7.22-30.7.22
51	Internship	ALEXZA Tech	SANOOP S	2022-2023	1.5.23-31.5.23
52	Internship	Sysbreeze	SANTHOSH C	2022-2023	1.7.22 - 21.7.22
53	Internship	Sysbreeze	SHRI HARI B	2022-2023	1.7.22 - 21.7.22
54	Internship	Sysbreeze	SIVA GOKUL L	2022-2023	1.7.22 - 21.7.22
55	Internship	Sysbreeze	SREENIVASULU S	2022-2023	1.7.22 - 21.7.22
56	Internship	ALEXZA Tech	SRIDHAR S.S	2022-2023	1.5.23-31.5.23
57	Internship	ALEXZA Tech	SUJI PRIYA A	2022-2023	1.5.23-31.5.23
58	Internship	Nestsoft	THANUSH P V	2022-2023	1.7.22-30.7.22
9	Internship	VERZEO	THODETI SIVA DEEKSHITHA	2022-2023	1.9.22 - 31.10.22
0	Internship	Nestsoft	ACHYUTH KUMAR V	2022-2023	1.7.22-30.7.22
1	Internship	Nestsoft	YADHU KRISHNAN N	2022-2023	1.7.22-30.7.22

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ALYDS

Date: 16-08-2022

To,

Ms.Kavya Govindaraj Verzeo HR & General Affairs Karnataka.

Dear Madam,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek tour kind patronage in providing internship opportunity to our Artificial Intelligence and Data Science students. It will be a great exposure for them to gain knowledge and hands on experience.

We request you to kindly share the availability schedule at an early date

Thanking you,

JCT College of Engineering and Technology PICHANUR, COMBALORE - 641 105.



23.08.2022 Kancheepuram

INTERNSHIP ACCEPTANCE LETTER

Based on your request, we are ready to offer internship opportunity to your students of Artificial Intelligence and Data Science, for the period from 1.09.2022 to 31.09.2022 in Our company at Karnataka. During the internship, the students have to abide by our rules and regulations

Ms.Kavya Govindaraj

HR & General Affairs

VERZEO Bengaluru, Karnataka.

PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

VERZEO

Certificate of Internship Afsal P A

has successfully completed an Internship Program Cyber Security

from 01-09-2022 to 31-10-2022.

During the internship, the student was found to be dedicated, hardworking and intelligent.



Certificate ID: 1313347830 Date: 24-02-2023



Our internship completion certificates are verified and are recognized by eminent industries and universities all over the world.

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B.Tech. Biotechnology and Biochemical Engineering

JCT



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DEPARTMENT OF BIOTECHNOLOGY AND BIOCHEMICAL ENGINEERING ACADEMIC YEAR 2022-2023: INTERNSHIP DETAILS

S.NO	NAME OF THE STUDENTS	DURATION	INTERNSHIP DETAILS
1	AISWARYA A P	15 DAYS	Venture Biotech, Palakkad
2	AKHILA A P	15 DAYS	Venture Biotech, Palakkad
3	ANANTHAKRISHNA S	15 DAYS	Venture Biotech, Palakkad
4	ATHIRA V	15 DAYS	Venture Biotech, Palakkad
5	JEYAPAL B	15 DAYS	Venture Biotech, Palakkad
6	KAMESH M	15 DAYS	Venture Biotech, Palakkad
7	MUHAMMED SAFVAN K	15 DAYS	Venture Biotech, Palakkad
8	NANDHANA	15 DAYS	Venture Biotech, Palakkad
9	PRIYADHARSHINI K	15 DAYS	Venture Biotech, Palakkad
10	SREELAKSHMI M S	15 DAYS	Venture Biotech, Palakkad
11	SRIKANTH V	15 DAYS	Venture Biotech, Palakkad
12	ABINAYA S	15 DAYS	Sunglow Biotech, Coimbatore
13	AMITH SURYA B	15 DAYS	Venture Biotech, Palakkad
14	ANSIYA ABBAS	15 DAYS	Venture Biotech, Palakkad
15	ARCHANA K Y	15 DAYS	Sunglow Biotech, Coimbatore
16	ARDRA P	15 DAYS	Sunglow Biotech, Coimbatore
17	ARIVUMATHI S	15 DAYS	Sunglow Biotech, Coimbatore
18	ATHULYA C	15 DAYS	Venture Biotech, Palakkad
19	AYISHA FIDHA V P	15 DAYS	Venture Biotech, Palakkad
20	DHARUN ESAKKIAPPAN S	15 DAYS	Sunglow Biotech, Coimbatore
21	EVANGELINE C	15 DAYS	Sunglow Biotech, Coimbatore
22	GOPI KRISHNA S	15 DAYS	Sunglow Biotech, Coimbatore
23	GOPIPRASATH.A	15 DAYS	Sunglow Biotech, Coimbatore
24	HARISH KUMAR S	15 DAYS	Sunglow Biotech, Coimbatore
25	JAYA SRI V	15 DAYS	Sunglow Biotech, Coimbatore
26	JERRY A	15 DAYS	Sunglow Biotech, Coimbatore
27	JISHNU T	15 DAYS	Sunglow Biotech, Coimbatore
28	LOGAVENI S	15 DAYS	Sunglow Biotech, Coimbatore
29	LOGESH L	15 DAYS	Sunglow Biotech, Coimbatore
30	MAHESWARI R	15 DAYS	Sunglow Biotech, Coimbatore
31	MEIYARASU A	15 DAYS	Sunglow Biotech, Coimbatore
32	MUHAMMAD MUSTHAFA Y	15 DAYS	Venture Biotech, Palakkad
33	MUHAMMED AMEEN O	15 DAYS	Venture Biotech, Palakkad
34	MUHAMMED SADIK K M	15 DAYS	Venture Biotech, Palakkad
35	MYDHILY A K	15 DAYS	Venture Biotech, Palakkad
36	NANDHA GOPAL M	15 DAYS	Sunglow Biotech, Coimbatore
37	NANDANA RAMAKRISHNAN	15 DAYS	Venture Biotech, Palakkad
38	NAYANA V M	15 DAYS	Venture Biotech, Palakkad
39	NEELAMBARI K	15 DAYS	Venture Biotech, Palakkad

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40	PRATHIKA A	15 DAYS	Venture Biotech, Palakkad
41	PRITHIV RAJ P	15 DAYS	Sunglow Biotech, Coimbatore
42	RAFIAS	15 DAYS	Venture Biotech, Palakkad
43	RAYANA S	15 DAYS	Venture Biotech, Palakkad
44	SAJITHA S	15 DAYS	Venture Biotech, Palakkad
45	SHABEEBA P	15 DAYS	Venture Biotech, Palakkad
46	SNEHA S	15 DAYS	Venture Biotech, Palakkad
47	SUDARASAN M	15 DAYS	Sunglow Biotech, Coimbatore
48	TAMIL SELVAN C	15 DAYS	Sunglow Biotech, Coimbatore
49	THANSIMOL T	15 DAYS	Venture Biotech, Palakkad
50	VASANTHA KUMAR V	15 DAYS	Sunglow Biotech, Coimbatore

Principal





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B.E Civil Engineering

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JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

Pichanur, Coimbatore - 641 105



DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2022 - 2023

List of Students attended In-Plant Training/Internship

S.No. Name of the Student		Year/	In-Plant Training/		Duration	
	Addite of the Student	Sem	Internship	Name of the Company	From	То
1	ANAGHA K P		1117 gi	Parambattu Builders & Developers Pvt. Ltd, Malapuram, Kerala	12.07.2022	09.08.2022
2	BHAGYA S			Parambattu Builders & Developers Pvt. Ltd, Malapuram, Kerala	12.07.2022	09.08.2022
3	NITHISHKUMAR J			Shanmugam Associates, Vadavalli, Coimbatore	12.07.2022	09.08.2022
	RAJAGOPAL T			Shanmugam Associates, Vadavalli, Coimbatore	12.07.2022	09.08.2022
4	VISHNU MAYA K P		Internshin	Parambattu Builders & Developers Pvt. Ltd, Malapuram, Kerala	12.07.2022	09.08.2022
5	VISHWA A		Training	Shanmugam Associates, Vadavalli, Coimbatore	12.07.2022	09.08.2022
6	EFAKKIL M	- 12 Jun		Shanmugam Associates, Vadavalli, Coimbatore	12.07.2022	09.08.2022
7	GODWIN PETER			Shanmugam Associates, Vadavalli, Coimbatore	12.07.2022	09.08.2022
8	KAPIL S			Shanmugam Associates, Vadavalli, Coimbatore	12.07.2022	09.08.2022
9	PRADEEP M			Shanmugam Associates, Vadavalli, Coimbatore	12.07.2022	09.08.2022
10	VISHNU K		and performance	Shanmugam Associates, Vadavalli, Coimbatore	Ar2.07.2022	09.08.2022

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	11	BALAJI R			Shanmugam Associates, Vadavalli, Coimbatore	12.07.2022	09.08.2022				
	12	KAVIYASELVAN K			Shanmugam Associates, Vadavalli, Coimbatore	12.07.2022	09.08.2022				
	13	SUHAIL O Y			K K Constructions, Pazhayannur, Palakkad, Kerala	12.07.2022	09.08.2022				
	14	ABILASH NARAYANAN J	1		K.Haridasan Building & PWD Contractor, Palakkad, Kerala	07.07.23	29.07.2023				
	15	ABHISHEK V K			K.Haridasan Building & PWD Contractor, Palakkad, Kerala	07.07.23	29.07.2023				
	16	AKSHATHA S							A.Kavitha Contractors, Kinathkadavu, Coimbatore	01.07.2023	29.07.2023
24	17	FATHIMA ROSNA K									Modern Builders, Department of Urban Affairs, Kerala
	18	FELIKS ANTONY A			Sree Lakshmi Constructions, Palakkad, Kerala	08.07.2023	27.07.2023				
	19	SARATH B					K.Haridasan Building & PWD Contractor, Palakkad, Kerala	07.07.23	29.07.2023		
	20	VISHNU DAS R	III/VI	Internship Training	Sree Lakshmi Constructions, Palakkad, Kerala	08.07.2023	27.07.2023				
	21	AGARSH U				Sree Lakshmi Constructions, Palakkad, Kerala	08.07.2023	27.07.2023			
	22	AKHILRAJ CS			Creations Engineers & Suppliers, Kallepully, Kerala	07.07.2023	29.07.2023				
4 4	23	ARAVINTHAN S			A.Kavitha Contractors, Kinathkadavu, Coimbatore	01.07.2023	29.07.2023				
	24	DEEKSHITA B			Creations Engineers & Suppliers, Kallepully, Kerala	07.07.2023	29.07.2023				
	25	DHARANYA D			Creations Engineers & Suppliers, Kallepully, Kerala	07.07.2023	29.07.2023				
	26	DIVYA N			ACC, Madukkarai Cement Works, Coimbatore	08.07.2023	29.07.2023				

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27	DODDALA VAISHNAVI			TRISQUARE Constructions, Hosur,	06.07.2022	0.4.00.0000
28	KANCHARLA, BHASKAR	-		Krishnagiri	06.07.2023	04.08.2023
20	В		e data Francis	D Dharnidhar Engineer & Contractor, Musarambagh, Hydrabad	01.07.2023	29.07.2023
29	MOHAN NARAYANAN J			AMIGOS Constructions. Kadapa, Andra Pradesh	01.07.2023	29.07.2023
30	SAI KUMAR M			AMIGOS Constructions. Kadapa, Andra Pradesh	01.07.2023	29.07.2023
31	SOORYA DAS H			K.Haridasan Building & PWD Contractor, Palakkad, Kerala	07.07.2023	29.07.2023
32	YAMUNA B			A.Kavitha Contractors, Kinathkadavu, Coimbatore	01.07.2023	29.07.2023
33	GOUTHAMKRISHNA.U	III/VI		Creations Engineers & Suppliers, Kallepully, Kerala	07.07.2023	29.07.2023
34	ABHISHEK T			Kerala State Nirmithi Kendra, Regional Centre Palakkad, Kerala	19.06.2023	19.07.2023
35	AFTHAB KHAN K Y			Kerala State Nirmithi Kendra, Regional Centre Palakkad, Kerala	19.06.2023	19.07.2023
36	ANBUSELVAN S	II/IV	Internship	ACC, Madukkarai Cement Works, Coimbatore	08.07.2023	29.07.2023
37	ANSHA A		Training	Malabar Cements Ltd, Kerala	20.07.2023	06.08.2023
38	ARATHI S			Malabar Cements Ltd, Kerala	20.07.2023	06.08.2023
39	ASHWATHY S			Malabar Cements Ltd, Kerala	20.07.2023	06.08.2023
40	ГАНІМ М			K.Haridasan Building & PWD Contractor, Palakkad, Kerala	20.07.2023	05.08.2023

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41	JAISON GEORGE			Kerala State Nirmithi Kendra, Regional Centre Palakkad, Kerala	19.06.2023	19.07.2023			
42	KESAVAN G			ACC, Madukkarai Cement Works, Coimbatore	08.07.2023	29.07.2023			
43	KRISHNA R			Kerala State Nirmithi Kendra, Regional Centre Palakkad, Kerala	19.06.2023	19.07.2023			
44	MOHAMMED FALAH A			Malabar Cements Ltd, Kerala	20.07.2023	06.08.2023			
45	MUHAMMED FAZIL			K.Haridasan Building & PWD Contractor, Palakkad, Kerala	20.07.2023	05.08.2023			
46	NIYAS M						Kerala State Nirmithi Kendra, Regional Centre Palakkad, Kerala	19.06.2023	19.07.2023
47	AKASH VR	T. O.L.		Malabar Cements Ltd, Kerala	20.07.2023	06.08.2023			
48	DHANUSH KRISHNA K			Kerala State Nirmithi Kendra, Regional Centre Palakkad, Kerala	19.06.2023	19.07.2023			
49	HARITHA S V			Malabar Cements Ltd, Kerala	20.07.2023	06.08.2023			
50	RAJAGOPAL R			ACC, Madukkarai Cement Works, Coimbatore	08.07.2023	29.07.2023			
51	AARTHI M			Bala Constructions, Pattukottai	14.11.2022	15.12.2022			
52	AMRITHESWARI A F	4 	II/III Internship Training	Amirtha Project Planning and Designing Division, Kochi, Kerala	21.11.2022	19.12.2022			
53	ATHIRA B	II/III		Possible Builders & Developers	15.11.2022	10.12.2022			
54	BABLU SANTHOSH			UBS Constructions, Vadakkenchery, Kerala	16.11.2022	17.12.2022			
55	BASMAH B			Vision International Surveys & Consultant, Palakkad, Kerala	28.11.2022	27.01.2023			

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56	JILSY J	Abinav Engineers, Builders & Developers, Palakkad, Kerala	15.12.2022
57	KATHIRESAN J	VJK Construction, Gandhipuram, 5.12.20	22 30,12,2022
-58	KRISHNALAL CS	Compatore	
	CARIOTITALAL C S	, Possible Builders & Developers 15.11.2)22 10.12.2022
59	LAKSHI PRIYA U	Atmosphere Architects, Designers & Planners, Ernakulam, Kerala 05.12.2	30.12.2022
60	MOHAMMED THOUFEEQ K	Infinity Walls Engineering, Palakkad, Kerala 20.11.2	30.12.2022
61	RAJESH KANNA M	Haridraa PEB Structures India Pvt.Ltd, Coimbatore 28.11.2	022 30.12.2022
62	REVANTH M	Arshaya Associates, Vadavalli, Coimbatore 21.11.2	022 19.12.2022
63	SUSMITHA LAKSHMI M	MONNAIE Developers, Palakkad, Kerala 14.11.2	022 15.12.2022

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Pichanur, Coimbatore - 641 105



DEPARTMENT OF CIVIL ENGINEERING

Academic Year 2022 - 2023

List of Student Projects

S.No.	Batch No.	Reg.No.	Name of the Student	Title	Guide Name
1		720919103002	ANAGHA K P		
2	Batch 1	720919103004	BHAGYA S	Experimental Investigation of	
3		720919103008	VISHNU MAYA K P	Stabilization of Clay Soil by using Lime and Plastic Fiber	Prof.M.SADHASIVAM
4		720919103307	BALAJI R		
5		720919103006	NITHISHKUMAR J		
6	Batch 2	720919103305	VISHNU K	Utilization Of Sandwich Insulated Concrete Panels In	Prof.P.BALACHANDIRAN
7		720919103308	KAVIYASELVAN K	Building Construction And Cost	
8		720919103309	SUHAIL O Y	Comparison With Solid Block	
9		720919103009	VISHWA A		Carrier agenties
10	Batch 3	720919103301	EFAKKIL M	Bricks Using Demolished	Dr.V.VENUGOPALAN
11		72.0919103302	GODWIN PETER	Building Material	
12		720919103007	RAJAGOPAL T		
13	Batch 4	720919103303	PRADEEP M	Using Machine Learning Model	Prof.K.SIVARAMAN
14		720919103304	KAPIL S		I DEINICIPAL

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15	B1	720921413001	AARATHI M	Experimental Investigation on Partial replacement of coarse aggregate by recycled aggregate with epoxy resin	Dr.V.VENYGOPALAN
16	B2	720921413002	AMIRTHESWARI A F ⁻	Experimental Investigation on the Suitability of Glass Flbres in foam concrete blocks	Dr.V.VENYGOPALAN
17	B3	720921413003	ATHIRA B	An Experimental Investigation on strength of transparent concrete and partially replacement cement by water hyacinth ash	Dr.V.MURUGESH
18	B4	720921413004	BABLU SANTHOSH	An Experimental Investigation of Partial replacement of fine aggregate by adding Rice Husk in concrete	Prof.M.SADHASIVAM
19	B5	720921413005	BASMAH B	Experimental Investigation on cement free Vege – Cardo bricks	Dr.V.MURUGESH
20	B6	720921413007	JILSY J	An experimental investigation of self compacting concrete strength characterics	Prof.M.SADHASIVAM
21	B7	720921413008	KATHIRE <mark>S</mark> AN J	Improvement of Strength of concrete with Partial replacement of Course aggregate with coconut coir and Rainwater	Prof.K.SIVARAMAN

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Pichanur, Coimbatore – 641 105



22	B8	720921413009	KRISHNALAL C S	Steel fibre reinforced rice husk ash	Dr.V.VENYGOPALAN
23	B9	720921413010	LAKSHMI PRIYA U	An Experimental investigation on recycled per powder and waste tyre crumb powder in green concrete	Prof.M.SADHASIVAM
24	B10	720921413011	MOHAMMED THOUFEEQ K	Study and analysis of building vibration under earthquake with inters	Dr.V.MURUGESH
25	B11	720921413012	NEHA R	An Experimental study on pineapple leaf fibre Reinforced concrete	Prof.P.BALACHANDIRAN
26	B12	720921413014	RAJESH KANNA M	Analysis and design of pre Engineered steel Building for aircraft shelter using STADD Pro	Prof.K.SIVARAMAN
27	B13	720921413015	REVANTH M	Experimental Investigation on Utilization of Hospital Waste ash Induced concrete	Dr.V.MURUGESH
28	B14	720921413016	SUMITHA·LAKSHMI M	Experimental Investigation on Fibrous Self Curing Concrete	Prof.K.SIVARAMAN
29	4.2	720919103002	ANAGHA K P		
30	BI	7209191030 <mark>04</mark>	BHAGYA S	Planning, Analysis And Designing Of Market Building	Prof.M.SADHASIVAM
31		720919103008	VISHNU MAYA K P		TCH

JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.



