





### IE(I) MECHANICAL CHAPTER, NSSC E ANNUAL EVENTS CALENDAR, 2024-25

Sl no.	Activity Title	Nature of activity	Mode of conduct	Date	Page number
1	INDUSTRIAL VISIT TO FCRI	Industrial Visit	Offline	03/08/2024	2
2	WORLD STANDARDS DAY CELEBRATION	9	Offline	03/08/2024	8
3	TECHNICAL REPORT WRITING SESSION	Talk session	Offline	29/08/2024	16
4	TARGET GATE ONLINE WEBINAR	Webinar	Online	05/10/2024	20
5	PHOTOGRAPHY CONTEST	Competition	Online	19/10/2024	24
6	ICME APPROACH TO ADDITIVE MANUFACTURING	Technical talk	Offline	13/12/2024	27
7	FUSION 360 WORKSHOP	Workshop	Offline	17/01/2025	33
8	CFD WORKSHOP	Workshop	Offline	08/02/2025- 09/02/2025	38
9	INDUSTRIAL VISIT TO FCRI	Industrial Visit	Offline	16/02/2025	44
10	AWARENESS SESSION ON SAFETY	Talk session	Offline	06/03/2025	49
11	WEBINAR ON "USE OF COMPOSITES IN AEROSPACE"	Webinar	Online	13/02/2025	55
12	TECHNICAL SESSION ON COMPOSITE ENGINEERING	Technical talk	Offline	11/03/2025	59



Title of Activity:	INDUSTRIAL VISIT TO FCRI
Activity under:	IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE
Date:03/08/2024	Venue: FCRI

The Industrial visit to FCRI was conducted on 3/8/2024 by the Institution of Engineers (India)(IE(I)) Mechanical Students Chapter. A total of 30 students and 1 staff member Sreeram V T sir participated in the Industrial visit. The team departed from college at about 9:15 AM and reached the industry around 9.45 AM. Upon reaching the industry, HR at FCRI handled a session that detailed the history and workings of the industry. After the introductory session, we were taken on a visit to see and understand the workings of the industry. The Institute provides the basic framework for technological development for the flow products industry and also serves as a national certifying authority and high-quality calibration laboratory. Fluid Control Research Institute is a national Centre, registered under the Societies Act and comes under the Ministry of Heavy Industries, Government of India. It is an independent organization, and its affairs and activities are managed by a duly constituted Governing Council.















# INSTITUTION OF ENGINEERS - IEI MECHANICAL CHAPTER NSS College of engineering, Palakkad



#### BENEFITS YOU GET IN INDUSTRIAL VISITS

- PROVIDES AN INSIGHT INTO THE REAL WORKING ENVIRONMENT.
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- EXPOSURE TO VARIOUS JOB ROLES HELPS STUDENTS MAKE INFORMED CAREER CHOICES.
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FOR IEI MEMBERS = 100RS FOR NON IEI MEMBERS=150RS



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INSTITUTION OF ENGINEERS - IEI

MECHANICAL CHAPTER

NSS College of engineering, Palakkad



#### ANNUAL INDUSTRIAL VISIT TO



FLUID CONTROL RESEARCH
INSTITUTE, KANJIKODE

ON



03 AUGUST

+91 62828 69004 Ananthapadmanabhan +91 95627 47154 ROSHIMA MURALI

## **Participants list:**

Sl no	Name	Class
1	Sreekrishnan B	S5ME
2	Abhijith M	S3ME
3	Abhinav shiva K K	S3ME
4	Abin N	S3ME
5	Adhyuth jayaraj	S3ME
6	Ajin kumar	S3ME
7	Akhil krishna	S3ME
8	Amal M	S3ME
9	Anantha krishnan M A	S3ME
10	Anirudh K J	S3ME
211	Anujith K R	S5ME
12	Aravind krishna S	S3ME
13	Dhananjayan C K	S3ME
14	Dhanush V	S3ME
15	Gokul Appattu Salish	S3ME
16	Abhishek R	S3ME
17	Gowri Nandana S	S3ME
18	Kabeerdas P	S5ME
19	Kirandas K	S3ME
20	KV Kailasnath Nair	S3ME
21	Mary shalima B	S3ME
22	Mohammed Riswan Z	S3ME
23	Mridul M	S5ME
24	Niranjan M	S5ME
25	Nirmal Sutar	S3ME

26	Noufal Rasheed H	S5ME
27	Prasad S	S3ME
28	Raghavan M	S3ME
29	Ronald K Francis	S3ME
30	Sreyas M	S3ME



### **Certificate:**



# पलूइड कंट्रोल रिसर्च इंस्टिट्यूट

WARE ACCREDITED; ISO BORE: 2015 CORTIFIED ESTABLISHMENT Linder Winistry of Heavy Industries, Govt. of India

काजिककोड नेस्ट, फालक्काड - ६७६ ६३३, केरल, फारत

Kanjikode West, Pelabikad - 678 683, Kerala, India #81-481-258128/258200/258008/2583137 & \$1-81 258528 @ www.friindo.com

PCRI/TRG/(V/2024-25/





To whomsoever it may concern.

This is to cortify that the following 30 Mechanical Engineering Students from NSS College of Engineering, Palakkad, along with their faculty, Mr. Sroemm. P. T. Mil. Department have successfully completed the industrial Visit to Fluid Control Research Institute, Palakkad, on 3rd August 2004.