Pichanur, Coimbatore - 641 105



32		720919103305	VISHNU K		
33		720919103009	VISHWA A	Planning, Analysis And Designing Of A Single Column	Prof P BALACHANDIRAN
34	D2	720919103307	BALAJI R	RCC Machan	
35		720919103309	SUHAIL O Y		a segura da la n de fac
36		720919103308	KAVIYASELVAN K		
37	D2	720919103301	EFAKKIL M	Planning, Analysis And Designing Of A Residential Building	Prof.K.SIVARAMAN
38	- B3	720919103302	GODWIN PETER		
39		720919103006	NITHISHKUMAR J		
40		720919103007	RAJAGOPAL T		
41	B4	720919103303	PRADEEP M	Planning, Analysis And Designing Of A Bank Building	Dr.V.VENYGOPALAN
42		720919103304	KAPIL S		

PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

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SITE ORIENTED TRAINING PROGRAM



INDUSTRIAL TRAINING REPORT

Submitted by

VISHNU K

Reg No. 720919103305

In partial fulfillment for the award of the degree

Of

BACHELOR OF ENGINEERING

In

CIVIL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE – 641105 JANUARY 2023

ANNA UNIVERSITY: CHENNAI 600025

1

JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

BONAFIDE CERTIFICATE

Certified that this is the bonafide report on INDUSTRIAL TRAINING, presented by Mr.VISHNU K(720919103305) second semester B.E. Civil Engineering, JCT College of Engineering and Technology, Pichanur, Coimbatore, in partial fulfillment of the requirements for the award of bachelor of Engineering in Civil Engineering under Anna University Chennai 600 025 during the year 2022-23.

2

SIGNATURE

HEAD OF THE DEPARTMENT

Dr.V.Murugesh M.E, Ph.D., Department of Civil Engineering JCT College of Engineering and Technology, Coimbatore.



SUPERVISOR

Mr.P.Balachandran M.E., Department of Civil Engineering JCT College of Engineering and Technology, Coimbatore.

neering and Technology JCT Colleg e of End PICHANUR, COIMBATORE - 641 105.



+91 9443522285 +91 75919 93832 @ +91 422 3561532 @ associatesshanmugam@gmail.com

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.VISHU K Reg. No 720919103305, BE Civil Engineering (2019-2023 Batch) student of JCT College of Engineering and Technology, Pichanur Coimbatore has undergone in plant Training at our firm (SHANMUGAM ASSOCIATES) for the duration of 4 weeks (12-07-2022 to 09-08-2022). He has attended the training regularly, and our site in-charge expressed satisfaction over the project report.

For SHANMUGAM ASSOCI

ge of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

No : 5/1, Ground Floor, 1st Portion, Bhuwaneshwari Amman Temple Back Side, Bommanapalayam, Vadavaili, Thondamuthur Road, Colmbatore - 641046

4

CHAPTER-9 CONCLUSION

The internship report helped me to gain important knowledge on construction field, work environment and all about construction development.

Participating in weekly team meeting with project manager and other team member and discuss on their treats of projects helped me attain the faith to develop a never giving up attitude. At the same time helped me learn the necessary skills to excel in the field.

I would like to convey my appreciation to Shanmugam Associates for providing me an opportunity to gain idea of the competitive environment in the professional field. It has certainly lifted my construction development skill for upcoming challenges of the world.

JCT College of Engineering and Technolo PICHANUR, COIMBATORE - 641 105





EXPERIMENTAL INVESTIGATION OF STABILIZATION OF CLAY SOIL BY USING LIME AND PLASTIC FIBER

A PROJECT REPORT

Submitted by

VISHNU MAYA KP	(720919103008)
ANAGHA KP	(720919103002)
BHAGYA S	(720919103004)
BALAJI R	(720919103307)

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING IN

CIVIL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE-641105

> ANNA UNIVERSITY: CHENNAI 600025 MAY 2023

PF

PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.



こうちょう かん ちょうちょう



UTILISATION OF SANDWICH INSULATED CONCRETE PANELS IN BUILDING CONSTRUCTION AND COST COMPARISON WITH SOLID BLOCK

A PROJECT REPORT

Submitted by

SUHAIL O Y(720919103309)VISHNU K(720919103305)KAVYASELVAN K(720919103308)NITHISH KUMAR J(720919103006)

In partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

IN

CIVIL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE - 641105

> ANNA UNIVERSITY: CHENNAI 600 025 MAY 2023

JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641,105.





B.Tech. Computer Science and Business Systems





DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS

Mini Project

S.No	Team	Reg no.	Name of the Student	Title of the project	Name of the guide	
01	140.	720920244303	Salim U	D. C.	•	
02	01	720920244304	Deepak Girish	Bus fare payment	Dr.S.Karthikeiyini	
03		720920244005	Aswin Krishnan	system with KF1D		
04		720920244013	Sujith PA			
05	02	720920244014	Thunga Naveen	Online quiz program	Mrs.K.Malarvizhi	
06	1	720920244009	Navaz Sherif M			
07		720920244011	Rahul Vijay			
08	03	720920244018	Vismaya VV	Animal health care	Ms.M.Rupa	
09		720924244016	Vishnu P V			
10		720920244001	Abhay M Das			
11	04	720920244302	Nizniya Henna KT	Health care	Dr.S.Karthikeiyini	
12		720920244010	Nikhil PS			
13		720920244004	Anusha UK			
14	05	720920244017	Vishnu Dev	Service at doorstep	Mrs.Leena	
15		720920244007	Kabilan K			



PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

16		720920244015	Vikram M		
17	. 06	720920244301	Nishaj Ahammed	School wise allotment	Mar V. Malamiahi
18	00	720920244006	Bhavya KB	system	MIRS.K. Maiarvizhi
19			Joseph		
20		720920244002	Adithya PS		
21	07	720920244012	Ranjith B	Together(waste	Mrs.S.Sandhya
22		720920244003	Adithyan CS	management system)	

ACLC ... BANDIDAL

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HODCSBS





PICHANUR, COIMBATORE - 641105
DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS

Sl.No	Title of the collaborative	Name of the collaborating	Name of the participant	Year of Collaboration	Duration
1	Internship	NESTSOFT	ABIRAM K B	2022-2023	1.7.22-30.7.22
2	Internship	ALEXZA Tech	ADHARSH S	2022-2023	1.5.23-31.5.23
3	Internship	NESTSOFT	AKASH A	2022-2023	1.7.22-30.7.22
4	Internship	NESTSOFT	AMAL KRISHNA M U	2022-2023	1.7.22-30.7.22
5	Internship	NESTSOFT	AMBATI CHARAN KUMAR REDDY	2022-2023	1.7.22-30.7.22
6	Internship	VERZEO	ANAGHA T J	2022-2023	1.9.22-31.10.22
7	Internship	VERZEO	ARAVA SAI CHARAN	2022-2023	1.9.22-31.10.22
8 .	Internship	ALEXZA Tech	ASWIN K	2022-2023	1.5.23-31.5.23
9	Internship	Sysbreeze	ATHUL KRISHNAN VR	2022-2023	1.7.22 - 21.7.22
10	Internship	NESTSOFT	AVULA MALLA REDDY	2022-2023	1.7.22-30.7.22
11	Internship	NESTSOFT	CHANDRU R	2022-2023	1.7.22-30.7.22
12	Internship	VERZEO	DEVARAKONDA MADHU SAI	2022-2023	1.9.22-31.10.22
13	Internship	ALEXZA Tech	DEVIKALAL G B	2022-2023	1.5.23-31.5.23
14	Internship	Sysbreeze	DHARSHAN S	2022-2023	1.7.22 - 21.7.22
15	Internship	ALEXZA Tech	FAISAL M U	2022-2023	1.5.23-31.5.23
16	Internship	VERZEO	GIMKAREE DANIEL	2022-2023	1.9.22-31.10.22
17	Internship	Sysbreeze	GOGULA JAYAKRISHNA	2022-2023	1.7.22 - 21.7.22
18	Internship	VERZEO	GUDA OBULA MAHIDHAR READDY	2022-2023	1.9.22-31.10.22
19	Internship	NESTSOFT	GUDI NARESH	2022-2023	1.7.22-30.7.22
20	Internship	NESTSOFT	GUNENDRA K	2022-2023	1.7.22-30.7.22
21	Internship	NESTSOFT	GURRAM KAVYA	2022-2023	1.7.22-30.7.22

P ICIPAI JCT College of Engineering and Technology PICHAMUR, COIMBATORE - 641 105.



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE - 641105



DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS

			I THE REPORT A PROVIDE A TO A	1 2022 2022	1777-71777
22	Internship	Sysbreeze	TARUN	2022-2023	Litika - Lititak
23	Internship	Sysbreeze	KALLU CHINNAVARUN	2022-2023	1.7.22 - 21.7.22
24	Internship	ALEXZA Tech	KASTURI ROHITH	2022-2023	1.5.23-31.5.23
25	Internship	Sysbreeze	KOMMINENI SAI CHANDU	2022-2023	1.7.22 - 21.7.22
26	Internship	ALEXZA Tech	KRANTHI K	2022-2023	1.5.23-31.5.23
27	Internship	Sysbreeze	KURUVA GANGADHR	2022-2023	1.7.22 - 21.7.22
28	Internship	NESTSOFT	MARRIPUDI ANIL TEJA	2022-2023	1.7.22-30.7.22
29	Internship	Sysbreeze	MISHAL K JALEEL	2022-2023	1.7.22 - 21.7.22
30	Internship	Sysbreeze	MOHAMMED SAFAR R	2022-2023	1.7.22 - 21.7.22
31	Internship	ALEXZA Tech	MUHAMMED MIDLAJ R	2022-2023	1.5.23-31.5.23
32	Internship	Sysbreeze	MUHAMMED NIHAL K P	2022-2023	1.7.22 - 21.7.22
33	Internship	VERZEO	NAGARAJ.S	2022-2023	1.9.22-31.10.22
34	Internship	Sysbreeze	NAVANEEDHA KRISHNAN R	2022-2023	1.7.22 - 21.7.22
35	Internship	ALEXZA Tech	NIVED KRISHNAN V R	2022-2023	1.5.23-31.5.23
36	Internship	Sysbreeze	PRABITHA N P	2022-2023	1.7.22 - 21.7.22
37	Internship	Sysbreeze	PUTCHAKAYALA DIVYA SREE	2022-2023	1.7.22 - 21.7.22
38	Internship	VERZEO	RAMIREDDY HARI KRISHNA REDDY	2022-2023	1.9.22-31.10.22
39	Internship	Sysbreeze	RANGA RAJAN M	2022-2023	1.7.22 - 21.7.22
40	Internship	NESTSOFT	RANJITH M	2022-2023	1.7.22-30.7.22
41	Internship	Sysbreeze	RAVIVARMAN M	2022-2023	1.7.22 - 21.7.22

RINCIPAL. JCT College of Engineering and Technology PICHANUR COMBATORE- 641 105

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JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE - 641105



DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS

42	Internship	Sysbreeze	RITVIK RAMACHANDRA	2022-2023	1.7.22 - 21.7.22
43	Internship	VERZEO	SANDRA SURESH	2022-2023	1.9.22-31.10.22
44	Internship	ALEXZA Tech	SHAIK ASIF	2022-2023	1.5.23-31.5.23
45	Internship	Sysbreeze	SHAIK BABJI	2022-2023	1.7.22 - 21.7.22
46	Internship	VERZEO	SHAIK RIZWANA	2022-2023	1.9.22-31.10.22
47	Internship	NESTSOFT	SHIBIL RAHMAN MB	2022-2023	1.7.22-30.7.22
48	Internship	Sysbreeze	SIDHARTH N	2022-2023	1.7.22 - 21.7.22
49	Internship	ALEXZA Tech	SREERAJ VARMA R	2022-2023	1.5.23-31.5.23
50	Internship	Sysbreeze	SRUDHINA M S	2022-2023	1.7.22 - 21.7.22
51	Internship	NESTSOFT	SUNEESH	2022-2023	1.7.22-30.7.22
52	Internship	Sysbreeze	THANGAM CHARANESWAR	2022-2023	1.7.22 - 21.7.22
53	Internship	VERZEO	VAISHNAVI A	2022-2023	1.9.2-31.10.22
54	Internship	NESTSOFT	VASANTH L	2022-2023	1.7.22-30.7.22
55	Internship	Sysbreeze	VASANTHAN K	2022-2023	1.7.22 - 21.7.22
56	Internship	ALEXZA Tech	PREM KUMAR V	2022-2023	1.5.23-31.5.23

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Pichanur CBE - 105

PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.





B.E.Computer Science and Engineering





Department of Computer Science and Engineering

Mini Project

Veademic	Vear: 2022-23
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Year / Sem: III / VI

Date: 22.05.23

Subject code: CS8611 Name of the Supervisor S.No. Batch No. Register No. Name of the student Title of the project 720920104025 KRISHNA KUMAR PROF LEENA VP AUTOMATED WEATHER CLASSIFICATION PRIYA KUMARI 720920104055 2 DEVESTERUMAR 720920104016 \mathbf{x} VIKRAM KUMAR 720920104082 AIRLINE-RUSERVATION SYSTEM PROF LIFENA VP 4 RAHUL KUMAR SHARMA 720920104057 5 RAHUL KUMAR CHAUHAN 720920104056 6 PROF AISHWARYA COLLEGE MANAGEMENT SYSTEM 3 MUSKAN KUMARI 720920104041 7 ROHIT YADAV 720020104070 ĸ RANIET KUMAR YADAV 720020104055 ADD RECIPES MANAGEMENT SYSTEM 0 VISHM KUMAR CHAPTEAN 120020104084 1 ... HOSPITAL MAN AGEMENT SYSTEM PROF RAJ KUMAR AID AJRCELLAD MANSURI There to the barries 11



JCT College PICHANUR COIMBATORE - 641 105

12	No.	720920104013	AZHARUDDIN ANSARI		
13		720920104051	PARVIJANSARI		
(4		720920104031	MD JUNED ALAM		
15		720920104003	ALISHA KHANAM	PASSPORT AUTOMATION SYSTEM	PROF RAJ KUMAR
10		720020104010	ARSHI KHANAM		
17		720920104088	VIVEK KUMAR		
18	1 7	770920104001	AJAY KUMAR SABNI	A RELIABLE ENERGY CONSUMPTION EFFICIENT SYSTEM	PROF ARUN J
19	1	720920104053	PRATIK KUMARJIJA	and and a spectrum of	
20		720920104033	MD SAMAR ATIB		
21	8	720920104034	MD SAQUIB ANSARI	АІ СНАТВОТ	PROF SANDUYA
22		720920104066	RAVI KUMAR		
23		720920104062	RANA PRATAP RAO		
24	4	720920104076	SUMIT KUMAR	A RELARLE ENERGY CONSUMPTION DR S SANTHI VIN EFFICIENT SYSTEM	DR S. SAKTHI VINAYAGAM
		720920104067	RAVIRANIAN KUMAR		
26	10	720020104020	KAMI I SH KUMAR GUPTA	LIBRARY MANAGEMENT SYSTEM	PROF RUPA
		720920104039	MOID IFITAMULLIIA	REAL TIME CHATING	MRS MALARVIZIILI
	11	720920104015	DETPAK KUMAR	KI PROTONO STOLEN	
-25	12	720920104069	ROHIT KUMAR	MOBILE APPLICATION FOR COLLEGE STUDENTS	PROF LEENA
29	12	720919104045	NIRAJ PANDIT	LIBRARY MANAGEMENT SYSTEM	PROF LAVA ROSE
30			dia Pictar UBB-1	JCT P	PRINCIPAL College of Engineering and Technology ICHANUR, COMBATORE - 641 195,

	and the second s	Thursday and T				
31		20050404045	MD KILMID			
12		720920104046	NISHE KEMAR PANDLY			
33	14	720920104036	MINHAJ AKRAM	1 APTOP PRICE PREDICTION	PROF ANUSHA	
34		720920104007	ANKIT PADIT			
35		720920104061	RAMESHKUMAR R			
36	15	720920104307	THANGAMANI S	EMAIL SPAM HARM CLASSIFICATION	DR RAJIV SURESH KUMAR	
37		720920104043	NAVEEN S	USING NLP		
38		720920104048	NITHIN SEKAR D			
39	1	720920104306	RAMYA S			
40	16	720920104008	ANTO ASHOR G	HOSPITAL MANAGEMENT SYSTEM	DR S SAKTHI VINAYAGAM	
11	1	720920104037	MOHAMED ANSARDDIN M			
42		720920104305	PRAGATHISH I			
43		750050104074	SHY AMEN ARAY ANAN J			
44		720920103072	SARATHS			
15	17	720920104040	MUTTAMMED STLATH	BOOK MANAGEMENT SYSTEM	MRS MALARVIZIEL	
46		720920104044	NIKHII DASS M			
17		720920104085	VISHNU A			
48		720920104011	ARUN RAM K			
49	18	720920104012	ASHICK S	SERVICE AT DOOR STEP	PROF RUPA	
50		720920104038	MOHAMMED AASHIL KHAN A			
51		720920104023	KISHORE E			
52	1a	720920404303	NISHANTITCR	THE HOSTEL INFORMATION	PROF LEENA	
41		72092010+302	MATHIYAZHAGAN F			



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PRINCIPAL JCT College of Legislation and Technology PICHARING COMBATCHIC OF 108

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HOD/CSE




SERVICE AT DOORSTEP

Front-end Development A MINI PROJECT REPORT

Submitted By

ARUN RAM K720920104011ASHICK S720920104012MD AASHIL KHAN A720920104038

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

T COLLEGE OF ENGINEERING AND TECHNOLOGY PJCHANUR, COIMBATORE - 641 105

ANNA UNIVERSITY : : CHENNAL 600 025

MAY 2023

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PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CRETIFICATE

Certified that this project report "SERVICE AT DOORSTEP" is

the bonafide work of " ARUN RAM K, ASHICK S, MD AASHILKHAN

A" who carried out the project work under my supervision

Dr.G. Rajir Suresh Kumar M.E., Ph.d., Mr.K.Rajkumar M.E.,

HEAD OF THE DEPARTMENT

Department Of Computer Science and Enlineering.

Jf College Of Engineering And i.e. nology

P. anur . Coimbatore 641 105

GUIDE & SUPERVISOR

Department Of Al&DS

JCT College Of Engineering And Technology

246/2023

Pichanur . Coimbatore - 641 105

wet gred tog the Project Viva-Voce Examination held on 02/06/2023

(ENTER

JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 125.

ABSTRACT

In present scenario, people are buried up in a heavy work culture, as everyone is engaged with busy schedules, and hectic tasks which make them deviate from family life. If any issues encounter unexpectedly, it distracts them and makes them choose over the work they have to accomplish primarily. It is important to manage both professional and family life. In such circumstances, every one of us would have fantasized about a kindof house which doesn't have any leaks in pipes, if it doesn't have any mess in fixing a furniture and a kind of house which never face any maintenance issues and every one of us have thought that a life would be much better if no point of issue arises in getting a service at your door step and if there is no mess in bargaining a labor for home service. In such situation's E- Commerce plays a vital role in today's life as it has so many advantages in our life because it makes convenient in daily life of the people [1].

So, giving a thought to that aspect of life is to design and developa system that provides many services at your doorstep in just one click. A System that provides variety of services like plumbers, movers and

packers, repair persons, cleaners, electricians, painters, taxi service laundry and many more. To make it confortable for all the users our system also provides a mobile environment which offers ease in accessing our crysters. A very simple process is carried out to book a servicet 1, and our system is specialized with providing a confirmation email about the specialized service. People can choose the particularity of "ervicerequired by sploading the intege of desired specification. System is versatile as metvace can be booked from everywhere to anywhere you

de sire.

Pichanur

PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - Constants

5. CONCLUSION

To reduce burden in finding in-house solutions for the services, the proposed system provides several services by providing service specialists at your doorstep in one click. A systematic mobile environment to system clients offers ease in accessing ourservices in a more comfortable way. With well qualified and background demonstrated professionals we make all your home cleaning, plumbing, furniture maintenance, electrical works, appliance repair, house painting, vehicle service and many otherservices to be done in a click anytime from anywhere as easy as available.

6. FUTURE SCOPE

The online household services application provides some of thehome services which are most frequently used. This system accommodates the changing needs of the end user. The overallsystem can be designed so that its capacity can be increased in response to the further requirements for which the application provides an appropriate service overseas. Further this application can be prolonged by merely adding up the required services and additional payment systems. For example, the current system provides the following services such as home painting, home cleaning, packers and movers, plumber repair and service further the system can be extended as per the requirements of the user. The system can have prolonged by adding the services such as mobile and computer repair. Laundryservices, catering services and many more. The discursion payment methods our system has, for example currently system has online payment by only MasterCard users further it can be extended by adding the payment services forvisa users also.

> PRINCIPAL JCT College of Engineering and Technology PICHANUR, COMPART



NEG NAAC ACCREDITED A COURSES PCE 1 ELE MICHICSE Grade

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Department of Computer Science and Engineering

UG Project List

Academic Year: 2022-23

Year / Sem: IV / VIII

Date:22.05.23

Subject code: CS8811

S.No.	Batch No.	Register No.	Name of the student	Title of the project	Name of the Supervisor
1		720919104066	SHIVAM KUMAR		
2		720919104062	SANNI KUMAR	MECH-EASY	DR.RAJIV SURESH KUMAR
3		720919104004	AKASH KUMAR		SEC. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.
4	,	720919104041	RAM NARAYAN KUMAR	BLOOD DONATION SYSYTEM	DR.RAJIV SURESH KUMAR
5		720919104061	M D SHAIL RAJA		
6	1	720918104028	AMIR KHAN	CUNIC SYSTEM MANAGEMENT	PROF AISHWARYA
7		720919104025	КРООЈА		
8	1	720919104010	1 M ASHLIN	DDOS ATTACK CLASSIFICATION	DR A PRIYA
9		720919104024	PAULRAJ R		
10	1	720919104014	GUNAL K		
н	5	720919104017	JAYAPRASANA I	HEART DIESASE DIAGNOSTIC ANALYTICS	PROF ARUN J
12	1	720919104020	MUTH SHI	10	
			Pichanur CDE - 105 Por - 105	PRINCIPAL JCT College of Engineering and Techno PICHANUR COMPATION SALES	logy

			T		
13		720919104026	PRASANATH D		
14	6	720919104039	YUVAN SANKAR F	DETECTION OF DUPLICATE FILES	DDATE TAXING SUBACTIN
15		720919104034	SIVA GANESH P	IN CLOUD STORAGE	TRUE JOUNT AEDASTIN
16		720919104016	HARISH C		a second and the second and
17	7	720919104028	RANGARAJ P	USER LEVEL RUNTIME SECURITY	PROF.ARUN J
18		720919104701	PANNEER SELVAM K	AUDITING FOR CLOUD	
		720919104019	MUHAMMED RAFEEQ		
10	8	720919104004	ABIN P	AUTOMATED ANSWER EVALUTION USING MACHINCE LEARNING AND NLP	PROF SANDHYA
20	1	720919104031	SHASHAL MOHHAMED		
21		720919104032	янатніка		
22	0	720919104033	SINEKA	BORFWELL RESCUEROBOT USING ARDIUNO	DR.S. SAKTHEVINAYAGAM
23	1	720919104303	SENTHE KUMAR		
24	10	720919104013	GOWTHAM S	DETECT MALICIAES PACKET AND MALICIOIS AFFECT IMPROVE CONFIDENTLY IN DATA SECURE	PROF RUPA
25		720919104005	ALWIN MILLER CJ		
20	- 11	720919104008	ANSIE SHAMSUDHEEN	ADVANCED DRIVER DROWSINESS	MRS MALARVIZHLI
77	1	720919104018	MILAN MOLLAN	DETECTION SYSTEM	
28	T	7209191040	SUBIN T	A TRAUSFER LEARNING	
20	12	7209191040	HARIPRASAD P	APPROACH TO CLASSIFY DEPRESSION USING SOCIAL	PROF. LEENA
30		7209191040	PUSHPARAJ CEREBRON	MEDIA	
			Press and a state of the state	JCT College of Engineering and Technolog	YV.

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32	- 13	720010104038	THANGADE RAI	LIVE MODEL OF DNA	
33		720949104029	RANDIN	OUTSOLIKET OF CLOUD STORAGE	PROF LAYA RONE
34		120919104035	PRAY AG RAJ		******
14	14	20010104054	PAPPERIMAR	LARATMAN AND AND AT CAMPAGE	
36		720019104049	CHUTEN KUMAR		PROF ANA NHA
\$7	-	730010104032	RAVINDRA KUMAR	ANDROID IGAST D SMARTE	
- 18	1	72001010104022	NITESTAS MAR	CLEANING 2 DISTANCE	DR RAJIV SURESTEKT MAR
3.9		720910164646	ABINAV RAJ		
441	14.	120910104044	THE KEYSTER AND A REPORT	SMART PANSI NULR ALERT	DRS SAKIDI VINAVAGAM
1)	1	720919104069	SURAJ KUMAR		
42		720019104065	NAUR ABIT SUMAN		
43	1	72091910404X	ADETEKTMARI	SKILL VERDE ATERS	MRS MALARVIZIET
44	18	720016104051	KAVITIAKIMARI	ONE INFORT GALLERY SYSTEM	PROF RUPA
15	10	720919104008	SNULLY RAU STRUKT A	NO CODE ADDE NERADON	PROFILITINA
40	20	720919104021	NAME AND ADDRESS AND ADDRESS	ONLINE EVENT BOOKING	DR.A.PRIYA

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A MACHINE LEARNING -BASED CLASSIFICATION AND PREDICTION TECHNIQUE FOR DDoS ATTACKS



A PROJECT REPORT

Submitted by

PAULRAJ R

720919104024

ΡΟΟΙΛ Κ

720919104025

ASHLIN TM

720919104010

in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

COMPUTER SCIENCE AND ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY, PICHANUR, COIMBATORE -641 105

> ANNA UNIVERSITY:: CHENNAI 600 025 MAY 2023

> > 1



PRINCIPAL JCT College of Englanding and Technology PICHANUR, COMMATORE - 641 105.

BONAFIDE CERTIFICATE

Certified that this project report "A Machine Learning-Based Classification and Prediction Technique for DDoS Attacks" is the bonafide work of "PAULRAJ R, POOJA K and ASHLIN TM" who carried out the project work under my supervision.

Dr. G. Rajiv Suresh Kumar, ME., Ph.D., HEAD OF THE DEPARTMENT, Department Of Computer Science and Engineering, JCT College Of Engineering and Technology Pichanur, Coimbatore -641 105



Miss.Greeshma, K Assistant Professor Department Of Computer Science and Engineering, JCT College Of Engineering and Technology Pichanur, Coimbatore -641 105

Submitted for the Project Viva-voice Examination held on 22-05 - 2023



M.h. External Examiner

PRINCIPAL JCT College of Englishing and Technology PICHANOR, COMBANORE - 641 105.

ABSTRACT

Distributed network attacks are referred to, usually, as Distributed Denial of Service (DDoS) attacks. These attacks take advantage of specific limitations that apply to any arrangement asset, such as the framework of the authorized organization's site. In the existing research study, the author worked on an old KDD dataset. It is necessary to work with the latest dataset to identify the current state of DDoS attacks.

This paper, used a machine learning approach for DDoS attack types classification and prediction. For this purpose, used Random Forest and XGBoost classification algorithms. To access the research proposed a complete framework for DDoS attacks prediction. For the proposed work, the UNWS-np-15 dataset was extracted from the GitHub repository and Python was used as a simulator. After applying the machine learning models, we generated a contusion matrix for identification of the model performance. In the first classification, the results showed that both Precision (PR) and Recall (RE) are _89% for the Random Forest algorithm. The average Accuracy (AC) of our proposed model is _89% which is superb and enough good. In the second classification, the results showed that both Precision (PR) and Recall (RE) are approximately 90% for the XGBoost algorithm. The average Accuracy (AC) of our sugge ted model is 90%. By comparing our work to the existing research works, the the defect determination was significantly improved which is accuracy of approximately 85% and 70% , respectively

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CHAPTER 8

CONCLUSION

It is important to provide a more user-friendly, faster alternative to deep learning calculations, and produce better results with a shorter burning time. It is important to work on unsupervised learning toward supervised learning for unlabelled and labeled datasets. Moreover, we will investigate how non-supervised learning algorithms will affect the DDoS attacks detection, in particular, we nonlabeled datasets are taken into account.

FUTURE ENHANCEMENT

Looking to the future, for functional applications, it is important to provide a more user-friendly, faster alternative to deep learning calculations, and produce better results with a shorter burning time. It is important to work on unsupervised learning toward supervised learning for unlabelled and labeled datasets. Moreover, we will investigate how non-supervised learning algorithms will affect the DDoS attacks detection, in particular, we non-labeled datasets are taken into account.

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

20		the state of the s			
29	Internship	Nestsoft	DHASARADH A M	2022-2023	1.7.22-30.7.22
30	Internship	Sysbreeze	DILNA K S	2022-2023	1.7.22 - 21.7.22
31	Internship	ALEXZA Tech	DIVYA G	2022-2023	1.5.23-31.5.23
32	Internship	ALEXZA Tech	EBY LALU	2022-2023	1.5.23-31.5.23
33	Internship	ALEXZA Tech	ESAKKI MUTHU N	2022-2023	1.5.23-31.5.23
34	Internship	VERZEO	GIFTSON MOSES G	2022-2023	1.9.22 - 31.10.22
35	Internship	Sysbreeze	GOVINDH KUMAR S.R.	2022,2023	1722.21722
36	Internship	Sysbreeze	GUTTA SAI LOKESH	2022-2023	1.7.22 - 21.7.22
37	Internship	Sysbreeze	HARI KRISHNAN N	2022-2023	1.7.22 - 21.7.22
38	Internship	VERZEO	HARISHMA SUHI S	2022-2023	1.9.22 -31.10.22
39	Internship	Sysbreeze	JAYA PRAKASH A	2022-2023	1.7.22 - 21.7.22
40	Internship	ALEXZA Tech	JAYASRI G	2022-2023	1.5.23-31.5.23
41	Internship	ALEXZA Tech	JOHN JEBASINGH P	2022-2023	1.5.23-31.5.23
42	Internship	Nestsoft	JOMON JOY	2022-2023	1.7.22-30.7.22
43	Internship	Nestsoft	JULIPI DIVYA SREE	2022-2023	1.7.22-30.7.22
44	Internship	ALEXZA Tech	KANNIGA K	2022-2023	1.5.23-31.5.23
45	Internship	Sysbreeze	KASALA SAI THARUN	2022-2023	1.7.22 - 21.7.22
46	Internship	Nestsoft	KAVIYA S	2022-2023	1.7.22-30.7.22
47	Internship	Nestsoft	KEERTHI VASAN V	2022-2023	1.7.22-30.7.22
48	Internship	VERZEO	KORIVI MADHANMOHAN REDDY	2022-2023	1.9.22 -31.10.22
49	Internship	VERZEO	KUDUMULA THRIVENI	2022-2023	1.9.22 - 31.10.22
50	Internship	Nestsoft	LINSON JOSEPH	2022-2023	1.7.22-30.7.22
51	Internship	ALEXZA Tech	LITHIN S	2022-2023	1.5.23-31.5.23
52	Internship	Sysbreeze	MAHINDHAN S	2022-2023	1.7.22 - 21.7.22
53	Internship	Sysbreeze	MANIKANDAN S	2022-2023	1.7.22 - 21.7.22
54	Internship	Sysbreeze	MANISHA NASREEN P	2022-2023	1.7.22 - 21.7.22
55	Internship	Sysbreeze	MANYAM THULASI PRAKASH	2022-2023	1.7.22 - 21.7.22
56	Internship	ALEXZA Tech	MARTIN YOKESH D	2022-2023	1.5.23-31.5.23
57	Internship	ALEXZA Tech	MATHAN S	2022-2023	1.5.23-31.5.23
58	Internship	Nesisofi	MOHAMMED FAZIL S	2022-2023	1.7.22-30.7.22
59	Internship	VERZEO	MOVESH M	2022-2023	1.9.22 - 31.10.22
60	Internship	Nestsoft	MUHAMMED FASIL K M	2022-2023	1.7 22-30.7.22
61	Internship	Nestsoft	M MUHAMMED	2022-2023	1.7.22-30.7.22

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62	Internship	NESTSOFT	THRISHA R	2022-2023	1.6.23-30.6.23
63	Internship	ALEXZA Tech	SHERIN MOHAMMED S	2022-2023	1.5.23-31.5.23
64	Internship	NESTSOFT	SHEBIN SHAJAHAN	2022-2023	1.6.23-30.6.23
65	Internship	NESTSOFT	SRIKHIL V	2022-2023	1.6.23-30.6.23
66	Internship	NESTSOFT	SANJIDN	2022-2023	1.6.23-30.6.23
67	Internship	ALEXZA Tech	VIPINRAJ MR	2022-2023	1.5.23-31.5.23
68	Internship	VERZEO	VISHAS P	2022-2023	1.9.22 -31.10.22
69	Internship	ALEXZA Tech	SURAJ M	2022-2023	1.5.23-31.5.23
70	Internship	Sysbreeze	SAYANDH K P	2022-2023	1.7.22 - 21.7.22
71	Internship	NESTSOFT	PRATHYUSH PP	2022-2023	1.7.22-30.7.22
72	Internship	Sysbreeze	THAJUL NIYAS	2022-2023	1.7.22 - 21.7.22
73	Internship	VERZEO	SARVESH	2022-2023	1.9.22 - 31.10.22
74	Internship	ALEXZA Tech	C R SANDEEP KUMAR	2022-2023	1.5.23-31.5.23
75	Internship	Sysbreeze	SUJITHA B	2022-2023	1.7.22 - 21.7.22
76	Internship	NESTSOFT	SUBHASREE N	2022-2023	1.7.22-30,7.22
77	Internship	VERZEO	TAHIRA BEGUM S	2022-2023	1.9.22 -31.10 22
78	Internship	Sysbreeze	NANDAKISHOR M	2022-2023	1.7.22 - 21.7.22
79	Internship	VERZEO	RASHAD F	2022-2023	1.9.22 - 31 10 22
80	Internship	NESTSOFT	NEHA B	2022-2023	1.7.22-30.7.22
81	Internship	NESTSOFT	SURE VENKATA NAGA	2022-2023	1.7.22-30 7.22
82	Internship	NESTSOFT	SAJJALA HEMANTH KUMAR	2022-2023	1.7.22-30 7 22
83	Internship	Sysbreeze	VANCHI REDDY PAVAN KUMAR REDDY	2022-2023	1.7 22 - 21 7 22
84	Internship	Sysbreeze	YERRAGORLA	2022-2023	1.7.22 - 21.7.22
85	Internship	ALEXZA Tech	NIKHIL H	2022-2023	1.5.23.31.5.23
84	Internship	Syshreeze	MUHAMMED SHAFLT	2022,2023	1732 31 733
87	Internship	VERZEO	NEETIN S	2022-2023	1922 31 10 22
			SEE THU S	_	
88	Internship	Sysbreeze	SUGUMAR E	2022-2023	1.7.22 - 21 7 22
89	Internship	Sysbreeze	SURYA S	2022-2023	17.22 - 21 7.22
90	Internship	Sysbreeze	VARGHESE ELDO	2022-2023	1.7 22 - 21 7.22
91	Internship	Sysbreeze	THIRL MOORTHI S	2022-2023	1.7.22 - 21 7 22

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92	Internship	ALEXZA Tech	PRAVEEN KUMAR B	2022-2023	1.5.23-31.5.23
93	Internship	Sysbreeze	RAMAJAYAM R	2022-2023	1.7.22 - 21.7.22
94	Internship	VERZEO	VISWA PRATHAP K	2022-2023	1.9.22 - 31.10.22
95	Internship	Sysbreeze	RAGUPRIYAN P	2022-2023	1.7.22 - 21.7.22
96	Internship	ALEXZA Tech	SATHISH KUMAR S	2022-2023	1.5.23-31.5.23
97	Internship	Sysbreeze	PANDI SELVAM R	2022-2023	1.7.22 - 21.7.22
98	Internship	Sysbreeze	NAVEEN K	2022-2023	1.7.22 - 21.7.22
99	Internship	VERZEO	TAMILKUMARAN V	2022-2023	1.9.22 -31.10.22
100	Internship	Sysbreeze	VIGNESHWARAN A	2022-2023	1.7.22 - 21.7.22
101	Internship	NESTSOFT	SHERBIN S	2022-2023	1.7.22-30.7.22
102	Internship	Sysbreeze	NISHANTH MG	2022-2023	1.7.22 - 21.7.22
103	Internship	Sysbreeze	SANOOP DHARAN	2022-2023	1.7.22 - 21.7.22
104	Internship	VERZEO	SREERAM R	2022-2023	1.9.22 -31.10.22
105	Internship	ALEXZA Tech	SRIDHAR S	2022-2023	1.5.23-31.5.23
106	Internship	Sysbreeze	SRIDESINGURAJA S	2022-2023	1.7.22 - 21.7.22
107	Internship	VERZEO	PRASANTH P	2022-2023	1.9.22 - 31.10.22
108	Internship	NESTSOFT	THIRISHA D	2022-2023	1.7.22-30.7.22
109	Internship	Sysbreeze	SANGAMESHWARANS	2022-2023	1777.71777
110	Internship	ALEXZA Tech	SANA MALAKONDA REDDY	2022-2023	1.5.23-31.5.23
111	Internship	Sysbreeze	NITHYA V	2022-2023	1.7.22 - 21.7.22
112	Internship	NESTSOFT	PEDDIREDDY INDU PRIYA	2022-2023	1.7.22-30.7.22
113	Internship	Sysbreeze	SREEJITH A	2022-2023	1.7.22 - 21.7.22
114	Internship	VERZEO	RAHUL G	2022-2023	1.9.22 -31.10.22
115	Internship	NESTSOFT	NALLABALLE GANGA PRASAD	2022-2023	1.7.22-30.7.22
116	Internship	Sysbreeze	NAILA P K	2022-2023	1.7.22 - 21.7.22
117	Internship	ALEXZA Tech	RAHUL CHRISTOBER F	2022-2023	1.5.23-31.5.23
118	Internship	NESTSOFT	RAHUL KUMAR	2022-2023	1.7.22-30.7.22
119	Internship	Sysbreeze	RAJNISH KU MAR	2022-2023	1.7.22 - 21.7 22
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HOD/CSE

Date: 13-6-2022

To.

Ms.Lekshmi menon Nestsoft HR & General Affairs Ernakulam,Kerala.

Dear Madam,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology!

I would like to seek tour kind patronage in providing internship opportunity to our Computer Science and Engineering students. It will be a great exposure for them to gain knowledge and hands on experience.

We request you to kindly share the availability schedule at an early date



Thanking you.

rinc

PRINCIPAL JCT College of Engineering and Technology PICHANUR, COM/BATORE - 641 105.



20.06.2022

INTERNSHIP ACCEPTANCE LETTER

We are pleased to give accept your internship request for your Computer Science and Engineering students. They can join the Internship training in our organization during the period from 01.07.2022 to 30.07.2022. During the internship they have to follow the rules and regulations of the company.

We wish him best wishes in future endeavors.