58 No.	Name	Reg No.
1	Sectional B	NSS22ME122
2	ANNUM M	NSS23ME002
2	Abbinary Siva K. K.	NSS230400006
4	Attrobek R	NSS23ME010
3	Altio N	NSS23MEILL
	Adhyoth Jayana	NSS23MERER
T	Alin Kamer	N8823ME026
	Akhil Krishoa	NSS23WE830
	Amat M	N\$823ME807
101	Assotha Krishnan M.A.	NSS23ME040
11	Anirudh K.J.	NSS23ME041
12	Assisto K.R.	N5522MER09
13	Arayind Kristera S	NSS23ME845
14	Dhanasjayan C.K.	N3823ME062
15	Dhonosh V	NSS23ME064
16	Gokul Appetra Salish	NSS23ME079
97	Gowri Nandara S	NSS23ME074
38.	Kaheerdas P	N5S22ME000
79	Kiran das K	N5823ME088
28	KV Kailasnath Nair	NSS23ME093
21	Mary Shalima B	NSS23ME094
22	Mohammad Riswan Z	NS823ME097
23	Mridal M	NSS22ME082
24	Niranjan M.	N8822ME093
29	Nireal sater	N8823METT1
26	Noufal Rasheed H	NSS22ME095
27	Proped S	N8823ME114
79.	Raytomon M	NSS23ME116
29	Rosald K. Francis	NS823ME120
30	Sreyso M	NSS22ME126





#### FCRI - A RESOURCE FOR INDUSTRY

A Globally renowned and reliable service provider in flow technology COMMERCIANE IS NO HAY ANNOUNCED IN COMMERCIAN ASSESSMENT AND ASSESSMENT ASSES



Title of Activity:	WORLD STANDARDS DAY CELEBRATION IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE		
Activity under:			
Date:03/08/2024	Venue: COLLEGE AUDITORIUM NSSCE		

The standards day celebration program was organized by IE(I) Mechanical chapter, Standards Club and BIS Kochi .The program aimed to make participants aware of the importance of standards, verify whether a product is standardize, what are the steps taken to standardize and what are the different standards we use.

The program commenced with a warm welcome by Dr.Jyothi Sankar P R ,professor of mechanical engineering department. Dr.Rajeev N, principle of NSS COLLEGE OF ENGINEERING , inaugurated the program by emphasizing the significance of standards. Dr.Vinod V, Head Of Department of Mechanical Engineering, delivered the felicitation note. Later on an oath taking ceremony was initiated which made participants to plug that they will use and emphasis standardize product in their life, refreshments were provided after the ceremony. Afterwards Vinith Kumar G , Scientist D/ Joint Director of BIS Kochi did the keynote event , some of the important points discussed were:

- \* History and Structure of BIS: A deep dive into the evolution and organizational structure of the Bureau of Indian Standards.
- \* Core Activities: Detailed explanation of BIS's primary activities, including standards formulation, certification, testing, and training.
- \* Standards Formulation: A staggering 22,644 standards have been formulated to date.
- \* International Cooperation: India's role as a founding member of ISO.
- \* Certification Schemes: A comprehensive overview of various certification schemes, such as product certification, foreign manufacturer certification, and compulsory registration schemes.
- \* Laboratory Activities: Insight into BIS's extensive laboratory network.

Followingly, Ben Joseph explained the BIS website and apps functioning to the participants, so that they can assure the use of standardized products , these sessions helped to understand the importance of standards , various governmental measures to promote standardization and to check whether a product is standardize or not, so that we can use safe and reliable products. Prizes were given to standards club members who won 1st price in the Idea Pitching Challenge conducted by the Bureau of Indian Standards as part of the World's Standards Day celebration in Kochi Arun Kumar gave the vote of thanks . Lunch was sereved afterwards.







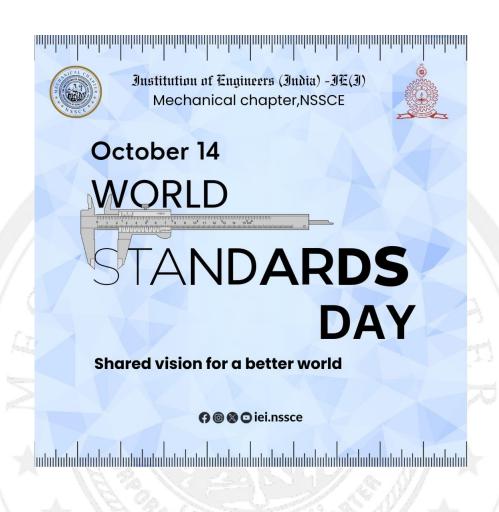












## **Participants list:**

Sl no	Name	Dept	Year of study	Baatch	Roll
1.	ADITHYAN NS	MECH		Δ	<b>no</b>
2.		MECH	3	A	14
	SANIN FUHADH	CIVIL	3	В	44
3.	MERIN PAUL	CIVIL	3	В	13
4.	M P ADWAITH KRISHNA	CIVIL	3	В	6
5.	SRADHA SHIBU	MECH	3	В	51
6.	ANAND C M	MECH	3	A	32
7.	HARISANKAR S	MECH	3	A	61
8.	HRISHIKESH A	MECH	3	A	62
9.	ASWINKUMAR A	MECH	3	В	102
10.	RIDUL M	MECH	3	В	133
11.	PRANAV R	MECH	4	В	129
12.	PRIYANANDA S	CIVIL	3	В	130
13.	SREENITHI N M	IC	3	A	61
14.	SHAMJITH A C	IC BI IS N	3	A	72
15.	ANUMODH P PRASAD	IC	3	A	17
16.	RAJASREE M	CIVIL	3	В	34
17.	SREEKUTTY S	CIVIL	3	В	53
18.	MANJUSHA M	CIVIL	3	В	66
19.	S THEJASWINI	CS	3	A	57
20.	ANJITHKRISHNAN K	CS	3	A	18
21.	ADITHYAN MARIKKAL	CS	3	A	9
22.	K V KAILASNATH NAIR	MECH	2	В	25
23.	RAJEESH C R	MECH	2	В	49

24.	HARISHMA H	EEE	2	A	68
25.	SHAHMA A	IC	2	A	57
26.	SANDRA H MENON	IC	2	A	56
27.	ANJU NIVEDHA M	EEE	2	A	32
28.	C B NANDHANA	CS	3	A	27
29.	RIYA S	CS	3	A	51
30.	NHAL AHAMMED P P	MECH	4	В	24
31.	JISHNU K	EEE	3	A	71
32.	HARIPRIYA S BABU	CIVIL	3	A	51
33.	DEVIKA KRISHNAN P	CIVIL	3	A	37
34.	FATHIMA RIHA T M	CIVIL	3	A	40
35.	JABIN MUHAMMED	MECH	4	В	63
36.	CHAITHRA C B	EEE	2	A	52
37.	AMALDEV	MECH	3	A	28
38.	NIRANJAN RAVI	MECH	3	В	126
39.	SANJAY S	MECH	4	В	137
40.	SREEJESH S VARIER	MECH	4	В	146
41.	CHRISTO PHILIP SABU	MECH	3	A	53
42.	MUHAMMED SHADI A	MECH	4	В	118
43.	MAHADEVAN B	MECH	4	В	109
44.	ALBIN ANTO K	MECH	3	A	24
45.	ANUJITH K R	MECH	3	A	39
46.	PRAMITH C	MECH	3	В	130
47.	SREEHARI SANKAR	MECH	4	В	145
48.	JAGANMAI EKARAJAN	IC	2	A	36
49.	NIHAL RAGESH	IC	2	A	47

50.	PRAVDA				
30.	PADMAKUMAR	MECH	4	В	131
51.	K F SHAHUL HAMEED	CIVIL	4	В	110
52.	NAMITHA A S	MECH	3	В	119
53.	ROSHIMA MURALI	МЕСН	3	В	134
54.	PRAVEENA P P	EEE	4	В	124
55.	PRASEETHA K	EEE	4	В	123
56.	VISWAJITH M	EEE	4	В	159
57.	VAISHNAV R	EEE	4	В	155
58.	SREEKRISHNAN B	ME	3	В	154
59.	SANOJ S D	ME	3	77	
60.	SHAHUL ASLIH P P	ME	3	31 0	. \\\
61.	ANUJITH S	ME	3	" 1 B 3	-3 ///
62.	GOPIKA V	ME	2	2 11	Ti I
63.	GOKUL APPATTU SALISH	ME	2		V
64.	S SIDHARTH	ME	3	100	
65.	SREELEKHA RAM B	EC	4	30/7	4//
66.	ADWAITH MENON	ME	3	E88/ 🗻	

## **Faculty Participants**

Sl no	Name
1	KIRAN VIJAYAN
2	KIRON K R
3	ANEESH KUMAR P
4	MADHUMOHAN
5	JYOTHI SANKAR P R
6	PRIYANKA C P
7	SIJO M S
8	VIVEK V M
9	ABHAY RAJAN
10	ARJUN K S
The state of the s	ARUNKUMAR M
12	VINOD V



Title of activity:	TECHNICAL REPORT WRITING SESSION		
Activity under:	IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE		
Date: 29/08/2024	Venue: NSS COLLEGE OF ENGINEERING, PALAKKAD		

A Technical Report Writing session was organized by IE(I), MECHANICAL STUDENTS CHAPTER NSSCE on 29/08/2024 from 4:15 p.m. The session was handled by Prof.Dipin Kumar R, Assistant Professor, Department of Mechanical Engineering, NSSCE. He gave the participants a clear idea about technical report writing, its importance and its features.

The program started with a welcome speech by Hisana, Project Head, IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE. Afterward, Prof. Dipin Kumar began the session by explaining the various types of reports like technical reports, review reports, etc. For a much more clear understanding of the participants, he used a PPT presentation. He differentiated every kind of report and its importance. Then he went on to the basic structure of a technical report which starts with a title then an abstract, a table of contents, a list of figures and tables, an introduction, a literature review, methodology, results, a conclusion, and references. He said that the field in which a person should work to write a report must be the field in which they are interested.

Furthermore, he stated that adding references is one of the difficult tasks in writing a report, and to tackle this Mendeley software was introduced to the participants. He also mentioned different apps that can be used to make the report more effective, like Grammarly to check grammatical errors, QuillBot to do paraphrasing, and more. All this software helps the writer to do their job better and efficiently. 20 students attended the session. The session was a success, and all the participants got a clear idea of how to write a basic technical report and what are the major things they should keep in mind.

Toward the end of the session, a memento was presented to Prof. Dipin Kumar R as a token of love and appreciation for giving his valuable time to take the session. The program ended with a vote of thanks by Sanal Sreekumar, Convenor, IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE, and a group photo was also taken.







### **BIODATA OF THE SPEAKER:**

#### **Experience**



#### **Assistant Professor**

NSS COLLEGE OF ENGINEERING, AKATHETHARA Jun 2016 - Present · 8 yrs 10 mos PALAKKAD, KERALA



#### **Assistant Professor**

HOLY KINGS COLLEGE OF ENGINEERING & TECHNOLOGY, MUVATTUPUZHA · Full-time Jun 2014 - May 2016 · 2 yrs Muvattupuzha, Kerala, India



#### **Mechanical Engineer**

Merchem Ltd. Jun 2010 - Jul 2011 · 1 yr 2 mos Cochin Area, India

#### Education



#### **PSG College of Technology**

M.E, Production Engineering 2012 - 2014



#### Mahatma Gandhi University

Bachelor of Technology (B.Tech.), Mechanical Engineering 2006 - 2010

Show all 3 educations →

#### Skills

#### Microstructural analysis



Indian Institute of Technology, Delhi

#### **Diffusion bonding**



Indian Institute of Technology, Delhi



TARGET GATE ONLINE WEBINAR
IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE
Venue: ONLINE

An online webinar 'TARGET GATE' was organized by IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE, Palakkad, Kerala on 5/10/2024 at 7:00 p.m. The session was handled by Achyuth S Gopinath, IIT Delhi (MTech in Production and Industrial Engineering), 2019-23 Batch of Mechanical Engineering from NSSCE. He gave the participants a clear idea about the GATE entrance examination.

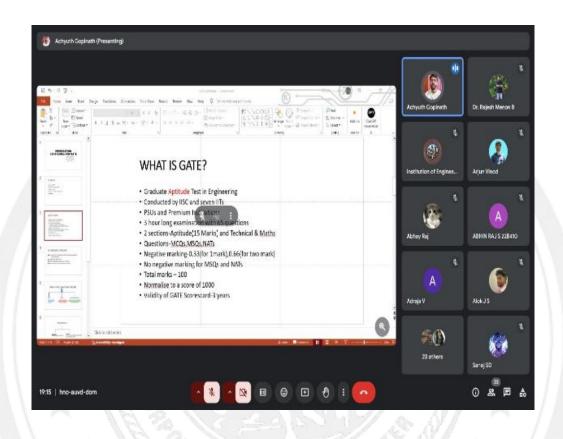
With the increasing competition for the Graduate Aptitude Test in Engineering (GATE), students require innovative and effective preparation methods. Online webinars have emerged as a valuable resource, offering flexible and accessible learning opportunities.