Thanks & Regards

Mar

Ms.Lekshmi Menon Infopark TBC, Kaloor, Kochi, Kerala 682016



PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

CERTIFICATE

- OF INTERNSHIP-----

THIS CERTIFICATE IS PROUDLY PRESENTED TO

HARI KRISHNAN M

Internship: Web Development (Html, Bootstrap, Javascript, Php/MySQL) Duration: 1 July 2022 to 30 July 2022

Their self-motivated attitude to learn new things, along with their dedication and hard work, helped them complete an internship successfully. We wish you every success in all your future endeavors.

Regards,

SUTTO S

Jilo Jose Chairman & CEO

PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105





www.nestsoft.com





B.E. Electronics and Communication Engineering





DEPARTMENT OF ECE

S. No	Register No	Name of the Student	Year	Name of the Organization	Duration of Training	No. of Days
1	720920106001	Barath P	m	Azetch Solutions	1.07.2023 to 20.07.20230	20 Days
2	720920106002	Dhanujnai N A	111	Azetch Solutions	1.07.2023 to 20.07.2023	20 Days
3	720920106003	Jagamsetty Saikiran	111	Azetch Solutions	1.07.2023 to 20.07.2023	20 Days
4	720920106004	Nandhakumar Y	Ш	Azetch Solutions	1.07.2023 to 20.07.2023	20 Days
5	720920106006	T Sathishkumar	111	Azetch Solutions	1.07.2023 to 20.07.2023	20 Days
6	720920106007	Stephen Roy S	ш	Azetch Solutions	1.07.2023 to 20.07.2023	20 Days
7	720920106009	Yarra Bhanu Prakash	ш	Azetch Solutions	1.07.2023 to 20.07.2023	20 Days
8	720920106303	Siddarth G	ш	Azetch Solutions	1.07.2023 to 20.07.2023	20 Days
9	720921106024	Reddygari Chethana	П	BOSCH	01.07.2023 to 11.08.2023	20 Days
10	720921106025	Sanjay K	П	BOSCH	01.07.2023 to 11.08.2023	20 Days

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11	720921106017	Mohansethupathi A	п	BOSCH	01.07.2023 to 11.08.2023	20 Days
12	720921106018	Monaboti Ganga Mahesh	Ц	BOSCH	01.07.2023 to 11.08.2023	20 Days
13	720921106026	Sannithi Sukesh S	П	BOSCH	01.07.2023 to 11.08.2023	20 Days
14	720921106014	Karthikeyan A T	11	BOSCH	01.07.2023 to 11.08.2023	20 Days
15	720921106015	Lokesh M	П	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
16	720921106016	Mallu Naga Tejeswar Reddy	11	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
17	720921106020	Nare Jagadeesh	11	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
18	720921106004	Aravind Ganesh	П	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
19	720921106021	Maheswar Reddy	П	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
20	720921106012	Jishnu S	П	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
21	720921106013	Vishnu Vardhan Reddy	11	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
22	720921106019	Nandibathini Venkatesh	П	SkillVERTEX	27.05.2023 to 27.06.2023	20 days









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23	720921106001	Aathavan P	П	SkillVERTEX	27.05.2023 to 27.06.2023	20 days
24	720921106002	Adarsh K S	П	SkillVERTEX	27.05.2023 to 27.06.2023	20 days
25	720921106003	Ailugari Bhanu Prakash	П	SkillVERTEX	27.05.2023 to 27.06.2023	20 days
26	720921106022	Koteswara Rao	H	SkillVERTEX	27.05.2023 to 27.06.2023	20 days
27	720921106023	Porulchelvan S	П	SkillVERTEX	27.05.2023 to 27.06.2023	20 days
28	720921106010	Golla Sumanth	11	SkillVERTEX	27.05.2023 to 27.06.2023	20 days
29	720921106005	Malla Reddy	11	SkillVERTEX	27.05.2023 to 27.06.2023	20 days
30	720921106006	Dhinesh M	П	SkillVERTEX	27.05.2023 to 27.06.2023	20 days
31	720921106028	Sreeram K	II	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
32	720921106010	Gaddam Manisha	11	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
33	720921106005	Avula Mallareddy	П	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
34	720921106027	Shaik Naf <mark>iya Tabasum</mark>	п	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days

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35	720921106007	Dhiwakar S	п	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
36	720921106008	Dudekula Bala Dastagiri	П	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days
37	720921106009	Dudekula Siddiq	П	Nxtlogic Software Solutions	01.07.2023 to 31.07.2023	20 Days

COURSE CO-ORDINATOR

N.J Dong

HOD



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JCT OLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE-641105



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

PROJECT LIST

Academic Year: 2022-2023

YEAR/SEM : IV ECE / VIII

Batch No	Register No	Students Name	Tittle of the Project	Project Guide	Signature of Guide	Remarks
	720919106001 B.Fenisha Princes			*		
1	720919106004	M.Mridula	Revolutionizing E-Mobility	Mr.K.Praveen Kumar	D.MK	
	720919106301	M.Arun			XXX	
	720919106005	P.Rajasubhisksha	2		-0	
2	720919106007	N.Varun	Footsteps Power Generation	Mr.M.Chandra Sekaran	M. Ch	
	720919106008	KM.Vishnu	System			
	720919106006	S.Saranraj				
3.	720919106003	KP.Malavika	E-Umbrella	Mr.K. Babu	ANX .	
	720919106302	K.Praveen Kumar			32	



proper

Department Project Coordinator

RINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

HoD/ECE





REVOLUTIONIZING E-MOBILITY - UNLOCKING THE POTENTIAL OF BREAKING THE TETHER

A PROJECT REPORT Submitted by

FENISHA PRINCESS B

MRIDULA M

ARUN M

720919106001

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ICT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105

In the partial fulfillment for the award of the degree

oſ

BACHELOR OF ENGINEERING

in

ELECTRONICS AND COMMUNICATION ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY, PICHANUR,

COIMBATORE - 641 105

ANNA UNIVERSITY: CHENNAI - 600 025

MAY 2023



ANNA UNIVERSITY: CHENNAI - 600 025

BONAFIDE CERTIFICATE

Certified that this project report "REVOLUTIONIZING E-MOBILITY -UNLOCKING THE POTENTIAL OF BREAKING THE TETHER" is the bonafide work of "FENISHA PRINCESS B, MRIDULA M, ARUN M" who carried out the project under my supervision.

Prof. D VEDHA VINODHA M.E. HEAD OF THE DEPARTMENT

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Prof. K PRAVEEN KUMAR M.E. ASSISTANT PROFESSOR

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PRINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

Submitted for the project Viva-Voice examination held on .23.05.23.....





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ABSTRACT

Wireless power transfer (WPT) technology has the potential to revolutionize the way electric vehicles (EVs) are charged. This abstract provides an overview of the various aspects involved in WPT for charging electric vehicles using solar and grid energy. It starts with an introduction to the concept of WPT, followed by a description of the different WPT technologies available for solar and grid integration. Then it outlines the various factors that affect the efficiency of WPT including distance, alignment, frequency and how these factors can be optimized for solar and grid integration. Charging time and power transfer efficiency are the main challenges of wireless power transfer for electric vehicles. It is proposed in this paper to resolve both issues using the transformer induction concept as well as wireless power transfer technology. A high efficiency WPT system for electric vehicle charging that carries a receiving coil. A prototype is built and tested to verify the feasibility of the proposed design with a unity power factor can be achieved over an air gap of 8cm. The maximum sliding distance of 10 cm under various power conditions and output voltage is produced upto 15V approximately. It uses solar energy and grid to produce electric voltage.

KEY WORDS: Wireless Power Transfer, Electromagnetic induction, Solar power, Grid.

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CHAPTER - 6 6 CONCLUSION

This paper presented a review of the wireless charging of electric vehicles A high-efficiency wireless power transfer system for electric vehicle charging applications is proposed. System configuration, design considerations were analyzed and discussed in detail. Vehicle electrification is unavoidable because of environmental and energy-related issues. Wireless charging will provide many benefits as compared with wired charging. WPT for EVs has the potential to overcome the drawbacks of wired chargers and also eliminate some hurdles towards vehicle electrification with sustainable mobility.

Aside from its convenience compared to wired chargers, WPT can enable significant downsizing of the onboard EV battery. A prototype was designed, built and tested with the popular renewable solar energy. With technology development, wireless charging of EVs can be brought to fruition. Further studees in topology, control, inverter design and human safety are still needed in the perittern.

6.1 FUTURE WORK

Dynamic wireless charging is a promising emerging technology that has the potential to revolutionize the EV industry by allowing EVs to be charged on the go. The technology works by using an array of charging pads embedded in the road, which wirelessly communicate with EVs to transfer power. Dynamic wireless charging offers benefits such as increased convenience for EV owner reduced range anxiety and potential cost savings from reduced battery siz. However, the technology faces challenges such as high costs, infrastructure requirements and standardization issues. Despite these challenges, governments and industry players are investing heavily in research and development to bring dynamic wireless charging to the market.

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B.E Electrical and Electronics Engineering



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ACADEMIC YEAR 2022-2023



PROJECT NAME LIST

Batch No	Register Number	Name of the Student	Guide	Title of the Project Work	
	720919105001	AKILAN M			
т	720919105003	LINO K V	Prof D NAGARAIAN	IOT BASED SURVEILLANCE AND	
1	720919105008	VIMAL A		ROBOT	
	720919105305	VIBIN M			
п	720919105004	MADHAVAN V			
	720919105006	SATHISH KUMAR R	Prof. M. DEVIKA	E VEHICLE WITH BATTERY	
	720919105302	MOHMMED IMRAN J		MANAGEMENT SYSTEM	
	720919105304	VARUN PS			
	720919105007	720919105007 SYAM S			
ш	720919105009	VISHNU RAJ C	Prof R SATHEESH	IOT BASED SMART MULTI	
m	720919105301	HARI HARA SUDHAN M		ROBOT	
	720919105303	MARIS RAHUL K			
	720919105005	PRAVEEN KUMAR P			
IV	720919105019	DHIRAJ KUMAR PANDIT	Prof I PRIVADHARSHINI	HYBRID FI FCTRICAL VEHICLE	
1 7	720919105024	HARI KISHOR KUMAR		ITTERID ELECTRICAL VEHICLE	
	720919105029	MANTU KUMAR			

PROJECT NAME LIST (M.E., PED)

	Batch No	Register Number	Name of the Student	Guide	Title of the Project Work	
					Design of Modified Bidirectional	
	1	720921415001	ARUN A	Dr.K.GEETHA	Converter for EV and HEV	
Γ					Designing of a New Topology of Seven	
	2	720921415002	MANOHARAN M	Mr. D.NAGARAJAN	Level Inverter	

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MINI PROJECT NAME LIST

Batch No	Register Number	Name of the Student	Guide	Title of the Project Work	
	720920105001	ABDUL KARIM ANSARI			
т	720920105004	JARWAN KUMAR	Prof D Nagaraian	Intelligent traffic light Control System	
1	720920105017	SARVESH KUMAR	F101.D.Ivagarajan		
	720920105010	MD SADDAM HUSSAIN			
	720920105003	CHHOTU KUMAR		Waste management Systems for Smart Cities	
	720920105015	SANOJ KUMAR			
Π	720920105018	SHAHABUDDIN MANSURI	Prof.R.Satheesh		
	720920105012	PRINCE KUMAR GUPTA			
	720920105014	RITIK KUMAR			
	720920105005	JAYAPRAKASH A		IoT based Smart Garage door opener	
ш	720920105016	SARAVANAN B	Prof K Guruvaran		
m	720920105308	HARIKRISHNAN T	Ton.K.Guruvaran		
	720920105311	SRIKANTH M			
	720920105310	RESHMA G		Intelligent ambulance with	
IV	720920105305	DIKUL	Prof M Devika		
I V	720920105312	GUDIPATI MANASA	TIOLIVIDEVIKa	automatic traffic signal control	
	720920105313	ANUMALA VENKATA SANTHOSH			
	720920105301	AMARNATH M		IoT enabled forest fire deduction and management	
V	720920105302	ASHIQ S	Prof M Shanthi		
•	720920105303	ASWIN R	1 IOLIVI.Shahun		
	720920105306	FUHAD K			
	720920105304	AYYAPPADAS KM			
VI	720920105011	MRIDHUL RAJU	Prof D Nagarajan	Wireless system based on coal mine safety helmet	
V I	720920105019	SIJIL JOHNSON	i 101.D.ivagarajali		
	720920105021	VISHNU B			

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JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ACADEMIC YEAR 2022-2023 INTERNSHIP TRAINING NAME LIST



S. No	Register No	Name of the Student	Year	Name of the Company	Duration of Training	No. of Days
1	720921105002	Abhijith.R	II	Keltron Knowledge Centre.Kerala	12/07/2023 to	1 Week
2	720921105003	Ajanya Stephy A	II	Code Blend Technologies, Coimbatore.	10/07/2023 to 14/07/2023	5 Days
3	720921105006	Anuragh R	П	Keltron Knowledge Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
4	720921105009	Arya Mohan	II	Keltron Knowledge Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
5	720921105013	Dhanush G	Π	VEI Technologies	11/07/2022 to 23/07/2022	12 DAYS
6	720921105014	Dharshik H Das	II	Keltron Knowledge Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
7	720921105015	Fazil J	II	Keltron Knowledge Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
8	720921105016	Francis Maria Thomson A	II	VEI Technologies	11/07/2022 to 23/07/2022	12 DAYS
9	720921105017	Gogula Amarnath	II	IPCS Automation	10/07/2023 to 14/07/2023	4 DAYS
10	720921105018	Gonugunta Akhil Kumar	11	Pumo Technologies India Pvt Ltd	24/02/2023 to 25/04/2023	60 DAYS
11	720921105019	Gowtham J	II	Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
12	720921105020	Jagajothi P		Pumo Technologies India Pvt Ltd	24/02/2023 to 25/04/2023 02/07/2023 to	60 DAYS
13	720921105022	Job Babu		Kumbazha,Pathanamthitta	03/07/2023 to 07/07/2023	5 Days
16	720921105025	Kuruva Sreenivasalu	II 	VEI Technologies	23/07/2022 to 11/07/2022 to	12 DAYS
17	720921105026	Midde Guru Teja	11 	VEI Technologies	23/07/2022 to 12/07/2022 to	12 DAYS
20	720921105029	Mohammed Salman M	II 	Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
24	720921105033	Nandhu Gokul G	11 	Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
25	720921105034	Nataraju K		IPCS Automation	14/07/2023 to 11/07/2023	4 DAYS
26	720921105036	Pradeep M	II 	VEI Technologies	23/07/2022 to 12/07/2022 to	12 DAYS
29	720921105039	Prajitha P	11 	Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
31	720921105041	Rajesh R	II 	Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
34	720921105047	Sreehari K S		Kumbazha,Pathanamthitta	03/07/2023 18	5 Days
36	720921105302	Muhamed Fayaz F		Code Blend Technologies, Coimbatore.	10/07/2023 to 14/07/2023	5 Days
37	720921105303	Sabari Das V	II	Keltron Knowledge Centre,Kerala	12/07/2023 to 18/07/2023	1 Week
39	720921105305	Sumithra R	II 	IPCS Automation	10/07/2023 to 14/07/2023	4 DAYS
40	720920105001	Abdul Karim Ansari		IPCS Automation	14/07/2023 to 11/07/2023	4 DAYS
41	720920105003	Chhotu Kumar		VEI Technologies	23/07/2022 to 10/07/2022 to	12 DAYS
42	720920105004	Jarwan Kumar		IPCS Automation	10/07/2023 to 14/07/2023 to	4 DAYS
43	720920105005	Jayaprakash A		IPCS Automation	14/07/2023 to 11/07/2023	4 DAYS
44	720920105007	Lakhindar Kumar		VEI Technologies	23/07/2022 to 10/07/2023 to	12 DAYS
45	720920105010	Md Saddam Hussain		IPCS Automation	14/07/2023 to 14/07/2023 to	4 DAYS
46	720920105011	Mridhul Raju		VEI Technologies	23/07/2022 to 24/02/2023 to	12 DAYS
51	720920105017	Sarvesh Kumar	Ш Ш	Ltd	25/04/2023 to	60 DAYS
52	720920105018	Shahabuddin Mansuri		VEI Technologies	23/07/2022 to	12 DAYS
57	720920105303	Aswin R	111	VEI Technologies	23/07/2022 to 10/07/2022 to	12 DAYS
58	720920105304	Ayyappadas Km	Ш Ш	IPCS Automation	10/07/2023 to 14/07/2023	4 DAYS
59	720920105305	Dikul	Ш	IPCS Automation	10/07/2023 to 14/07/2023	4 DAYS

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IOT ENABLED FOREST FIRE DETECTION AND MANAGEMENT

PROJECT REPORT

Submitted by

AMARNATH.M (720920105301) ASHIQ . S (720920105302) ASHWIN. R (720920105303) FUHAD.K (720920105306)

In partial fulfillment for the award of the degree

of

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in

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BONAFIDE CERTIFICATE

Certified that this project report "IOT ENABLED FOREST FIRE DETECTION AND MANAGEMENT" is the bonafide work of "AMARNATH, ASHIQ, ASHWIN and FUHAD

Who carried out the project work under my supervision.

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TURE

Dr.K. GEETHA

Prof .M SHANTHI

HEAD OF THE DEPARTMENT PER . 1 ..

xamination held on JUNE/01/2023. Submitted Y EXTERNAL INTERN

NER

JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

ABSTRACT:

This project deals with the detection and management of forest fire with the combined technology. Forest fire is very common which a massive disaster to the environment and wildlife is. In order to protect these, there need to be taken early caution measures to control the spreading fire. Usually it requires massive dependency of man power, transportation facility and lagging to trace true area will leads to delay in taking actions. Through this look up we have come up with the solution for this by implementing the IOT technology. Where flame sensors detects the fluctuation in the temperature continuously and using Node MCU microcontroller which is also a Wi-Fi module sends these values to the cloud as database, if these value exceeds the threshold value then a pop up alert message will be sent by the cloud to the respective forest department immediately. Where we can avoid major loss and spreading of fire to large area at its early stage.

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CONCLUSIONS

This type of system is the first of its kind to ensure no further damage is then to forests when there is fire breakout and immediately a message is sent to the user through the App. immediate response or early warning to a fire breakout is mostly the only ways to avoid losses and environmental, cultural heritage damages to a great extent. Therefore the most important goab in fire surveillance are quick and reliable detection of fire. It is so much easier to suppress fire while it is in its early stages. Information about progress of fire is highly valuable for managing fire during all its stages. Based on this information the fire fighting staff can be guided on target to block fire before it reaches cultural heritage sites and to suppress it quickly by utilizing required fire fighting equipment and vehicles. With further research and intevation, this project can be implemented in various forest areas so that we can save our firests and maintain great environment.