The program started with a welcome speech by Christo Philip Sabu, Membership Head, IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE. The Faculty Advisor Dr Rajesh Menon B also welcomed the speaker of the session. The session started by explaining what is GATE. For a much more clear understanding of the participants, he used a PPT presentation. He talked about the basic GATE characteristics. He explained the marking scheme of the exam and the duration details.

He also mentioned various online channels like Gatewallah, Ajaydecodes, Exergic, and Rahuram Chanthrakumar which are the online sources for GATE preparation. He also helped the participants with various strategies to crack the exam easily.

The session was very successful and useful to the participants. Students understood the importance of the GATE examination in their career growth. The personal experience of the speaker was a motivation for the participants.

The session ended with a vote of thanks by Sanal Sreekumar, Convenor, IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE.





### **BIODATA OF THE SPEAKER:**

#### **Experience**



#### **Teaching Assistant**

Indian Institute of Technology, Delhi · Full-time
Jul 2024 - Present · 9 mos
Delhi, India



#### **Student Intern**

Re-Nu Technologies Feb 2023 - Feb 2023 · 1 mo Chennai, Tamil Nadu, India · On-site

Learned about HVAC systems, took part in energy auditing, determined ener... see more



#### **Student Member**

Celestia NSSCE 2020 - 2021 · 1 yr Palakkad, Kerala, India

Had the opportunity to connect with fellow space enthusiasts and play a par... see more

#### Education



#### Indian Institute of Technology, Delhi

Master of Technology - MTech, Production Engineering Jul 2024



#### NSS College of Engineering, Palakkad

Bachelor of Technology - BTech, Mechanical Engineering

2019 - 2023 Grade: 8.93

Show all 3 educations →

#### Volunteering



#### **Volunteer Staff**

Office of Career Services, IIT Delhi



#### Volunteer

Dyuksha



Title of activity:	PHOTOGRAPHY CONTEST
Activity under:	IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE
Date:19/10/2024	Venue: NSS COLLEGE OF ENGINEERING, PALAKKAD

A Photography Contest was held by the IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE, in association with Friday Photo Club, NSSCE, on 19 October 2024 as part of World Photography Day.

The theme for the competition was "MECHANICAL HERITAGE." This provided a wonderful opportunity to capture the soul of vintage machines, the intricate beauty of historical mechanical devices, and the rustic vibes of abandoned industrial sites. The participants transformed the relics of the past into timeless pieces of art.

There was no registration fee for the contest and a prize pool of 150 was given. There were many entries for the contest and from them, the best two photos were selected. Rejoy Prince (S5MB) and bagged the first position. Niranjan Ramesh (S3 CSE) bagged the second position.







World Photography Day

## Phe tography Contest

### **Winners**

#### 1st Position



Rejoy Prince (S5 MB)

#### 2nd Position



Niranjan Ramesh (53 CSE)





Title of activity:	TECHNICAL TALK SESSION	
Activity under:	IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE	
Date: 13/12/2024	Venue: NSS COLLEGE OF ENGINEERING, PALAKKAD	

A Technical Talk Session was organized by IE(I), Mechanical Student's Chapter NSSCE on 13/12/2024 from 2:00 p.m. to 4:00 p.m. The session was handled by Prof.Gandham Phanikumar, Department of Metallurgical and Materials Engineering, IIT Madras. He gave the participants a clear idea about the ICME approach to Additive Manufacturing, its features, and advantages. Dr. Phanikumar, a professor at IIT Madras, is a renowned researcher specializing in advanced areas such as phase-field modeling of solidification, laser-based additive manufacturing, and integrated computational materials engineering. With an illustrious academic journey that includes a B.Tech from IIT Madras, a Ph.D. from IISc Bangalore, and post-doctoral research in Germany as an Alexander von Humboldt scholar, Dr. Phanikumar brings unparalleled expertise to the table.

His contributions to the scientific community, including pioneering work in electromagnetic levitation studies and undercooled metallic alloys, have set benchmarks in the field. Dr. Phanikumar's groundbreaking research has earned him prestigious recognitions, including the Metallurgist of the Year Award from the Ministry of Steel and Mines.

The program started with a welcome speech by Sanal Sreekumar, Convenor, IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE. Afterward, Prof. Gandham Phanikumar began the session by explaining the various types of materials and how different countries use them for different purposes. For a clear understanding of the participants, he used a PPT presentation. He clearly explained how our country India was technologically developed even before 40-50 years. The valuable contributions of various scientists and engineers were explained by him. It was an interactive session with the participants and he very sincerely cleared the doubts of the participants.

Towards the end of the session, a memento was presented to Prof. Gandham Phanikumar by our faculty advisor Dr. Rajesh Menon B as a token of love and appreciation for giving his valuable time to take the session. The program ended with a vote of thanks by Gopika V, Documentation Head, IE(I)Mechanical Student's Chapter, NSSCE, and a group photo was also taken.









## **Participants list:**

Sl No	Name	Class
1.	Arpith Ashok	S6MA
2.	Anujith K R	S6MA
3.	Adarsh E P	S3MA
4.	Anantha krishnan M A	S3MA
5.	Sreyas S	S1MB
6.	Amal M	S3MA
7.	Pooja K S	S8MB
8.	Ajmal M	S1MA
9.	Rakesh P R	S1MB
10.	Anamika K R	S1MA
11. [2]	Abhiram krishna	S1MA
12.	Dinesh K	S1MA
13.	Sreeshand devan M	S1MA
14.	Muhammed Ramzan	S1MB
15.	Aditya Vinod	S3MA
16.	Anand krishna K	S1MA
17.	Sanoj S D	S8MB
18.	Anandhu S	S8MA
19.	Favas K T	S8MA
20.	Josir Ibrahim J	S1MA
21.	Athul krishna S	S1MA
22.	M K Mithun Muralichandran	S1MA
23.	Dhanush V	S1MA
24.	Hrishikesh R	S1MA
25.	Anandu krishnan	S1MA
26.	Abhijith krishnan	S1MA