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B.Tech Food Technology

SI. No	Title of the collaborative	Name of the collaborating and
1	activity	Contact details
1	Internship	Aavin - coimbatar
12	Internship	Aavin - coimbatore
13	Internship	Aavin coimbatore
4	Internship	Green valles elles al liter tra
13	Internship	Green valley off - palakkad, Kerala
6	Internship	Green valley oll - palakkad, Kerala
1	Internship	Noble L. J.
8	Internship	Noble Industry - Avittathur
9	Internship	Noble Industry - Avittathur
10		Aguin The Foodastha-Ernakulam, Kerala
	Internship	Aavin-Thanjavur district cooperative milk
11		producers union ltd
	Internship	Aavin-Thanjavur district cooperative milk
12		producers union ltd
12	Internship	Aavin-Thanjavur district cooperative milk
12		producers union ltd
15	Internship	Thiruvananthapuram regional cooperative
14		milk producers union LTD
14	Internship	Thiruvananthapuram regional cooperative
16	1	milk producers union LTD
15	Internship	Thiruvananthapuram regional cooperative
16	Internchia	milk producers union LTD
17	Internship	Aavin Industry - Theni
18	Internship	Noble Industry - Avittathur
19	Internship	Noble Industry - Avittathur
20	Internship	Aavin - Kanyakumari
21	Internship	Green valley oil - palakkad, Kerala
22	Internship	Green valley oil - palakkad, Kerala
23	Internship	Aavin - Madurai
24	Internship	Aavin - Madurai
25	Internship	Aavin - Madurai
26	Internship	Foodastha-Ernakulam, Kerala
27	Internship	Foodastha-Ernakulam, Kerala
27	Internship	Foodastha-Ernakulam, Kerala
20	Internship	Foodastha-Ernakulam, Kerala
29	Internship	Thiruvananthapuram regional cooperative
	F	milk producers union LTD
30	Internship	Thiruvananthapuram regional cooperative
	p	milk producers union LTD
31	Internship	Thiruvananthapuram regional cooperative
	incitionip	milk producers union LTD
32	Internship	Foodastha-Ernakulam, Kerala
33	Internship	Aavin - Madurai

hanur

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34	Internship	Foodastha-Ernakulam, Kerala
35	Internship	Foodastha-Ernakulam, Kerala
36	Internship	Foodastha-Ernakulam, Kerala
37	Internship	Foodastha-Ernakulam. Kerala
38	Internship	Foodastha-Ernakulam, Kerala
39	Internship	Green valley oil - palakkad, Kerala
40	Internship	Thiruvananthapuram regional cooperative milk producers union LTD
41	Internship	Thiruvananthapuram regional cooperative milk producers union LTD
42 Internship		Aavin-Thanjavur district cooperative milk producers union ltd



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PROJECT BATCH LIST

Batch. No.	Title of the Project	Student Name	Specialization	Nature of the Project	Name of the Guide with Designation
1	Development of ice apple flavored lactose free ice cream using coconut milk	Abitha RAJ Santhosh K Vidhya D	Dairy Technolog y	Society Oriented	Dr.M.Indumathi Associat e Professo r
2	Development and Optimization of probiotic fermented fruit juicefor the control of diabetes	Akila K Babisha M Dhanush T B	Fruits and Vegetable Processing	Society Oriented	Ms.S.Indu Assistant Professor
	Development of nutrient rich tofu from cottonseed milk.	Naja beegam M N Shafna KP Sinsia Thaslin S Surya K S	Food Processin g	Society Oriented	Ms.S.Indu Assistant Professor



4	Impact of m pin cold plass on quality of ct and honey.	ulti ma hilli Krishnanjali	nanjali Preservation		Dr.M.Indumathi Associat e Professo r
5	Development and characterizatio n of nutrient rich instant millet soup mix.	Ebin Davis Muhammed Raby	Food Processin g	Society Oriented	Dr.M.Indumathi Associate Professor
6	Development or calcium enriched wheat flour from valorization of sardine fish bones.	f Abhishek silvan Mohammed Badusha K N Muneeb Parappurath Tony Saji	Food Processin g	Society Oriented	Dr.P.Balamurug a n Professor and Head
7	Optimization of underutilized chia seeds and its incorporation into dietary millet cookies	Aadhithya Krishna Arshad K Vipin Dinesh M	Baking and Confectionery	Society Oriented	Ms.S.Indu Assistant Professor
8	Development of Omega 3 fatty acid enriched yogurt	Pooja Purushothaman Sweeka Theresa M Anil Tonisha	Dairy Technolog y	Society Oriented	Ms.S.Indu Assistant Professor



9	Development of Kalanchoe pinnata and Musa acuminata sap powder for Anti-urolithiasi s	Arunachalam R Binlit P Biju Jagadesh S Settu G	Food Processin g	Society Oriented	Mr. Jerome Inder Naflakannu Assistant Professor
10	Fortification of tofu with garcinia cambogia extract to fight obesity and evaluation of its hydroxyl citric acid profile , Physicochemical and sensory Presention	Dharun J Edwin Sabu	Food Processin g	Industry Oriented	Ms.E.Nivetha Assistant Professor
11	Development and analysis of nutrient rich energy bar with traditional ingredients	Sowmiya P Sandhosh S Manikandan T	Baking and Confectionery	Society Oriented	Mr.D.Alwin Jhonnie Assistant Professor
12	Development of calcium enriched wheat flour from valorization of sardine fish bones.	Abhishek silvan Mohammed Badusha K N Muneeb Parappurath Tony Saji	Food Processin g	Industry Oriented	Dr.P.Balamurug a n Professor and Head



13	Effect of multi pin cold plasma treatment on the quality parameters of ragi flour.	Alisha Mohamed	Food Preservatio n	Industry Oriented	Dr.M.Indumathi Associate Professor
14	Study on formulation of food product utilizing Pithecellobium Dulce	Bharath.D Parvez Ahamed.S Rohan Jenner.M	Food Processing	Society Oriented	Dr.M.Indumathi Associate Professor

Brite

COORDINATOR

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ANNA UNIVERSITY, CHENNAI 600025 BONAFIDE CERTIFICATE

Certified that this Thesis titled "DEVELOPMENT AND CHARACTERIZATION OF NUTRIENT RICH INSTANT MILLET SOUP MIX" is the Bonafide work of "EBIN DAVIS (720919218018) & MUHAMMED RABY M (720919218026)"who carried out the work under my supervision.

Committed for the even semester practical examination conducted on 23/5/22

Dr.P Balamurus

Head of Department

Department of Food Technology

JCT College of Engineering and Technology,

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Dr M.Indumathi PhD

Project Guide Department of Food Technology JCT College of Engineering and Technology, Coimbatore-641105



ABSTRACT

The current study aimed to create an Instant Soup Mix from millets, dehydrated veggies, and natural herbs. Today's ready-to-eat and ready-to-cook food products have a significant food market since they are the closest substitute for our usual food. Food habits and cooking methods have changed dramatically in recent years as a result of urbanization, cultural changes, and social change. The herbal formulations boost the antioxidant content of soup and pulav. The selected millets were per-processed, ground, and blended in various amounts to create T1, T2, T3, and T4 instant soups. Sensory evaluation, Proximate composition, and shelf life were all performed on the manufactured product samples. When the sensory qualities of several formulations were assessed, sample T2 in instant soup mix was formulations. The nutritional analysis results showed that enrichment with millets and herbs considerably boosts the sensory and other nutritional benefits, as shown in the result.

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Keywords: Millet, Sorghum Millet, Instant soup, Ready to cook, Nutritional value



CHAPTER 5 CONCLUSION

The essential objective of this undertaking is to foster a speedy food that is easy to make and has each of the supplements required for a sound lifestyle Millets are sans gluten and without allergen. Consuming millet brings down fatty oils and staying away from cardiovascular illness. Millets are high in dietary fiber. Dietary fiber retains water and goes about as a building specialist. It upgrades food travel time in the stomach, bringing down the gamble of fiery gut illness and going about as a detoxifying specialist in the body. This quick soup made with millets, dried veggies, spices, and other flavor parts is easy to make and requires no specific stockpiling strategies. Additionally, when put away at room temperature, the time span of not entirely settled to be satisfactory.



IMPACT OF MULTI-PIN COLD PLASMA ON QUALITY

OF CHILLI AND HONEY

A PROJECT REPORT

Submitted by

KRISHNANJALI

(720919218021)

in partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

IN

FOOD TECHNOLOGY



JCT COLLEGE OF ENGINEERING AND

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ANNA UNIVERSITY: CHENNAI 6400 025

MAY 2023



FICHANUR, COIMBATORE - 641 105.

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BONAFIDE CERTIFICATE

Certified that this Thesis titled "IMPACT OF MULTI-PIN COLD PLASMA ON QUALITY OF HONEY AND CHILLI" is the bonafide work of "KRISHNANJALI" (720919218021) who carried out the work under my supervision.

DR.P.BALAMURUGAN HEAD OF DEPARTMENT Associate Professor Department of Food Technology,

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DR.M.INDUMATHI **PROJECT GUIDE** Assistant Professor Department of Food Technology JCT College of Engineering and Technology, Coimbatore – 641105

Submitted to the viva-voce examination held on 23/2123

INTE



ABSTRACT

The quality of honey and chilli reduces when it undergoes various thermal treatment. This is one of the major challenges faced by food industry. Cold plasma is a non-thermal food processing method which reduces the microbial load in food particles without losing the nutritional quality of the food. Cold plasma treatment on chilli and honey samples were given treatment at different time and voltage. After the treatment, treated samples were compared with the control sample. A slight increase in the total phenolic content of the chilli was observed. Moisture content and particle size was observed decreasing after the cold plasma treatment. There were only negligible differences observed when compared to the control sample. While, no changes in capsaicin content were found after the treatment. The microbial reduction of $2.02 \pm 0.1 \log$ cfu/g was observed in cold plasma treated samples. Total reducing sugar, moisture content, specific gravity, colour, viscosity of honey were observed decreasing after cold plasma treatment.

Keywords: Cold plasma, Honey, Chilli, Quality, Capsaicin



CHAPTER 5

CONCLUSION

Thermal techniques are effective considering their lethal effect on microorganisms' growth, they also cause degradation of many thermolabile compounds, with reduction of nutritional value also change in the texture of food due to heat, The limitations of conventional thermal processing technologies are presenting challenges for the 21st century food industry This directed the attention of food professionals toward the development of non-thermal technologies that are safe, and environment-friendly. Cold plasma is a non thermal food processing treatment which reduces the microbial load without effect the quality of the food product.

This studies showed that cold plasma doesn't affect the quality of selected food products. Cold plasma shows different effect in different food products as we got different results for honey and chilli even though we gave same treatment. The role of cold plasma in chilli and honey sample for maintaining the quality is discussed in this research and observed that the quality parameters of chilli and honey doesn't change when we applied cold plasma treatment. A slight changes has been observed when compared with the control sample which is negligible...

This emerging technology can be used for various other food products. In this study it shows that the cold plasma reduces the microbial load present in chilli, it can utilize in preservation of honey and chilli processing of food particle at room temperature. Cold plasma doesn't consume large time for treatment. In future cold plasma technology will plays a significant role in food industries because people demand food with high quality with no or minimal changes, however cold plasma study on different food products is necessary.







B.E.Mechanical Engineering





Internship Students List-Mechanical-(2022-23)

SI. No.	Title of the collaborative activity	Name of the collaborating agency with contact details	Name of the participant Year of collaboration		Duration
1	Internship	Hirotec India Pvt Ltd	Premkumar P	2022-23	19.1.2023 to 28.1.2023
2	Internship	Hirotec India Pvt Ltd	Gokul Raj K	2022-23	19.1.2023 to 28.1.2023
3	Internship	Hirotec India Pvt Ltd	Pranav C K	2022-23	19.1.2023 to 28.1.2023
4	Internship	Hirotec India Pvt Ltd	Sandeep S	2022-23	19.1.2023 to 28.1.2023
5	Internship	Hirotec India Pvt Ltd	Vyshnav K A	2022-23	19.1.2023 to 28.1.2023
6	Internship	Hirotec India Pvt Ltd	Abhilash S	2022-23	19.1.2023 to 28.1.2023
7	Internship	Hirotec India Pvt Ltd	Akhil Sherin A	2022-23	19.1.2023 to 28.1.2023
8	Internship	Hirotec India Pvt Ltd	Akshay P S	2022-23	19.1.2023 to 28.1.2023
9	Internship	NSK BEARINGS INDIA PRIVATE LIMITED,	Arunjith S	2022-23	6.7.2022 to 16.7.2022
10	Internship	NSK BEARINGS INDIA PRIVATE LIMITED,	Deepak Andrews A	2022-23	6.7.2022 to 16.7.2022
-11 -	· Internship	NSK BEARINGS INDIA PRIVATE LIMITED.	Ebin Binoy	2022-23	6.7.2022 to 16.7.2022
12	Internship	NSK BEARINGS INDIA PRIVATE LIMITED.	Gadrin Pius Paiva	2022-23	6.7.2022 to 16.7.2022
13	Internship	NSK BEARINGS INDIA PRIVATE LIMITED,	Ganesh Pandi V	2022-23	6.7.2022 to 16.7.2022
14	Internship	NSK BEARINGS INDIA PRIVATE LIMITED.	Jebin Bastine J	2022-23	6.7.2022 to 16.7.2022
15	Internship	Ashok Leyland	Kiran C V	2022-23	6.7.2022 to 16.7.2022
16	Internship	Ashok Leyland	Manu G	2022-23	6.7.2022 to 16.7.2022
17	Internship	Ashok Leyland	Mohammed Alfas M A	2022-23	6.7.2022 to 16.7.2022
18	Internship	Ashok Leyland	Muhammed Rafshan	2022-23	6.7.2022 to 16.7.2022
19	Internship	Ashok Leyland	Muhammed Sadeed P	2022-23	19.1.2023 to 28.1.2023
20	Internship	ACC Limited	Muthu Pallan	2022-23	19.1.2023 to 28.1.2023
21	Internship	ACC Limited	Muthu Sankar M	2022-23	19.1.2023 to 28.1.2023
22	Internship	ACC Limited	Naveen Kumar T M	2022-23	19.1.2023 to 28.1.2023
23	Internship	ACC Limited	Poovarasan M	2022-23	19.1.2023 to 28.1.2023
24	Internship	ACC Limited	Sajith Ali V S	2022-23	19.1.2023 to 28.1.2023
25	Internship	ACC Limited	Sarathi Pugal C	2022-23	19.1.2023 to 28.1.2023
_ 26	Internship	Best Heat Treatment Services	Sreenath S	2022-23	4.1.2023 to 13.1.2023
27	Internship	Best Heat Treatment Services	Telugu Uday Bhaskar	2022-23	4.1.2023 to 13.1.2023
28	Internship	Best Heat Treatment Services	Thoufiq M	2022-23	4.1.2023 to 13 1 2022
29	Internship	Best Heat Treatment Services	Vaddarapu Gnaneswar	2022-23	4.1.2023 to 13.1.2023
30	Internship	Best Heat Treatment Services	Vignesh R	2022-23	4.1.2023 to 13.1.2023

JCT College of Engineering and Technology FICHANUR, COIMBATORE - 641 105.



17th July 2022

TO WHOMSOEVER IT MAY CONCERN

We wish to inform you that, Deepak Andrews A, has successfully completed his internship with our organisation from 6.7.2022 to 16.7.2022.

During this period of internship he has shown great enthusiasm in understanding the functioning of the Manufacturing Department and its functions.

We wish him all success in his future endeavours!

For NSK Bearings India Pvt. Ltd.,

DGM - HR & General Affairs

T College of Engineering and Technolog

CHANUR, COIMBATORE - 641 105.

hHIROTEC

30.01.2023

TO WHOMSOEVER IT MAY CONCERN

This is to certify that GOKUL RAJ K (MECHANICAL ENGINEERING) student from JCT COLLEGE OF ENGINEERING & TECHNOLOGY, Coimbatore has undergone Internship training in our organization during the period from 19.01.2023 to 28.01.2023.

We wish him best wishes in future accomplishments.

Regards

ARJUN SHANKAR.A Manager- HR

Hirotec India Private Limited - Coimbatore

7/147, W Power House Rd, Keeranatham Post, Saravanampatti, Coimbatore, Tamil Nadu 641035, India

PRINCIPAL

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE - 641105

DEPARTMENT OF MECHANICAL ENGINEERING



Academic Year: 2022 – 2023

ME8682 - Design and Fabrication Project

Batch No.		Name List
	720920114015	LAKSHMI K R
Batch 1	720920114311	MIRUNALAN M
	720920114312	MONESH J
	720920114317	PRAVEEN S
	720920114316	PRAMOB K PRASAD
Batch 2	720920114321	UMESH M
	720920114314	NIVED AB
	720920114320	SUJIL G
	720920114013	KARAN M
Batch 3	720920114022	SAKTHI B
	720920114032	SURESH D
	720920114012	KANNAN S
	720920114318	VIMAL GLADIN R
Batch 4	720920114326	NIMAL VARGHESE V
	720920114303	AKASH S
	720920114315	M PRABHU
	720920114007	AVDHESH KUMAR
Batch 5	720920114309	JOEL P
	720920114027	SANTOSH KUMAR
	720920114033	VIKASH KUMAR BITTU
	720920114024	SANJEET KUMAR
Batch 6	720920114009	DHILNATH KS
	720920114011	JITHIN MOORTHY N
	720920114323	VIGNESH R
	720920114031	STEFFIN STEPHEN T
Batch 7	720920114301	ABINANDH C C
	720920114001	ADHARSH T K
	720920114304	ANSHAD V A
	720920114327	MADHAV R NAIR
Batch 8	720920114319	SHIBU T K
	720920114002	AKASH S
	720920114025	SANKEERTH SIVAN

JCT

ANNA UNIVERSITY : CHENNAI



BONAFIDE CERTIFICATE

Certified that this project report "DESIGN AND FABRICATION OF OIL SKIMMER MACHINE" is the bonafide work of "ABINANDH CC, ADHARSH T K, ANSHAD V A, STEFFIN STEPHEN T" who carried out the project work under my supervision.

SIGNATURE

Dr.G.MAHESH M.E,Ph.D; PROFESSOR &

HEAD OF THE DEPARTMENT

Department of Mechanical Engg

JCT College of Engineering & Technology, Coimbatore

SIG

R.MAHENDRAN M.E ASSISTANT PROFESSOR SUPERVISOR

Department of Mechanical Engg

JCT College of Engineering & Technology, Coimbatore

It has been submitted for the Anna University Project Viva-Voce held on 02/06/2023

EXTERNAL EXAMINER

ABSTRACT

Engineers are continuously being asked to improve processes and increase efficiency. These requests may arise as a result of need to increase throughput, increase probability, or accommodate capital limitations. The processes which use oil skimmer equipment must frequently be improved for these reasons. Changes in the design to increase the efficiency and to reduce cost of the equipment's & also the overall cost should be made. More and more industries and also the governments must be urged to make use of oil skimmers to prevent hazardous effects of oil spill.

Various other methods and techniques of oil skimming or water oil separation were also studied while manufacturing and design of the model of oil skimmer and during the preparation of this technical paper. This project provides method for increasing efficiency of oil skimmer by using marine ply disc and scrapper to prevent marine pollution by oil spill. It also provides information and methods on how it can be used in various industries to separate the oil water mixture. Improvements in design and equipment's through which efficiency can be increased have also been provided through this technical paper. The results and conclusions acquired by using disc oil skimmer have been provided through this technical paper.