27.	Abhijith krishna	S1MA
28.	Edwin Joseph	S1MA
29.	E Aswin Krishna	S1MA
30.	Kiranraj R	S1MA
31.	Arjunkrishna K	S1MA
32.	Adithyan E	S1MA
33.	Sreeram G	S1MB
34.	Aswin V	S1MA
35.	Aravind krishna S	S3MA
36.	Arjun M	S3MA
37.	Afthab Aslam N	S8MA
38.	Harikrishna M	S1MA
39.	Fathima Fasmin	S1MA
40.	Niranjan Ravi	S5MB
41.	Sanjay S	S8MB
42.	Sanal Sreekumar	S8MB
43.	Hisana	S8MB
44.	Pravda	S8MB

## **BIODATA OF THE SPEAKER:**

#### **Experience**



#### Professor

IIT Madras

Feb 2005 - Present · 20 yrs 2 mos Chennai Area, India

Teaching and Research



#### **Guest Scientist**

IM2NP

May 2008 - Aug 2008 · 4 mos



#### **Guest Scientist**

Mar 2002 - Jan 2005 · 2 yrs 11 mos Cologne Area, Germany

Post-doctoral research

#### Education



#### Indian Institute of Science (IISc)

Doctor of Philosophy (Ph.D.), Metallurgy 1996 - 2002

Under the guidance of Prof. K. Chattopadhyay and Prof. P. Dutta



#### Indian Institute of Technology, Madras

BTech, Metallurgical Engineering 1992 - 1996

#### **Skills**

#### **Scanning Electron Microscopy**



Endorsed by Rowthu Sriharitha, Ph.D. and 1 other who is highly skilled at this



Endorsed by 8 colleagues at Indian Institute of Technology, Madras



37 endorsements

#### **Optical Microscopy**



Endorsed by 7 colleagues at Indian Institute of Technology, Madras



26 endorsements



Title of activity:	FUSION 360 WORKSHOP	
Activity under:	IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE	
Date: 17/01/2025	Venue: NSS COLLEGE OF ENGINEERING, PALAKKAD	

A Workshop on Fusion 360 was conducted by IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE on 17/01/2025 from 1:00 p.m. to 4:00 p.m. The session was handled by Sanal Sreekumar and Vipin (Students of NSSCE).

The session started by giving a basic idea about designing in Fusion 360 software. Students created an account of their own. Then the basic tools of the software were introduced to them. A simple cup was drawn by the participants so that they could understand every tool on the software easily. Then a turbine blade was drawn to them step by step to increase their potential in the software.

Then information about Manufacturing processes and 3-D printing rendering and its parameters were taken by Vipin. The participants were made to understand how to convert a fusion CAD model into a 3-D model in different software and how it can be easily visualized.

It was an interactive session with the participants and he very sincerely cleared the doubts of the participants. Towards the end of the session, a memento was presented to Sanal Sreekumar and Vipin by our Staff in charge Gopi Sir as a token of love and appreciation for giving their valuable time to take the session. The program ended with a vote of thanks by Aravind Krishna B, Executive Member, IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE, and a group photo was also taken.











## **Participants list:**

Sl No	Name	Department
1.	Arpith Ashok	ME
2.	Adhiya V	EE
3.	Sreyas M	ME
4.	Noufal Rasheed H	ME
5.	Vrinda	EE
6.	Nandhana Panniyath	EE
7.	Karthik K	EE
8.	Nikha Lakshmi M	EE
9.	Akhila T	EE
10.	Ridul M	ME
11.	Pranav Govind	EE
12.	Sidharth M Nair	EE
13.	Irfan Thaha	EE
14.	Krishna Satheesh	EE
15.	Vaishak M	ME
16.	Adithya P B	EE
17.	Deeksha K	EE
18.	Navnith Jayaprakash	ME
19.	Immanuvel geever	ME
20.	K V Kailasnath Nair	ME
21.	Jacob Shaju	ME
22.	Prasad S	ME
23.	Dhiya K U	EE
24.	Bhagyalekshmi S	EE
25.	Jaza Rahman A V	EE
26.	Devananda Devarajan	EE

27.	E H Akshay	EE
28.	Aathish	EE
29.	Hariprasad S	EE
30.	Abhijith K	EE
31.	Akshay V	EE
32.	Abay P	EE
33.	Arjun M	ME
34.	Vignesh M G	ME
35.	Ebin peeyus	ME
36.	Aswin kumar A	ME
37.	Rajesh C R	ME
38.	Niranjan M	ME





MECHANICAL CHAPTER, N.S.S COLLEGE OF ENGINEERING, PALAKKAD-678008, KERALA, INDIA

Title of activity:	CFD WORKSHOP
Activity under:	IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE
Date: 08/02/2025-09/02/2025	Venue: NSS COLLEGE OF ENGINEERING, PALAKKAD

The Computational Fluid Dynamics (CFD) Workshop was successfully conducted at NSS College of Engineering, Palakkad, with the objective of providing students with hands-on experience in numerical simulation techniques. The workshop aimed to introduce participants to the fundamentals of CFD, practical problem-solving skills, and exposure to industry-standard tools.

#### Workshop Details

- Date: February 8-9, 2025

- Venue: Mechanical CAD Lab, NSS College of Engineering

-- Resource Persons:

- Dr. Ritu Raj Kumar (High-fidelity CFD in high-speed flows, IIT Madras)

- Dr. Sumit Shankar Sarvankar (High-fidelity CFD in turbomachinery, IIT Madras)

The workshop spanned two days, offering a detailed exploration of both theoretical concepts and practical applications of Computational Fluid Dynamics. On the first day, the focus was on building a strong theoretical foundation. The sessions began with an Introduction to CFD, explaining its significance in solving complex fluid flow problems and its widespread applications in various industries, including aerospace, automotive, architecture, and environmental engineering. Participants were introduced to different CFD tools and software, with a special emphasis on ANSYS Fluent and open-source platforms.

The theoretical discussions were complemented by a thorough explanation of the mathematical framework underlying CFD, covering key topics such as Partial Differential Equations (PDEs) and their discretization using Finite Difference Methods (FDM). The instructors guided students through the process of converting PDEs into linear equations and discussed numerical techniques for solving these equations accurately. This session laid the groundwork for the

practical applications that followed on the second day.

Day two was dedicated to hands-on training, where participants engaged in practical exercises to apply the concepts learned on the first day. The day began with a session on Setting Up CFD Simulations, including geometry and mesh generation, defining boundary conditions, and configuring solver settings. Students were encouraged to explore the software interface and perform simulations on sample problems involving 2D airfoil flow and 3D heat transfer.

The coding session was a major highlight of the workshop. Under the guidance of the resource persons, participants learned to write basic codes in Fortran for solving 1D and 2D heat equations. The instructors explained the syntax and data structures in Fortran, helping students understand how to implement numerical techniques through coding. This session provided a deeper understanding of how simulations are built from scratch.

Following the coding exercises, participants were introduced to ParaView, a powerful tool for post-processing and visualizing simulation results. The session demonstrated how to import data, create contour plots, and generate animations to interpret and present results effectively. An additional session on the Finite Volume Method (FVM) was conducted, offering insights into this advanced discretization technique, time permitting.

Throughout the workshop, the resource persons emphasized the importance of validation and benchmarking in CFD simulations to ensure the accuracy and reliability of results

The workshop witnessed enthusiastic participation from students who showed great interest in both theoretical and practical sessions. The hands-on exercises were particularly well-received, as they allowed participants to apply their newly acquired knowledge in a practical context. Several students mentioned that the coding sessions and the opportunity to work with industry-standard tools were the most rewarding parts of the workshop. The feedback collected at the end of the workshop highlighted the structured approach, real-world examples, and interactive nature of the sessions as key strengths.

The CFD Workshop was a resounding success, providing students with both theoretical and practical knowledge essential for understanding CFD. The organizing team extends its sincere gratitude to Dr. Ritu Raj Kumar and Dr. Sumit Shankar Sarvankar for their invaluable contributions. Special thanks to Mr. Arunkumar M, faculty advisor, and the organizing team for their dedicated efforts in ensuring a smooth and impactful event.







**INSTITUTION OF ENGINEERS (INDIA) MECHANICAL STUDENT CHAPTER NSSCE PALAKKAD** 



2-DAYS WORKSHOP ON COMPUTATIONAL FLUID DYNAMICS



08-09 FEBRUARY, 2025 09:00AM - 4:00PM **MECHANICAL CAD LAB** 

#### **REGISTRATION FEE**

For IE(I) members : Rs 25 For non-IE(I) members: Rs 100

#### Why Attend?

- Practical simulation training
- Expert-Led Sessions
- Use of industry standard software





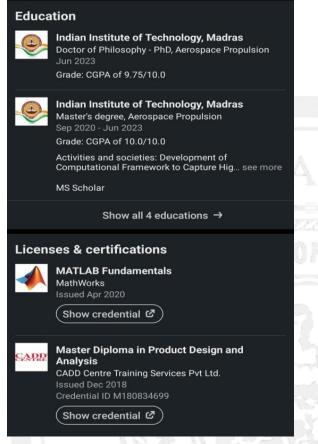


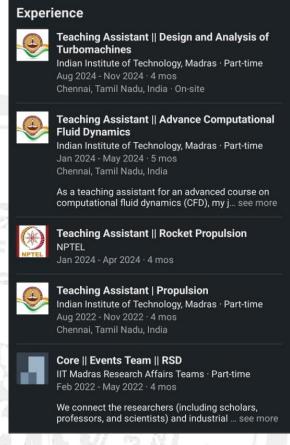
**Register now** 





# **BIODATA OF THE SPEAKERS:**





# **Participants list:**

Sl No	Name	Class	Roll number
1	Aravind krishna S	S4MA	43
2	Anantha krishnan M A	S4MA	39
3	Mohammed riswan Z	S4MB	129
4	Sathyajith Narayanan	S6MB	147
5	Sreyas M	S6MB	158
6	Sreekrishnan B	S6MB	154
7	Kabeerdas P	S6MB	104
8	Sivani Manoj	S2MB	51
9	Nirmal sutar	S4MB	143
10	Maria bronia P J	S2MA	66
11	Nandhagopan M	S2MB	15
12	Shilpa T	S8MB	143
13	Vaibhav B Ramalingam	S8MB	153
14	Yadu R krishna	S8MB	159
15	Noufal Rasheed H	S6MB	127
16	Arjunkrishna K	S2MA	33
17	Niranjan M	S6MB	125
18	Christo Philip Sabu	S6MA	53
19	Shikhil A	S8MB	142
20	Noufia Hussain S	S2MB	127



MECHANICAL CHAPTER, N.S.S COLLEGE OF ENGINEERING, PALAKKAD-678008, KERALA, INDIA

Title of Activity:	INDUSTRIAL VISIT TO FCRI
Activity under:	IE(I), MECHANICAL STUDENTS
1	CHAPTER, NSSCE
Date:16/02/2025	Venue: FCRI

The Industrial visit to FCRI was conducted on 16/2/2025 by the Institution of Engineers (India)(IEI) MECHANICAL STUDENTS CHAPTER. A total of 30 students and staff members Arunkumar Sir, Sreejith Sir, Jyothishankar Sir participated in the Industrial visit. The team departed from college at about 9:15 AM and reached the industry around 9.45 AM. Upon reaching the industry, HR at FCRI handled a session that detailed the history and workings of the industry. After the introductory session, we were taken on a visit to see and understand the workings of the industry. The Institute provides the basic framework for technological development for the flow products industry and also serves as a national certifying authority and high-quality calibration laboratory. Fluid Control Research Institute is a national Centre, registered under the Societies Act and comes under the Ministry of Heavy Industries, Government of India. It is an independent organization, and its affairs and activities are managed by a duly constituted Governing Council.