CHAPTER 9

CONCLUSIONS

Based on theoretical calculation, if we apply larger area, it will produce higher amount of oil being recovered. If higher rotation speed being applied, the quality of recovered solution will mostly consist of water. Based on experimental data, slope angle of wiper or wiped area will not affect the amount of recovered oil, because as the disc rotates, the oil near the centre of the disc tends to move toward the tip of the disc due to tangential force, and gravity for some part of the rotation. In order to gain higher amount of recovered oil, it is necessary to consider the depth of disc on the water. If possible, the depth of dipped disc should reach its own radius







Approved by AICTE, New Dethi, Affiliated to Anna University, Chennar & Accredited by NAAC Pichanur, Coimhatore - 641105 | info@jct.ac.in | www.jct.ac.in | 0422 2636900

YEAR / SEM IV / VIII

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PROJECT BATCH

MECH (2022-23)

Batch	Batch Reg.No Name of the				
-		Student	Name of the Guide	Project Title	
	720919114001	ABIJITH .P			
1	720919114012	GOWTHAM M	Dr.M.Vijayakumar	DESIGN EXPERIMENTATION AND ANALYSIS OF AIR TO	
	720919114020	VINEETH S		WATER CONVERTER	
~	720919114008	S.HARIHARAN			
2	720919114010	M.MUTHUKUMAR	1	INVESTIGATION OF MACHINING TI-6AL-4V	
	720919114013	PAVITHRAJ R	Prof. Ashok kumar	TITANIUM ALLOY USING	
	720919114308	B.VASUTHEVAN		NANOFLUID	
	720919114019	SRIJIL. E			
3	720919114003	ASHIN M M	Prof S Setty	DESIGN AND ANALYSIS OF ECONOMICAL COCONUT	
	720919114009	MOHAMMED SHAHEEN BIN SALEEM		OUTER HUSK REMOVER MACHINE	
	720919114302	ARAVIND KUMAR.G			
4	720919114303	ARJUN V U	Dr.I. J. Issac Prem kumar	INNOVATION OF IoT BASED FIRE FIGHTING ROBOT	
	720919114304	ASHWIN K PATHROSE	,		
5	720919114309	POORNIMA V M	Prof.Anand kumar	DESIGN FABRICATION AND ANALYSIS OF UNMANNED	
	720919114002	ANIL KUMAR M		ALKIAL VEHICLE	
6	720919114004	CHRISTOES DENISHAN		INVESTIGATION OF	
, , , , , , , , , , , , , , , , , , ,	720919114016	R.RAJESH KANNAN	Prof. Mahendran	NITROCARBONIZED LOW	
	720919114311	AJITHKUMAR.R		CARBON STEEL	
	720919114301	AKSHAI U		DESIGN OF REGENERATIVE	
7	720919114305	FAWAS I	Prof. P.Siva	CLUTCH FOR POWER	
· · · · · · · · · · · · · · · · · · ·	720919114306	JAYAFIR SADIQ P		VEHICLES	
	720919114023	RITIK KUMAR RAM			
8	720919114022	CHANDAN KUMAR	Prof Philomin Anto	AUTOMATION OF	
5	720919114034	CHANDAN KUMAR		INT	
	720919114042	ITIHAS KUMAR			
	720919114006	GOKUL O M			
9	720919114012	NIKHIL RAJ. K	Prof P Prabu	DESIGN AND DEVLOPMENT	
5	720919114017	SHARUNRAJ. K		MOTORVEHICLE	
	720919114029	ANIRUDH SADANANDAN			

PROJECT COORDINATOR

HOD

PRINCIPAL

INCIPAL JCF College of Engineering and Technology PICHANUR, COMBATORE - 641 105.

JCT

ANNA UNIVERSITY: CHENNAI 600 025



BONAFIDE CERTIFICATE

Certified that this project report "DESIGN AND ANALYSIS OF ECONOMICAL COCONUT OUTER HUSK REMOVER MACHINE" is the bonafide work of "ASHIN M M, MOHAMMED SHAHEEN BIN SALEEM, SRIJIL E" who carried out the project work under my supervision.

Grang 16/23

SIGNATURE

Dr. G. MAHESH, M.E, Ph.D., PROFESSOR HEAD OF THE DEPARTMENT, Department of Mechanical Engineering, JCT College of Engineering and Technology, Pichanur, Coimbatore – 641 105.

SIG

Mr. S. SETTU, M.E., SUPERVISOR, ASSISTANT PROFESSOR, Department of Mechanical Engineering, JCT College of Engineering and Technology, Pichanur, Coimbatore – 641 105.

Submitted for the university viva-voce examination held on 23-05-2023

INTERNAL EXAMINER

EXTERNAL EXAMINER

ABSRACT

The evacuation of shells of coconut and nut has been an issue for loads of years. Foot-worked and hand-worked frameworks are extremely in-effective and in nations like India where huge coconut ranches are accessible, it is hard to utilize labor supply alone. Productive strategies are fundamental for the dehusking of coconut. This paper proposes double separating blade plan over conventional De-husking apparatuses and the advanced de-huskers. This technique utilizes the utilization of Single-stage engines rather than customary three-stage engines. It helps in the decrease of cost. The Machine aspects are planned after different Midpoints of Coconut aspects and force computations of the Single Stage Acceptance engine. The machine utilizes the Stuff shaft-Pulley fueled Single Stage engine which controls the spiked rollers. The rollers dehusk the coconut which when put on it. It additionally has a movable base edge which helps in changing the speed and change of the place of the engine in the event that Electrical speed differing techniques are not accessible. This machine is incredibly valuable for limited scope ranchers since it's an exceptionally minimal expense, high working productivity.

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14. CONCLUSION

low-cost coconut de-husking machine has been fabricated for small-scale farm olders in agricultural and rural areas. The machine appears to be feasible, ollution-less, and economical. The number of coconuthusk removal per hour epends upon the slack time and speed of blade units. The operation of the lachine is simple and the maintenance of the machine is also not expensive. The lachine can de-husk an average of 450 coconuts per hour with a double spear. Itroducing this machine in the farm areas can reduce the risk involved in the use f a spear in de-husking the coconut and also eliminates the skilled manpower equired for de-husking the coconuts. The machine can also be integrated along rith the further processing steps of the coconut such as the production of opra.Compared with a double spear twin bladede-husker has 5 times more roductivity than a single spear twin blade de-husker.





B. E. PetroChemical Engineering



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE – 641105 IMPLANT/ INTERNSHIP TRAINING ATTENDED BY STUDENTS ACADEMIC YEAR 2022-2023 DEPARTMENT OF PETROCHEMICAL ENGINEERING

S. No	Register No	Name of the Student	Year	Name of the Organization	Duration of Training	No. of Days
1	720921139001	Adithyan KS	Ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
2	720921139002	Akash K R	П	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
3	720921139004	Anton Akash B	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
4	720921139005	Asifkhan A	II	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
5	720921139008	Emeema C S	Ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
6	720921139010	Gowsick M	П	Central Institute of Petrochemicals Engineering and Technology (CIPET). Palakkad	26.03.2023 to 12.04.2023	15
7	720921139011	Guru Harish Raja C	П	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
8	720921139012	lejas Ahmed	П	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
9	720921139013	Jebastin A	п	Central Institute of Petrochemicals Engineering and Technology (CIPET). Palakkad	26.03.2023 to 12.04.2023	15
10	720921139014	Jhishnu C	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
11	720921139015	Kabilesh K	П	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15





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12	720921139016	Mark Sandler X	п	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
13	720921139018	Mithuna Varshan	Ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
14	720921139020	Mohammed Rinshad	п	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
15	720921139021	Muhammed Sawad V K	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
16	720921139022	Muhammed Shamil P K	Ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
17	720921139023	Muhammed Sinan	Ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
18	720921139024	Nishanth B	н	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
19	720921139025	Nithishkumar K	u	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
20	720921139026	Palutla Ashish Sekhar	II	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
21	720921139027	Pugazhendhi R	Н	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
22	720921139028	Rajapandiyan S	II	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
23	720921139030	Ramcharan Tej T	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
24	720921139031	Sanchipatla Bhadrinath		Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
25	720921139032	Sasi Kumar B	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
26	720921139033	Thomas Dino A	11	Central Institute of Petrochemicals Engineering and Technology (CIPET). Palakkad	26.03.2023 to 12.04.2023	15



JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

					and the second se	a generative second statement was and the second statement of the second
27	720921139034	Veeramani N	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
28	720919139301	Aswin Suyambu Nadar	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
29	720919139302	Micheal Subin D	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
30	720919139303	Sathees Kumar S	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
31	720919139304	Sreenath T K	11	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
32	720919139305	Sri Ganapathy Subramanyan Asubramaniyam	n	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
				III-Year		
S. No	Register No	Name of the Student	Year	Name of the Organization	Duration of Training	No. of Days
1	720920139001	Ajay B	m	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
2	720920139002	Ajay T	m	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
3	720920139003	Akash P R	III	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
4	720920139004	Anandhu Kesav	ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
5	720920139005	Arockia Arul Chandru S	ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
6	720920139006	Arulgnani K	ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
7	720920139007	Arulselvan S	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15



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8	720920139009	Boobalan R	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
9	720920139010	Chetlamallapuram Mamatha	ĦI	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
10	720920139011	Dalvin R	181	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
!1	720920139012	Hariharan M	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
12	720920139013	Joshva Joseph	III	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
13	720920139014	Kailas Krishna D	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
14	720920139015	Madheshwaran K P	Ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
15	720920139016	Manoj A	111	Central Institute of Petrochemicals Engineering and Technology (CIPET). Palakkad	26.03.2023 to 12.04.2023	15
16	720920139017	Muthu Selvam M	Ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2024	16
17	720920139018	Noor Mohammed J	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
18	720920139020	Ramkumar R	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
19	720920139021	Sanjay Sukesh	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
20	720920139022	Santhoshkumar M	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
21	720920139023	Sarath Kumar T	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
22	720920139024	Selva G	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
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					the second se	and the second se
23	720920139025	Shiniljith K	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
24	720920139026	Subash C	181	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
25	720920139027	Surya E	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
26	720920139029	Thaayaalan K S	ы	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
27	720920139030	Valanarasu V	Ht	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
28	720920139031	Vishnu M	H	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
29	720920139301	Alen T S	118	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
30	720920139302	Kartik S	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
31	720920139303	Ragavendran K	111	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
32	720920139305	Salamon A	ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
33	720920139306	Santhosh S	III	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15
34	720920139307	Sasikumar R	ш	Central Institute of Petrochemicals Engineering and Technology (CIPET), Palakkad	26.03.2023 to 12.04.2023	15

H COURSE CO-ORDINATOR

PRINCIPAL le of Engineering and Technology UR COMBATORE - 641 105.

Pichanur CBE - 105.

HOD

From Dr.S.Kavitha, Professor & Head, Department of Petrochemical Engineering, JCT College of Engineering and Technology, Pichanur, Coimbatore 641105

To

Mr Libin Roberts Senior Technical Officer and Incharge, Central Institute of Petrochemical Engineering and Technology, (Government of India) Palakkad 679103

Dear Sir,

Sub: Internship opportunity -Reg.

Greetings from JCT College of Engineering and Technology. I would like to seek tour kind patronage in providing internship opportunity to our Petrochemical Engineering students. It will be a great exposure for them to gain industrial and hands on experience. We request you to kindly share the availability schedule at an early date.

Thanking you

College of Engineering and Technology ANUR, COIMBATORE - 641 105.

Yours Truly Dr. S. Kavitha

(Professor & Head)





5th March 2023 Palakkad

INTERNSHIP ACCEPTANCE LETTER

Based on your request, we are ready to offer internship opportunity to 66 students of Petrochemical Engineering Department. for the period from 26.03.2023 to 12.04.2023 in our company at Palakkad. During the internship, the students have to abide by our rules and regulations

For Central Institute of Petrochemical Engineering and Technology, Palakkad

Lufa Rung

Mr Libin Roberts Senior Technical Officer and Incharge



CIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

सेंट्रल इंस्टिट्यूट ऑफ़ पेट्रोकेमिकरूस जीनियरिंग एंड टेक्नोलॉजी(सिपेट) ल एवं वेट्री स्तावन विभाग 100 त मंत्रालय, भारत सरकार असाप सि एस थी, बिल्डम आई आई थी लकिडी हुदुधारत, चंगरत्म पीओ वालकाङ, केपरत-679301 AT 0466-2967187 -tre: palakkad@cipet.gov.in . cipetpalakkad@gmail.com साहट: www.cipet.gov.in प्राह्य: गिणडी, समें : 600 032



) / D

CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING & TECHNOLOGY(CIPET) Department of Chemicals and Petrochemicals

Ministry of Chemicals and Pertilizers, Govt. of India ASAP CSP, Kinfra I I P Lakkidi Kootupatha, Mangalam P O Palakkad,Kerala- 679301 Phone: 0466-2967187 E-mail: palakkad@cipet.gov.in, cipetpalakkad@gmail.com Website: www.cipet.gov.in Head Office: CIPET, Guindy, Chennai-600 032

CIPET/PKD/STC/JCTCMBTR_INTERNSHIP/2022-23/ 567 12.04.2023

60

CERTIFICATE

This is to certify that Ms. EMEEMA C.S S/o Mr. SHIBU C.V student of JCT College of Engineering and Technology, Coimbatore Specialized in BE PETROCHEMICAL ENGINEERING, has successfully completed her Industrial Familiarization Training at our Institute from 26-03-2023 to 12-04-2023 (15 days).

With Regards

Im STC In-Charge

JCT College of Engineering and Technology Noneye or cingineening and recimined

: अहमदाबाद, अनुसासर, औरंगाबाद, अगस्तला, बढी, बालासोर, बंगलुरु, पोपाल, भुवने बर, चतपुर, चेन्नई, देहरादून, गुवाहाटी, म्वालियन, हैदराबाद, हाजीवुद, हलिरया, इम्प्लाल, जयपुर, कोचि, लखनऊ, महुरे, नेसुर, सयपुर, राची, वैसाव और विजयचाक। : Ahmedabed, Amrilsar, Aurangabed, Agarthaia, Baddy, Balasore, Bengaluru, Bhopal, Bhuvaneswar, Chandrapur, Chennai, Dehradun, Guwahati, Gw Hyderabed, Hajipur, Haidia, Impihal, Jaipur, Kochi, Lucknow, Madurai, Malauru, Ralpur, Ranchi, Vaisad & Vijayawada

Pichanur CBE - 105.

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Cantres



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY PICHANUR, COIMBATORE



DEPARTMENT OF PETROCHEMICAL ENGINEERING PROJECT LIST 2022-2023

REGISTER NUMBER	NAME	BATCH	SUPERVISOR	TITLE	
720919139001	AADHITHYAN S				
720919139007	720919139007 AKASH N 720919139043 PRAVEEN KUMAR K		Ms Monica Silvenas	THE ANTICANCER ACTIVITIES OF HYDROALCOHOLIC EXTRACT OF ANNONA MURICATA FRUIT AGAINST HUMAN OSTEOSARCOMA CELLS	
720919139043					
720919139050	SAMPANTHAM G				
720919139002	ABHAY KRISHNA P S		Mr B Parthiban		
720919139013	ASHISH M A	2		PRODUCTION OF CYCLOHEXANE AND HEPTANE COLUMN DESIGN	
720919139029	HUDSON T	2			
720919139044	PRITHVIN DEVASSY				
720919139003	ABINATH K		Mr G Arumugam		
720919139047	RAJA KABILESH R	2		IMPACT OF AMBIENT TEMPERATURE CHANGES ON A RAW HYDROGEN COOLER ANALYSIS USING HTRI	
720919139061	STARVIN D V	3			
720919139066	SUJITH PRASANTH M				
720919139004	ABIRAM K		Ms V P Kalpana		
720919139017	ATHUL KRISHNA P A	4		SULPHURIC ACID PLANT STUDY WITH SPECIAL FOCUS ON FIXING THE MATERIAL BALANCE OF 1000TPD SULPHURIC ACID	
720919139060	SHERON VARGHESE				
720919139060	SRAVAN S				
720919139005	ADITHYA RAJ				
720919139035	MOHAMED AYISH A A	5	Ms V P Kalpana	ENERGY STEP-UP USING A HEAT	
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720919139056	SHARAFARAS T K			PUMP IN PRU	
720919139068	UMMAR FAROOQ K				
720919139006	AISWARYA ANIL			THE DECION AND FOLLING ANALYSIS	
720919139018	BAVYA BABU	6	Ms A Monica Silvenas	OF SPIRAL HEAT EXCHAGER IN	
720919139048	RESHMA L A			ACRYLIC ACID UNIT	
720919139008	ANTO AJEES RAJA X				
720919139011	ARUN SELVIN T			COMPARATIVE ANALYSIS AND	
720919139020	BLESSWIN PAULBIN B	7 7	Mr J Praveenkumar	DOUBLE INLET CYCLONE SEPARATOR	
720919139046	RAHUL R				
720919139010	ARUNKUMAR S		Mr. G. Arumugam		
720919139025	GOKULPRASATH S				
720919139033	MATHESWAR V	8		EXPERIMENTAL INVESTIGATION ON HEAT EXCHANGER STUDIES OF	
720919139040	NITHISHWARAN V			PLATE TYPE HEAT EXCHANGER	
720919139012	ASHISH K.K.				
720919139021	DHANASEKARAN S		Ma V Vanimana an	TREATMENT OF WASTE WATER BY	
720919139022	DIWAHAR M		Mr K Kaviyarasan	USING POLYMER MEMBRANE	
720919139034	MAYUR MANGESH GHATKAR M				
720919139014	ASIF MUSHEER K M J				
720919139026	GOLDEN RENNY P	10	Dr. S. Kowitha	DESIGN OF REVERSE OSMOSIS TO	
720919139031	KAMALAKANNAN G	10	Dr 5 Kavitna	IMPROVE ZERO LIQUID DISCHARGE	
720919139032	MAHESH KANNAN M				

720919139308	RANGANATHAN K S	17	M. I.D	OPTIMIZATION OF ORGANIC DYES WITH TWO DIFFERENT MORDANTS	
720919139312	SUJITH KANAGARAJAN K	17	Mr J Praveenkumar		
720919139315	ABHINAV R	-		USING POLYESTER FABRIC	
720919139042	PRASANTH S			FREECTIVE PECOVERY OF LPG FROM	
720919139059	SHREE TULASI A			UNSTABILIZED NAPHTHA AND DESIGN	
720919139063	SUBASH S	18	Mr K Kaviyarasan	CONDENSER TO REDUCE	
720919139070	VIJAY P	ane state		CARRYOVER OF LPG TO OFF GAS	
720919139049	ROSHIN DANNISH R				
720919139051	SARATH S			RECOVERY OF LPG FROM FUEL GAS	
720919139058	SHERYL J		Mr B Parthiban		
720919139062	SUBABHARATHI. P				
720919139054	SATHYANARAYANAN K		ę	PRODUCTION OF BIODIESEL FROM ANIMAL FAT OIL USING EGGSHELL CATALYST	
720919139055	SELVABHARATHI M		N. N.O. J		
720919139064	SUGAN T	20	Mrs M Sowntharya		
720919139069	VEERAPANDIYAN P				
720919139301	ALBIN SMITH J				
720919139302	DELPHIN SHAM R		N. U. D. V. I	SYNTHESIS OF BIO FILM BY	
720919139304	KUPERA RAJESH S		MS V P Kalpana	CORN STARCH	
720919139311	SRINATH V				

Project Co-Ordinator

JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

HOD

MATERIAL BALANACE OF 1000 TPD OF SULPHURIC ACID PLANT

A PROJECT REPORT

Submitted by

ABIRAM K	720919139004
ATHUL KRISHNA P A	720919139017
SHERON VARGHESE	720919139057
SRAVAN S	720919139060

In partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

in

PETROCHEMICAL ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

COIMBATORE 641105



ANNA UNIVERSITY: CHENNAI 600 025

I

MAY 2023



JCTCollege of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this main project report "MATERIAL BALANACE OF 1000 TPD OF SULPHURIC ACID PLANT" is the Bonafide work of "ABIRAM K, ATHUL KRISHNA P.A, SHERON VARGHESE, SRAVAN S" who carried out the main project work under my supervision.

SIGNAT

Dr. S. KAVITHA M.E., Ph.D., Head of the Department Department of Petrochemical JCT College Engineering and Technology Coimbatore 641105

SIGNATURE

Ms. KALPANA V.P, M.Tech., Assistant Professor Department of Petrochemical JCT College Engineering and Technology

Coimbatore 641105

Submitted for the Anna University Examination held on 23/05/2023

I

INTERNAL EXA MINFR

EXTERNAL EXAMINER

CT College of Engineering and Technology Therefulkure, COIMBATORE - 641 105.