For registration, scan the above QR code

# **Participants list:**

SI NO	Name	CLASS	KTU registration no	Contact Number
1	Aarabhi B	S2CEA	NSS24CE001	8089299032
2	ABHISHEK VK	S2MA	NSS24ME012	9207023244
3	ABIJITH KRISHNA	S2MA	NSS24ME013	7510201000
4	Akbar Ali	S2MA	NSS24ME022	7591929224
5	Ameen Ahammed Hussain.H	S2MA	NSS24ME025	7306793899
6	Anantha Krishnan M A	S4MA	NSS23ME040	7306875636
7	ANANTHAPADMANABHAN	S6MA	NSS22ME034	6282869004
8	ANUSREE K P	S2CEA	NSS24CE038	8075243493
9	Aravind krishna S	S4MA	NSS23ME045	7034871518
10	Arjun S	S2MA	NSS24ME034	8289837003
11	Arjunkrishna k	S2MA	NSS24ME033	8086966900
12	Aswathi K	S2CEA	NSS24CE042	7012652163
13	Aswin V	S2MA	NSS24ME037	8156849202
14	Bharath C R	S2MA	NSS24ME040	9447620426
15	Darsana.R	S2CEA	NSS24CE052	8921295605
16	Dhanush V	S4MA	NSS23ME064	8075572249
17	Dharsana B	S2CEA	NSS24CE057	9567508015
18	Fareeda Rahim	S2MA	NSS24ME049	9207399520
19	Ganga ps	S2CEA	NSS24CE063	7510935728
20	Jasir Ibrahim J	S2MA	NSS24ME058	9995493447
21	Jimmy Johnson	S2MA	NSS24ME059	7736209583
22	KARTHIKA S	S2MA	NSS24ME061	7994163001
23	Nandhagopan M	S2MA	NSS24MEO82	8330063953
24	Navaneeth Nair	S2MA	NSS24ME083	9562079615
25	Neha v	S2CEA	NSS24CE100	7306187962
26	Noufiya Hussain S	S2MA	NSS24ME094	8921258353

27	Sarang s	S2MA	NSS24ME108	8590390981
28	Sridhu Raj K R	S2MA	NSS24ME125	9746624665
29	Zain Jisa Chemmanoor	S2MA	NSS24ME136	9037162835





MECHANICAL CHAPTER, N.S.S COLLEGE OF ENGINEERING, PALAKKAD-678008, KERALA, INDIA

Title of Activity:	AWARENESS SESSION ON SAFETY
Activity under:	IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE
Date:06/03/2025	Venue: NSS COLLEGE OF ENGINEERING

An awareness session on safety was organized by IE(I), MECHANICAL STUDENTS CHAPTER NSSCE on 06/03/2025 from 1:30 p.m. to 3:30 p.m. The session was handled by Karthikeyan R, Safety Consultant, Safety Council of Kerala. He gave the participants a clear idea about safety. He has a Btech degree in mechanical engineering from NSSCE, and an M.E in industrial safety engineering.

The program started with a welcome speech by Aravind Krishna S, Executive member, IE(I) MECHANICAL STUDENTS CHAPTER, NSSCE. Afterward, Karthikeyan R began the session by explaining the various types of safety measures and how the safety council of kerala works. For a clear understanding of the participants, he used a PPT presentation. It was an interactive session with the participants, and he very sincerely cleared the doubts of the participants.

Toward the end of the session, our faculty advisor, Dr. Rajesh Menon B, presented Karthikeyan sir with a memento as a token of love and appreciation for giving his valuable time to take the session. Jyothishankar sir also gave a momento to Venugopalan sir, the secretary of SCK. The program ended with a vote of thanks by Amal, and a group photo was taken.

















# IE(I) ME STUDENT'S CHAPTER NSSCE

Awareness session on

ENGINEERING A SAFER FUTURE

"Safety is not an option; it's a necessity." Learn how engineering plays a crucial role in making workplaces safer!

#### Key insights:

- · Identify potential safety improvements
- Enhance workplace safety standards

*IN ASSOCIATION WITH SC*K (SAFETY COUNCIL OF KERALA)

FREE REGISTRATION!

**Register Now** 



Limited slots available! https://forms.gle/5CoyJV5WWmcwvnWZ7



KARTHIKEYAN R

Speaker

Safety consultant from SCK members organization

> 06 MAR 2025 **01:00 PM**

VENUE: MECHANICAL SEMINAR HALL

# **Participants list:**

S No:	Name	Class Roll No:
1	Agnay Anil	24
2	Aravind Krishna S	43
3	Anandakrishnan M A	39
4	Amal M	36
5	Arjun K S	69
6	Abin Raj	12
7	Arun B	17
8	Amal Sidhan	29
9	Amith Aravind	31
10	Ben Jude Tharsiuse	49
11	Abhijith J Kurup	2 5 1
12	Fitha A	56
13	Harisankar S	61
14	Anand C M	32
15	Abhishek S Nair	8
16	J R Muhammed Althaf	65
17	Abhinand J S	3
18	Abhay Krishna A	1
19	Aswanth T H	45
20	Govind R	58
21	Amaldev K	28

22	Anfas Anwar C M	35
23	Akash K T	19
24	Arya Sivan	44
25	Afreen Ayoov	16
26	Ahammed Najjad P S	17
27	Arjun Krishna	33
28	Ameen Ahammed Hussain H	24
29	Rakesh P R	134
30	Sreesanth Devan M	157
31	Navaneeth N T	168
32	Rajildas R	133
33	Nazim Hussain K	119
34	Karthik S	119
35	Jayakrishnan J	114
36	Gopika V	104
37	Muhammed Riswan Z	129
38	K V Kailasnath Nair	125

## **BIODATA OF THE SPEAKER:**

#### RESUME'

NAME : KARTHIKEYAN R.

PHONE : (0091) 9497632705

E-MAIL ADDRESS : karthikpalghat@gmail.com

#### **EDUCATIONAL QUALIFICATIONS**

Degree in Engineering : B. Tech., Mechanical Engineering

(University of Calicut - India.)

Master's Degree in Engineering : M.E., Industrial Safety Engineering

(Regional Engineering College, Trichy, India.)

#### ADDITIONAL QUALIFICATIONS

1. Sr. Root Cause Analysis Facilitator - Chevron certified

- 2. Experienced in Chevron Operational Excellence (OE) Management System
- Attended various Fire, Safety, Health and Environment trainings and workshops conducted by Chevron, Saudi Aramco, KNPC and KOC.

#### SUMMARY OF EXPERIENCE

I Have 30 years of experience in Health, Safety and Environment in upstream and downstream petroleum industries out of which 18 years in upstream industry involved in exploration and production. Proficient in international oil industry HSE standards and procedures of Chevron, Kuwait Oil Company, Saudi Aramco and Kuwait National Petroleum Company in HSE.