दि फर्टिलाइज़र्स एण्ड केमिकल्स ट्रावनकोर लिमिटेड THE FERTILISERS AND CHEMICALS TRAVANCORE LIMITED

(भारत सरकार का उद्यम)/ (A Government of India Enterprise)

प्रदिश्वाण केन्द्र / TRAINING CENTRE मुख्यालय / Head Office ज्योगनंडस / Udyogemendel - 683 501 पुरपाप / Phone : 0484 - 2567544, 2567467, 2567583, 2556750, 2559621, 2567423, 2567360, 2567424 ई-मेग/ Email : fido@factitd.com, sdc@factitd.com

DGM (Trg) CERT-PW/99/2022-23

04.05.2023

CERTIFICATE

Certified that Mr. ABIRAM K, student of BE Petrochemical in JCT College of Engineering and Technology, Coimbatore has successfully completed his Project Work titled "Material Balance of 1000 TPD of Sulphuric Acid plant" in FACT, Cochin division during the period from 20.02.2023 to 18.03.2023

We wish the student all the best in her future endeavors.

Abraham P Varghese Project Coordinator



Antony K D Engineer(Trg&Dev)



Plehanur

BE - 105.



पंजीकृत कार्यालय : प्रमुर, उद्योगपंडल Regil Office: Eloor, Lidyogamandal

NCIPAL JCT College of Engineering and Technology PICHANUR, COMBATORE - 641 105.

ABSTRACT

The material balance of a 1000 TPD (tonnes per day) sulphuric acid production plant involves accounting for all inputs and outputs of the process. The process includes the reaction of sulphur with air to form sulphur dioxide, which is then oxidized to form sulphur trioxide. The sulphur trioxide is then absorbed in water to form sulphuric acid. The material balance takes into account the mass and composition of all inputs, such as sulphur, air, and water, as well as the outputs, such as sulphuric acid, carbon dioxide, and heat. The purpose of the material balance is to ensure that the process is running efficiently and to identify any losses or inefficiencies that need to be addressed. By accurately tracking the material flow through the process, adjustments can be made to optimize production and minimize waste.



VIII

CHAPTER 6

RESULTS AND DISCUSSION

Material balance of 1000 TPD Sulphuric acid is determined and studied by the various problems in the production of Sulphuric acid, such as the poor infrastructure of plant and old machineries that result in less efficiency of production.

By implementing latest technology we could improve the quality and quantity of production. As per the result it would have a probability of getting high end yields and the industrial accidents can be controlled easily.

So in a nutshell, we use the most advance technology to consume the maximum production with less resources.



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B.Tech.Petroleum Engineering



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ad year Internship Details

SI. No	Title of collaboration	Name of the Collaborating agency	Name of the Student	Year of collaboration	Duration
1	Internship	Chemfab Alkalis	ABDUL MAJID T A	2022-2023	16.10.2022 to 31.10.2022
2	Internship	Chemfab Alkalis	ABHISHEK A G	2022-2023	16.10.2022 to 31.10.2022
3	Internship	Chemfab Alkalis	ADHIL T A	2022-2023	16.10.2022 to 31.10.2022
4	Internship	Chemfab Alkalis	MUHAMMED SHAFIK S	2022-2023	16.10.2022 to 31.10.2022
5	Internship	Chemfab Alkalis Limited	SANJAY T	2022-2023	01.11.2022 to 15.11.2022
6	Internship	Galileovasan Offshore & R & D Pvt Ltd	ALWIN THOMAS	2022-2023	01.11.2022 to 15.11.2022
7	Internship	Galileovasan Offshore & R & D Pvt Ltd	PREMSURYA V P	2022-2023	01.11.2022 to 15.11.2022
8	Internship	Galileovasan Offshore & R & D Pvt Ltd	THAUFEER AM	2022-2023	01.11.2022 to 15.11.2022
9	Internship	SPIC, Tuticorin, TN	ELAYARAJA E	2022-2023	01.07.2022 to 31.07.2022
10	Internship	SPIC, Tuticorin, TN	GOKULM	2022-2023	01.07.2022 to 31.07.2022
11	Internship	SPIC, Tuticorin, TN	JAYANANTHA R	2022-2023	01.07.2022 to 31.07.2022
12	Internship	SPIC, Tuticorin, TN	JENILSON JEYARAJ J	2022-2023	01.07.2022 to 31.07.2022
13	Internship	SPIC, Tuticorin, TN	LINGAN A	2022-2023	01.07.2022 to 31.07.2022
14	Internship	SPIC, Tuticorin, TN	PRASATH P	2022-2023	01.07.2022 to 31.07.2022
15	Internship	Bharathi Cements	BURRA PADMAVATHI	2022-2023	19.09.2022 to 09.10.2022
16	Internship	The Website Makers	MOHAN K	2022-2023	01.10.2022 to 15.10.2022
17	Internship	The Website Makers	NAGENDRAR	2022-2023	01.10.2022 to 15.10.2022
18	Internship	The Website Makers	PUJARI LOKESH	2022-2023	15.06.2022 to 14.07.2022
10	Internship	The Website Makers	SUNKARA AMARNATH	2022-2023	01.10.2022 to 15.10.2022
20	Internship	The Website Makers	DASARI HEMANTH	2022-2023	01.10.2022 to 15.10.2022
20	Internship	Knnamp Drilling Fluids Services Pyt Ltd	ABHISHEK VINOD	2022-2023	11.01.2023 to 28.01.2023
22	Internship	Knnamp Drilling Fluids Services Pvt Ltd	AKSHAY JITH	2022-2023	11.01.2023 to 28.01.2023
23	Internship	Knnamp Drilling Fluids Services Pyt Ltd	CHRISTOPHER N A	2022-2023	11.01.2023 to 28.01.2023
24	Internship	Knnamp Drilling Fluids Services Pyt Ltd	DEEPU D	2022-2023	11.01.2023 to 28.01,2023
25	Internship	Knnamp Drilling Fluids Services Pyt Ltd	ASWIN SHAJI	2022-2023	11.01.2023 to 28.01.2023
26	Internship	Knnamp Drilling Fluids Services Pyt Ltd	KIRAN V	2022-2023	11.01.2023 to 28.01.2023
27	Internship	Knnamp Drilling Fluids Services Pyt Ltd	MATHAN KUMAR S	2022-2023	11.01.2023 to 28.01.2023
28	Internship	Knnamp Drilling Fluids Services Pyt Ltd	AKASH J	2022-2023	11.01.2023 to 28.01.2023
29	Internship	Knnamp Drilling Fluids Services Pyt Ltd	ANTONY SALET MOUN	2022-2023	11.01.2023 to 28.01.2023
30	Internship	Learn to upgrade	DASARI NAGENDRA GARI PRAVEEN KUMAR	2022-2023	02.07.2022 to 02.08.2022



JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

Dr. S. Venkatesh Babu M.E., Ph.d., Professor & Head Department of Petroleum Engineering JCT College of Engineering and Technology Pichanur, Coimbatore.



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ard year Internship Details

SI.	REG No.	Name of the Student	Intern Company
1	720921219001	ABDUL MAJID T A	Chemfab Alkalis Limited
2	720921219002	ABHISHEK A G	Chemfab Alkalis Limited
3	720921219003	ABHISHEK VINOD	Knnamp Drilling Fluids Services Pvt Ltd
4	720921219005	ADHIL T A	Chemfab Alkalis Limited
5	720921219006	AKASH J	Knnamp Drilling Fluids Services Pvt Ltd
6	720921219007	AKSHAY JITH	Knnamp Drilling Fluids Services Pvt Ltd
7	720921219008	ALWIN THOMAS	Galileovasan Offshore & R & D Pvt Ltd
8	720921219009	ANTONY SALET MOUN	Knnamp Drilling Fluids Services Pvt Ltd
9	720921219010	ASWIN SHAJI	Knnamp Drilling Fluids Services Pvt Ltd
10	720921219011	BURRA PADMAVATHI	Bharathi Cements
11	720921219012	CHRISTOPHER N A	Knnamp Drilling Fluids Services Pvt Ltd
12	720921219013	DASARI HEMANTH	The Website Makers
13	720921219014	DASARI NAGENDRA GARI PRAVEEN KUMAR	Learn to upgrade
14	720921219015	DEEPU D	Knnamp Drilling Fluids Services Pvt Ltd
15	720921219016	ELAYARAJA E	SPIC, Tuticorin, TN
16	720921219017	GOKUL M	SPIC, Tuticorin, TN
17	720921219018	JAYANANTHA R	SPIC, Tuticorin, TN
18	720921219019	JENILSON JEYARAJ J	SPIC. Tuticorin, TN
19	720921219021	KIRAN V	Knnamp Drilling Fluids Services Pvt Ltd
20	720921219022	LINGAN A	SPIC. Tuticorin, TN
21	720921219023	MATHAN KUMAR S	Knnamp Drilling Fluids Services Pvt Ltd
22	720921219024	MOHAN K	The Website Makers
23	720921219025	MUHAMMED SHAFIK S	Chemfab Alkalis Limited
24	720921219026	NAGENDRAR	The Website Makers
25	720921219028	PRASATH P	SPIC, Tuticorin, TN
26	720921219029	PREMSURYA V P	Galileovasan Offshore & R & D Pvt Ltd
27	720921219030	PUJARI LOKESH	The Website Makers
28	720921219031	SANJAY T	Chemfab Alkalis Limited
29	720921219033	SUNKARA AMARNATH	The Website Makers
30	720921219034	THAUFEER AM	Galileovasan Offshore & R & D Pvt Ltd



COLLEGE OF ENGINEERING AND TECHNOLOGY

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JCT Callege of Engineering and Technolog Dr. S. Venkatesh Babu M.E., Ph.d., PICHANUR, COIMBATORE - 641 105. Department of Petroleum Engineering UCT College of Engineering and Technology UCT College of Engineering and Technology Pichanur, Coimbatore.



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31d Year Internship Details

Department of Petroleum Engineering

SL No	Title of collaboration activities	Name of the Collaborating agency	Name of the Student	Year of collaboration	Duration
1	Internship	ONGC Karaikal TN	DHANUSH R	2022-2023	07.08.2022 to 18.08.2022
2	Internship	ONGC Karaikal TN	DINESHR	2022-2023	07.08.2022 to 18.08.2022
3	Internship	ONGC, Karaikal, TN	KARANRAJ S	2022-2023	07.08.2022 to 18.08.2022
4	Internship	ONGC Karaikal, IN	KISHORE R	2022-2023	07.08.2022 to 18.08.2022
5	Internship	ONGC, Karaikal, TN	HARISH KRISHNA S	2022-2023	05.07.2022 to 19.07.2022
6	Internship	ONGC, Karaikal, TN	HARISH KUMAR D	2022-2023	05.07.2022 to 19.07.2022
7	Internship	ONGC, Karaikal, TN	ASHLY GODSON Y	2022-2023	11.07.2022 to 25.07 2022
8	Internship	ONGC, Karaikal, TN	BANDRLAPALLI SAINATH	2022-2023	11.07.2022 to 25.07.2022
9	Internship	ONGC, Karaikal, TN	BHAWARLAL THARUN SEERVI	2022-2023	11.07.2022 to 25.07.2022
10	Internship	ONGC, Karaikal, TN	CHALICHEEMALA GIRISH	2022-2023	11.07.2022 to 25.07.2022
11	Internship	ONGC, Karaikal, TN	ARUNRAJ S	2022-2023	20.10.2022 to 09.11.2022
12	Internship	ONGC, Karaikal, TN	MANIKANDAN .R	2022-2023	20.10.2022 to 09.11.2022
13	Internship	ONGC, Karaikal, TN	NIMALSON .V	2022-2023	20,10.2022 to 09.11.2022
14	Internship	ONGC, Karaikal, TN	RANJITH KUMAR P	2022-2023	20.10.2022 to 09.11.2022
15	Internship	Sri luck Paints	P.DIBU	2022-2023	20.10.2022 to 09.11.2022
16	Internship	Sri luck Paints	ADITHYAN.N	2022-2023	20.10.2022 to 09.11.2022
17	Internchin	CPC1 Channai	PATAK	2022-2023	28.06.2022 to 12.07.2022
18	Internship	Bharathi Cements	T.CHANDRA KUMAR REDDY	2022-2023	19.09.2022 to 09.10.2022
19	Internship	Bharathi Cements	D. SIDDHARTHA	2022-2023	19.09.2022 to 09.10.2022
20	Internship	BPCL, Kochin	RAJEEV P R	2022-2023	04.09.2022 to 15.09.2022
21	Internship	BPCL, Kochin	ARUN T	2022-2023	04.09.2022 to 15.09.2022
22	Internship	SPIC, Tuticorin, TN	UDAYA SANTHOSH C	2022-2023	25.07.2022 to 05.08.2022
23	Internship	SPIC, Tuticorin, TN	UDAYA KISHORE K	2022-2023	08.08.2022 to 19.08.2022
24	Internship	SPIC, Tuticorin, TN	ASWIN DAS K H	2022-2023	08.08.2022 to 19.08.2022
25	Internship	SPIC, Tuticorin, TN	SRIDHAR E	2022-2023	08.08.2022 to 19.08.2022
26	Internship	SPIC, Tuticorin, TN	SRINIVASAN S	2022-2023	08.08.2022 to 19.08.2022

Ven Dr. S. V

1.E., Ph.d.,

Lineering and Tochnology Not, Coimbatore.

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Pichanur

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3rd Year Internship Details

Department of Petroleum Engineering

SI. No	REG No.	Name of the Student	Intern Company
1	720920219001	ARUNRALS	ONGC, Karaikal, TN
2	720920219002	ASHLY GODSON Y	ONGC, Karaikal, TN
3	720920219003	ASWIN DAS K H	SPIC, Tuticorin, TN
4	720920219004	BANDRLAPALLI SAINATH	ONGC, Karaikal, TN
5	720920219005	BHAWARLAL THARUN SEERVI	ONGC, Karaikal, TN
6	720920219006	CHALICHEEMALA GIRISH	ONGC, Karaikal, TN
7	720920219007	DANDEERAPPA SIDDHARTHA	Bharathi Cements
8	720920219008	DHANUSH R	ONGC, Karaikal, TN
9	720920219009	DINESH R	ONGC, Karaikal, TN
10	720920219010	HARISHKRISHNA S	ONGC, Karaikal, TN
11	720920219011	HARISH KUMAR D	ONGC, Karaikal, TN
12	720920219013	KARANRAJ S	ONGC, Karaikal, TN
13	720920219014	KISHORE R	ONGC, Karaikal, TN
14	720920219015	RAJA K	CPCL, Chennai
15	720920219016	RAJEEV P R	BPCL, Kochin
16	720920219017	SRIDHAR E	SPIC, Tuticorin, TN
17	720920219018	SRINIVASAN S	SPIC, Tuticorin, TN
18	720920219019	TUMMALURU CHANDRA KUMAR REDDY	Bharathi Cements
19	720920219020	UDAYA KISHORE K	SPIC, Tuticorin, TN
20	720920219021	UDAYA SANTHOSH C	SPIC, Tuticorin, TN
21	720920219301	ADITHYAN.N	Sri luck Paints
22	720920219302	ARUN T	BPCL, Kochin
23	720920219303	P.DIBU	Sri luck Paints
24	720920219304	MANIKANDAN .R	ONGC, Karaikal, TN
25	720920219305	NIMALSON .V	ONGC, Karaikal, TN
26	720920219306	RANJITH KUMAR P	ONGC, Karaikal, TN

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Dr. S. Venkatesh Babu M.E., Ph.d., Professor & Head Department of Petroleum Engineering JCT College of Engineering and Technology Pichanur, Coimbatore.

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Coimbatore 29.06.2022

Dr. S. MANOHARAN M.E, PhD, FIE Principal To

> The HR Manager. Southern Petrochemical Industries Corporation Limited, SPIC Nagar, Muthiahpuram, Thoothukudi - 628005, Tamil Nadu, INDIA..

Dear Sir/Madam,

<u>Sub:</u> Requisition for Internship Programme for our B.Tech- Petroleum Engineering Student at Southern Petrochemical Industries Corporation Limited, Thoothukudi - Reg.

JCT College of Engineering and Technology is a pioneering Engineering Institute in Coimbatore, affiliated to Anna University, Chennai, approved by AICTE New Delhi, managed by M/S. Shri Jagannath Educational Health and Charitable Trust, Chennai.

The student Mr. UDHAYA SANTHOSH C (Reg No: 720920219021) of Third year B.Tech- Petroleum Engineering of our institute is interested to undergo in Internship Programme in your esteemed organization. We will be highly obliged if you could kindly grant them permission for the Internship Programme. We are looking forward for your favorable support in this regard.



Thanking you,

Yours Traily

PRINCIPAL JCT College of Engineering & Technology PICHANUR, COIMBATORE - 641 105.

JCT College of Engineering and Technology

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai Accredited by NAAC 'A' Grade & Accredited by NBA for Petrochemical, Mechanical, EEE & CSE.) Pichanur, Coimbatore - 641 105 Tamil Nadu INDIA Phone: +91 422 2636900 Fax: +91 422 2636901,¢mail: info@jct.ac.in www.ict.ac.in



JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

LETTER OF PERMISSION

Ref.: TRG / IPT/ 365/2022

Date: 11.07.2022

To: Udaya santhosh C JCT College Of Engineering and Technology Coimbatore

Dear Udaya santhosh C

Sub: Permission for Internship Training (Ref:Your Bonofide/email dated on 11.07.2022)

This has reference to your application. Your request for undergoing Internship in M/S Southern Petrochemical Industries Corporation Ltd has been granted from 25.07.2022 to 05.08.2022.

Students should adhere to rules & regulations as per the enclosure and strictly follow the terms and conditions listed below:

Terms & Conditions

No boarding & lodging arrangement is offered here. However canteen facilities are extended to the

1 Internship Trainees for lunch at nominal rates (Rs.20/- per lunch) and Tea / Coffee free of cost, during office hours only.

This Internship Training is neither stipendiary nor remunerative. Further, this internship training shall
not be treated as preliminary training for any official responsibilities or job opportunities or priority towards future recruitments in M/S. Southern Petrochemical Industries Corporation Ltd.

The Internship trainee has to pay Training Charges on the commencing date of Training by means of a

3 Demand Draft which is to be obtained from any nationalized bank in favor of M/S Greenstar Fertilizers Limited, payable at Tuticorin.

Training charges per student	Rs: 1000
GST @ 18% on the training charges	Rs: 180

In Plant Training Charges to be paid (Round off)

Rs: 1180



Yours Sincerely.

R. Ramkumar Joint Manager – Training & Developmer

Southern Petrochemical Industries Corporation Ltd Muthlapuram Post, Thoothukudi 628005, Tamilnadu, India



ngineering and Technology JCT C 001 PJCHANUR, COIMBATORE - 641 105.



Date: 05.08.2022

CERTIFICATE

This is to certify that Udaya santhosh C, studying Second year B.Tech Petroleum Engineering , student of JCT College Of Engineering and Technology,Colmbatore has undergone Internship Training in M/s. Southern Petrochemical Industries Corporation Ltd SPIC Nagar, Tuticorin.

Internship Training details are as furnished below:

1) Type of Training Imparted	INTERNSHIP TRAINING
2) Period of Institutional Training	25.07.2022 to 05.08.2022
3) Allotment of Department	DAP PLANT
4) Conduct & Character	6000
5) Performance during Training	6000
6) Attendance during Training	REGULAR



Joint Manager - Training & Development



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4th Year (Project Work)

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1		720919219006	ARAVINDHAN R	Holistic overview in	Mr. K.	
2	1	720919219017	IFEVA NATHIN R	Health safety and	Janardhanan	
3	- 1	720919219031	VIGNESH R	Environment management on Typical onshore drilling operation		
4		720919219003	ANAND A	Modeling polymer EOR	Mr.V.	
5	11	720919219013	HARI KRISHNA R G	with Guar gum replacing	Purushothaman	
6	1	720919219022	NAVEEN KUMAR.N	polyacrylamide for		
7	1	720919219032	VIMALRAJ.P	effective production		
8		720919219008	ASVIN.S	Risk and Safety	Dr. M.J.A.	
9	1.00	720919219019	MOHAMED RISHWAN	management in Oil and Gas Industry	Prince	
10	1	720919219024	PRADEEP.R	7		
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12	Iv	720919219007	ARJAV.H	process and system in hazardous industry	Babu	
13	1	720919219018	MANOJ S			
14		720919219028	SHARUGH A			
15	V	720919219005	ANUSIYA.C	Artificial Lift Method Gas	Mr.V.	
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17		720919219009	ATHUL BABU P	Casing Seat Selection	Dr. M.J.A. Prince	
18	VI	720919219012	DUOLS			
19	1	720919219025	PRAKASH.P	1		
20	VII	720919219015	JAIKRISHNA.A	Oil Spill Management on Offshore	Dr. S. Venkatesh Babu	
21		720919219010	CHIRPYKUMARAN V C	Out in the hole of	Dr. S. Venkatesh	
22	1	720919219011	DHIYANESH R	Optimized techniques of	Babu	
23		720919219014	JAGATH RATCHAGAN	Unconventional Shale		
24	1	720919219020	MUKILAN.S	Reservoir		
25	іх	720919219023	POOJAA T D	Data Visualization using Python in SRP wells	Mr. K. Janardhanan	
26		720919219026	ROBIN ANTONYJ	Implementation of plasma	Dr. M.J.A.	
27	1 ×	720919219027	SAM DANIEL M	pulse technology in EOR	Prince	
28	1	720919219030	VASIKARAN.V			
29		720919219016	JAISON.M	Analysis for controlling of	Mr. S. Samraj	
30	XI	720919219002	AKSHAY PRADEEP	Lateral and Torsional vibration of BIT in Directional Drilling		
31	1	720919219021	NAVANEETH K			



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JiVennath Dr. S. Venkatesh Babu M.E., Ph.d.,

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3	1	720919219031	VIGNESH R	1	a
4	1	720919219003	ANAND A	Mr.V. Purushothaman	1
5	11	720919219013	HARI KRISHNA R G	1	
6	1	720919219022	NAVEEN KUMAR.N	1	V. WW
7	1	720919219032	VIMALRAJ.P	1	11
8		720919219008	ASVIN.S	Dr. M.J.A. Prince	
9]	720919219019	MOHAMED RISHWAN		los
10		720919219024	PRADEEP.R]	
11		720919219001	AKASH.J	Dr. S. Venkatesh Babu	J. Vennes
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17	14	720919219009	ATHUL BABU P	Dr. M.J.A. Prince	
18		720919219012	DIJO L S		102
19]	720919219025	PRAKASH.P		
20	VII	720919219015	JAIKRISHNA.A	Dr. S. Venkatesh Babu	& Vennot
21		720919219010	CHIRPYKUMARAN V C	Dr. S. Venkatesh Babu	
22		720919219011	DHIYANESH R		A.ven
23		720919219014	JAGATH RATCHAGAN M		
24	1	720919219020	MUKILAN.S		
25	IX	720919219023	POOJAA T D	Mr. K. Janardhanan	X. Tort
26		720919219026	ROBIN ANTONY.J	Dr. M.J.A. Prince	
27	X	720919219027	SAM DANIEL M]	600
28	1	720919219030	VASIKARAN.V		
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HOD Bebu M.E., Ph.d., & Head Dr. S um Engineering and Technology Dep JCT C ore.

CASING SEAT SELECTION

A PROJECT REPORT

Submitted by

ATHUL BABU P – 720919219009 DIJO LS – 720919219012 PRAKASH P – 720919219025

in partial fulfillment for the award of the degree

of

BACHELOR OF TECHNOLOGY

in

PETROLEUM ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

COIMBATORE



ANNA UNIVERSITY: CHENNAI 600 025

MAY 2023



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BONAFIDE CERTIFICATE

Certified that this project report "CASING SEAT SELECTION" is the bonafide work of ATHUL BABU P. DIJO LS, PRAKASH P who carried out the project work under my supervision.

Dr. S. Venkatesh Babu HEAD OF THE DEPARTMENT Professor and Head Petroleum Engineering JCT CET Coimbatore

121192023

SUPERVISOR Associate Professor Petroleum Engineering JCT CET Coimbatore

Submitted for the Anna University examination held on 22 May 2023_

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lege of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

ABSTRACT

The Study is based on the casing setting depth and design in drilling process that plays a vital role in drilling activities on onshore or offshore is an important aspect that must be planned. The major objective of this project is to maintain the recovery rate of hydrocarbon satisfying the formation by varying the design and choosing grades corresponding to the parameters of the selected well. In this work we had done quality control of data provided and calculated the selected well by using application of pore pressure and fracture gradient. The method used in determining the casing setting depth is the top-down method and the bottom- up method. Generally, top-down method is used in exploration drilling and the bottom-up method in development drilling. Having a comparative study of the well data provided the results of the calculations shows the methodology followed was providing significant grade selection for the well depth and the estimation of cost for the recovery was minimized.

Keywords: pore pressure, fracture gradient, mud density, casing setting depth, kick tolerance, equivalent mud density.

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8. CONCLUSION

The project helped me understand the selection of casing seat at different depth and its importance in the drilling industry. The proper knowledge of the well planning techniques helps to drill a safe and usable hole in a cost-efficient way. The well planning requires collection of data from different sources which should be accurate for further planning and its importance was realized.

The two most important aspects of data collection include pore pressure data and fracture gradient data which are the basic parameters to decide the mud window and the casing seats keeping in mind that the above formations must not get fractured and should be cased off safely.

This project also helped me to grab practical knowledge apart from theoretical by selecting casing seats for an exploratory well which helped me to understand that some other parameters also play a role in casing seatselection like presence of competent formations etc.

This project gave me the industrial approach of all the seat selection of the different types of casing in detail and helped me understand that the theoretical knowledge may serve as the base but the industrial practices always need to be considered and this helps to give the field approach of Casing Seat Selection.

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POST GRADUATE COURSES

(M.E. STRUCTURAL/POWER ELECTRONICS/VLSI/ENGG.DESIGN)

STUDY AND ANALYSIS OF BUILDING VIBRATION UNDER EARTHQUAKE WITH INERTERS

A PROJECT REPORT

Submitted by

MOHAMMED THOUFEEQ K (720921413011)

in partial fulfilment for the award of the degree of

MASTER OF ENGINEERING IN STRUCTURAL ENGINEERING



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

COIMBATORE - 641 105

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Certified that this report "STUDY AND ANALYSIS OF BUILDING VIBRATION UNDER EARTHQUAKE WITH INERTERS" is the bonafide work of "MOHAMMED THOUFEEQ K (720921413011)" who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

SIGNATURE

Dr.V.MURUGESH Head of the Department

Department of Civil Engineering JCT College of Engineering & Technology Coimbatore.

GUIDED BY Dr.V.MURUGESH Head of the Department

Department of Civil Engineering JCT College of Engineering & Technology Coimbatore.

Submitted for the Anna University project Viva-Voce Examination held on

09-10-2023

INTERNAL EXAMINER

EXT MANER

JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

ABSTRACT

The work described in this report deals with the analysis of buildings under earthquake loads and vibration with inerter, a relatively new concept, explored in context of vibration control in racing cars, and recently for buildings. Inerter is a mechanical device which generates a force proportional to relative acceleration between its two terminals. Originally employed in Formula One cars to reduce tyre vibrations, significant research work has been carried out using the inerter in different vibration control scenarios. Recently, some research has been carried out considering inerter as a seismic damper to be used in buildings. Their effect on reducing natural frequencies of structures has also been studied. Their significance lies in the fact that they can achieve effective vibration control without addition of an extra mass to the system unlike other conventional passive vibration control devices. This property is called the mass amplification effect of the inerter. This work focuses on the vibration control properties of the inerter with respect to their capability in reducing peak response quantities of the system to which it is connected to. In the current study, the effect of inerter on buildings modeled as single degree of freedom (SDOF) and multi degree of freedom (MDOF) systems under harmonic loading and seismic loading are dealt with. MATLAB and SAP2000, ETABS are the tools employed for the analysis. Based on the linear and non-linear dynamic analysis of the multi-storied buildings performed, it could be inferred that the inerter is a promising and versatile vibration control device that can be employed in Civil Engineering structures.

இந்த அறிக்கையில் விவரிக்கப்பட்டுள்ள பணி, பூகம்ப சுமைகளின் கீழ் உள்ள கட்டிடங்களின் பகுப்பாய்வு மற்றும் இன்டர்டருடன் அதிர்வு ஆகியவற்றைக் கையாள்கிறது, இது ஒப்பீட்டளவில் புதிய கருத்து, பந்தய கார்களில் கட்டுப்பாட்டின் அதிர்வுக் பின்னணியில் ஆராயப்பட்டது, மற்றும் சமீபத்தில் கட்டிடங்கள். Inerter என்பது ஒரு இயந்திர சாதனமாகும், இது அதன் இரண்டு முனையங்களுக்கு இடையில் தொடர்புடைய முடுக்கத்திற்கு விகிதாசார விகிதத்தை உருவாக்குகிறது. முதலில் ஃபார்முலா ஒன் கார்களில் டயர்

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ACKNOWLEDGEMENT

First and foremost, my thanks to god almighty for the blessings and guidance me in every step towards this project completion

I Express my sincere thanks to our chairman Thiru.R.ARULSELVAN and vice chairman Thiru.R.GAUTHAMAN JCT College of engineering and technology, Pichanur, for helping us by providing immense facilities for successful completion of my project work.

I whole heartedly thank to our beloved principal Dr.S.MANOHARAN. ME, Ph.D., for his inspiration, encouragement and support.

I greatly indebted to Prof.Dr.V.MURUGESH. M.E, Ph.D., professor and Head of Department of Civil Engineering for his continuous encouragement and help to complete my project work on time.

My sincere gratitude and heartfelt thanks to my project guide **Prof.Dr.V.MURUGESH**, M.E, Ph.D., Department of civil engineering for his constant encouragement and valuable guidance.

I also thank all department faculty members, supporting staff and lab in charge, who played a major role to complete my project.

Finally, I express to award from my deep sense of gratitude to my parents and friends for their support and inspiration.

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CHAPTER 5

SUMMARY AND CONCLUSIONS

5.1 SUMMARY

From this study, it was found that the Inerter can be used as an effective vibration control device in the field of Civil Engineering. It was found to decrease peak values of displacement, velocity and acceleration responses of both SDOF and MDOF systems subjected to regular harmonic excitation and earthquake induced ground motion. This can be achieved without the addition of a large external mass as in other conventional passive vibration control devices. It could also be seen that the Inerter decreased the natural frequency of the systems it is connected to. The characteristics of non-linear systems without inerter were also studied.

5.2 CONCLUSIONS

- For SDOF system subjected to harmonic load A.1, 19%, 25% and 31% reduction in peak displacement, velocity and acceleration value could be achieved due to inerter respectively for a b/M ratio of 0.8.
- For SDOF system subjected to earthquake ground motion A.2, a decrease in peak displacement, peak velocity and peak acceleration of 11%, 32% and 42% could be obtained for a b/M ratio of 0.7.
- For the system B.1.1, maximum reductions of 6%, 59% and 63% could be achieved for the peak displacement, velocity and acceleration response of first storey respectively.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

PROJECT LIST

Academic Year: 2022-2023

YEAR/SEM : IV ECE / VIII

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	720919106301	M.Arun				
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	720919106007	N.Varun			M. Chr	
	720919106008	KM.Vishnu				
3 .	720919106006	S.Saranraj	E-Umbrella	Mr.K. Babu		
	720919106003	KP.Malavika			~~~	
	720919106302	K.Praveen Kumar			3	



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Department Project Coordinator

RINCIPAL JCT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105.

HoD/ECE





REVOLUTIONIZING E-MOBILITY - UNLOCKING THE POTENTIAL OF BREAKING THE TETHER

A PROJECT REPORT Submitted by

FENISHA PRINCESS B

MRIDULA M

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ICT College of Engineering and Technology PICHANUR, COIMBATORE - 641 105

In the partial fulfillment for the award of the degree

of

BACHELOR OF ENGINEERING

in

ELECTRONICS AND COMMUNICATION ENGINEERING

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY, PICHANUR,

COIMBATORE - 641 105

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MAY 2023

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BONAFIDE CERTIFICATE

Certified that this project report "REVOLUTIONIZING E-MOBILITY -UNLOCKING THE POTENTIAL OF BREAKING THE TETHER" is the bonafide work of "FENISHA PRINCESS B, MRIDULA M, ARUN M" who carried out the project under my supervision.

Prof. D VEDHA VINODHA M.E. HEAD OF THE DEPARTMENT

Department of Electronics And Communication Engineering JCT College of Engineering And Technology, Coimbatore - 641105

But 22/5/23 SIGNATURE

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ABSTRACT

Wireless power transfer (WPT) technology has the potential to revolutionize the way electric vehicles (EVs) are charged. This abstract provides an overview of the various aspects involved in WPT for charging electric vehicles using solar and grid energy. It starts with an introduction to the concept of WPT, followed by a description of the different WPT technologies available for solar and grid integration. Then it outlines the various factors that affect the efficiency of WPT including distance, alignment, frequency and how these factors can be optimized for solar and grid integration. Charging time and power transfer efficiency are the main challenges of wireless power transfer for electric vehicles. It is proposed in this paper to resolve both issues using the transformer induction concept as well as wireless power transfer technology. A high efficiency WPT system for electric vehicle charging that carries a receiving coil. A prototype is built and tested to verify the feasibility of the proposed design with a unity power factor can be achieved over an air gap of 8cm. The maximum sliding distance of 10 cm under various power conditions and output voltage is produced upto 15V approximately. It uses solar energy and grid to produce electric voltage.

KEY WORDS: Wireless Power Transfer, Electromagnetic induction, Solar power, Grid.

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CHAPTER - 6 6 CONCLUSION

This paper presented a review of the wireless charging of electric vehicles A high-efficiency wireless power transfer system for electric vehicle charging applications is proposed. System configuration, design considerations were analyzed and discussed in detail. Vehicle electrification is unavoidable because of environmental and energy-related issues. Wireless charging will provide many benefits as compared with wired charging. WPT for EVs has the potential to overcome the drawbacks of wired chargers and also eliminate some hurdles towards vehicle electrification with sustainable mobility.

Aside from its convenience compared to wired chargers, WPT can enable significant downsizing of the onboard EV battery. A prototype was designed, built and tested with the popular renewable solar energy. With technology development, wireless charging of EVs can be brought to fruition. Further stude is in topology, control, inverter design and human safety are still needed in the near term.

6.1 FUTURE WORK

Dynamic wireless charging is a promising emerging technology that has the potential to revolutionize the EV industry by allowing EVs to be charged on the go. The technology works by using an array of charging pads embedded on the road, which wirelessly communicate with EVs to transfer power. Dynamowireless charging offers benefits such as increased convenience for EV ownerreduced range anxiety and potential cost savings from reduced battery siz. However, the technology faces challenges such as high costs, infrastructure requirements and standardization issues. Despite these challenges, governments and industry players are investing heavily in research and development to bring dynamic wireless charging to the market.

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DESIGN OF BOILER CHIMNEY AND VALIDATION USING TRANSIENT ANALYSIS.

PHASE I REPORT

Submitted by

MURUGAN S 720921408002

in partial fulfillment for the award of the degree of

MASTER OF ENGINEERING IN ENGINEERING DESIGN



JCT COLLEGE OF ENGINEERING AND TECHNOLOGY

COIMBATORE - 641 105

DEPARTMENT OF MECHANICAL ENGINEERING

ANNA UNIVERSITY, CHENNAI

APRIL 2023

ingineering and Technology NUR, COMBAUTE - 641 135

ANNA UNIVERSITY, CHENNAI

BONAFIDE CERTIFICATE

Certified that this Report titled DESIGN OF BOILER CHIMNEY AND VALIDATION USING TRANSIENT ANALYSIS is the bonafide work of MURUGAN S 720921408002 who carried out the work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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bmitted a report for the Project Phase I Viva-Voce examination held on ... 50:03.2023.

TERNAL

ABSTRACT

An initial design of chimney heat recovery heat exchanger was provided. The design had a completely fabricated exchange core but an incomplete ducting system . This report is based on the work undertaken to complete and test the gas to gas heat recovery system. This system was specifically designed for boiler chimney and therefore the systems ducting was designed to conform to the general boiler stack. In the completion of the design, the major factor to consider was to design against fouling. The system was therefore designed with means of reducing fouling such as provision for easily replaceable particulate filter and quick washing system. The project was hence done in the following manner.

1. Completing of the fabrication.

2. Research on ways of minimizing fouling.

Incorporating the ways arrived at in 1 above into the system design.

4. Testing of the model under forced convection condition.

The gases from a furnace were used to simulate industrial flue gases. The performance of the model was used to project the optimum of prototype.

3.(1
RANSIENT TEST

he air exit temperature rose sharply with time within the first two minutes rom 22.7°C to about 200°C. It then rose to a maximum of 210°C in the next ne minute then dropped to 205°C at the end of four minutes. This temperature hen remained constant.

The maximum time to allow temperatures to reach maximum was 4 minutes. Normalizing this time with the dwell time the maximum normalized time was found to be 750.

7.1 CONCLUSION

The objective of this project was completion and testing of boiler chimney heat recovery heat exchanger system that could be used to recover heat lost through flue gases. A plate type heat exchanger was used in the design. The systems model was completed and tested under forced convection conditions. From the performance of the model the optimum operating conditions were obtained as:

Overall heat transfer coefficient U= 0.778kW/m²K

Amount of heat recovered Q = 3.4 kW

Effectiveness $\varepsilon = 40\%$

 $T_{air in} = 22.7^{\circ}C$, $T_{air out} = 194^{\circ}C$, $T_{g} in = 482^{\circ}C$, $T_{g} out 253^{\circ}C$

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DESIGN OF BOILER CHIMNEY AND VALIDATION USING TRANSIENT ANALYSIS



A Project Report

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of

MASTER OF ENGINEERING

in

ENGINEERING DESIGN

JCT COLLEGE OF ENGINEERING AND TECHNOLOGY COIMBATORE - 641 105

ANNA UNIVERSITY - CHENNAI 600 025

APRIL/MAY 2023

UR, COIMBATORE - 641 185.



ANNA UNIVERSITY - CHENNAI



BONAFIDE CERTIFICATE

rtified that this project report is **DESIGN OF BOILER CHIMNEY AND VALIDATION USING ANSIENT ANALYSIS** is the bonafide work of **MURUGAN S** who carried out the project rk under my supervision.

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INTER ALEXAMI

EXTERNAL EX

OBJECTIVE STATEMENT

The aim of this project was to recover heat lost through flue gases exhaust at the chimney stage taking a keen consideration of the effect of fouling especially at the core of the heat exchanger. Some research was done and the exchanger system designed and fabricated though not to completion. It was nevertheless tested specifically to determine its heat exchange effectiveness. However critical factors such as fouling were not keenly observed. The small plate spacing of the exchange core will allow for a substantial heat recovery. This obviously means the core will undergo fouling at a higher rate as compared to boiler tubes. This makes the exchanger to require more frequent maintenance than the normal boiler maintenance. The objective was to review the design ensuring that fouling was reduced and that the maintenance practice on the exchanger does not adversely interfere with the normal operation of the boiler. It was projected that the project will maintain its goal of recovering heat and hence its benefits towards energy management and at the same time maintain the smooth operation of the boiler. The aim of this project can therefore be summarized as

I. Complete the fabrication of the heat recovery system and test.

2. Research on fouling effects for different fuels used in boilers.

3. Minimizing fouling and reduce maintenance requirements to avoid interference with the normal operations of the boiler.

4. Give the recommendations based on the prototype performance

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