Developing and monitoring implementation of HSE Management system, leading HSE management teams in major projects, conducting safety audits / compliance reviews in industries and developing and conducting HSE training programs

Facilitating Root Cause Analysis (RCA) investigation of incidents, presenting RCA reports to management and tracking implementation of recommendations. Preparing HSE statistics, trend analysis and monthly/quarterly reports, Quarterly review of significant incidents with Chevron management, sharing lessons learned with various business units of Chevron and business partners. Monitoring and benchmarking overall HSE performance with OGP, GCC oil industry statistics etc.

Preparing strategic initiatives, HSE Performance targets/limits and action plans. Liaising with corporate office of Chevron and participating in monthly management review of Global HSE performance review meetings. Participating in social impact studies for major projects, coordinating with stake holders and government agencies.

As an active member of Safety Council of Kerala, I have conducted training and presentations on various topics for industries and safety reviews of companies in Kerala. Delivered presentations and held discussions on HSE topics in various conferences.



MECHANICAL CHAPTER, N.S.S COLLEGE OF ENGINEERING, PALAKKAD-678008, KERALA, INDIA

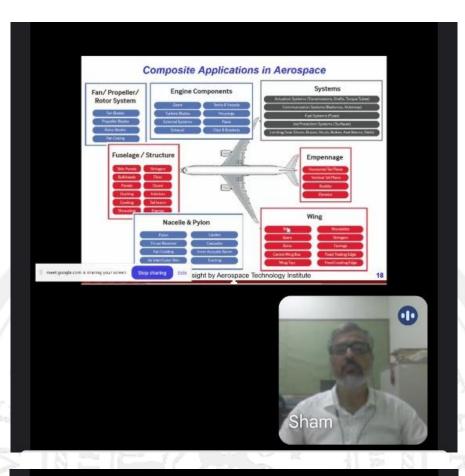
Title of activity:	WEBINAR ON "USE OF COMPOSITES	
4104	IN AEROSPACE"	
Activity under:	IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE	
Date: 13/02/2025	Venue: ONLINE	

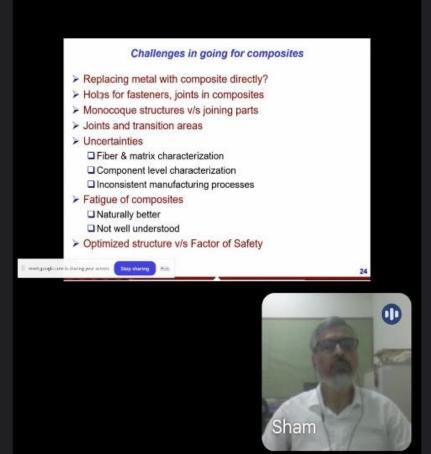
An online webinar on "USE OF COMPOSITES IN AEROSPACE" was organized by IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE, Palakkad, Kerala on 13/02/2025 at 4:00 p.m. The session was handled by Sham Gurav, Professor of Practice of Engineering, PhD (Delft University of Technology). He gave the participants a clear idea about the composites.

With the increasing demands for composites used in aerospace, students require innovative and effective preparation methods. Online webinars have emerged as a valuable resource, offering flexible and accessible learning opportunities.

The session started by explaining what is composites. For a clear understanding of the participants, he used a PPT presentation. He talked about the basic characteristics of composites. He also explained different types of composite materials. He said how composites can be applied in aerospace like for propellers, engine components, wing etc. With that he also said about the challenges in going for composites.

The session was very successful and useful to the participants. Students understood the importance of composites in aerospace, and the speaker's personal experience motivated the participants.











# USE OF COMPOSITES IN AEROSPACE



SPEAKER
SHAM GURAV

Professor of Practice of Engineering PhD (Delft University of Technology)

- (2) 13 FEBRUARY,2025 ,THURSDAY
- 4.00 PM (IST)
- (7 @ finite in in initial in initial in initial in initial ini



# **BIODATA OF THE SPEAKER:**

#### **Experience**



#### **Professor of Practice**

Ahmedabad University · Part-time Aug 2020 - Present · 4 yrs 8 mos Ahmedabad, Gujarat, India



#### Founder and CEO

JAGO Motion Technologies Pvt. Ltd. · Self-employed

May 2018 - Present · 6 yrs 11 mos Sangli, Maharashtra



#### **Adjunct Professor**

RIT · Part-time May 2018 - May 2020 · 2 yrs 1 mo Islampur, Maharashtra, India



#### **Associate Professor**

KLE Technological University · Part-time Aug 2017 - Apr 2018 · 9 mos Hubballi, India



#### Associate Professor

Walchand College of Engineering(A Govt. Aided Autonomous Institute),SANGLI-M.S Aug 2015 - Aug 2017 · 2 yrs 1 mo Sangli



#### **Senior Engineer**

ATKINS Aerospace Jan 2013 - Jul 2014 · 1 yr 7 mos Hoofddorp, Netherlands



#### **Engineering Manager**

Eaton

Mar 2012 - Apr 2013 · 1 yr 2 mos



#### **Engineering Manager**

**GE** Aviation

Jul 2010 - Mar 2012 · 1 yr 9 mos



#### Postdoctoral Research Fellow

Virginia Polytechnic Insitute and State University

Jan 2008 - Jun 2009 · 1 yr 6 mos



#### Structural Engineer

Advanced Operations & Engineering Services

Dec 2005 - Apr 2007 · 1 yr 5 mos



#### Education



#### **Delft University of Technology**

Ph.D., Mechanical Engineering 2000 - 2005

Thesis: Uncertainty-based Design Optimization of Structures



## Indian Institute of Technology, Madras

Master's degree, Aerospace Engineering 1998 - 2000



#### Walchand College of Engineering , Vishrambag

B.E., Civil Engineering 1992 - 1996



MECHANICAL CHAPTER, N.S.S COLLEGE OF ENGINEERING, PALAKKAD-678008, KERALA, INDIA

Title of Activity:	TECHNICAL SESSION ON COMPOSITE ENGINEERING
Activity under:	IE(I), MECHANICAL STUDENTS CHAPTER, NSSCE
Date:11/03/2025	Venue: NSS COLLEGE OF ENGINEERING

A Technical session on Composite Engineering was organized by IE(I), MECHANICAL STUDENTS CHAPTER NSSCE, in association with PTIB on 11/03/2025 from 2:00 p.m. to 4:00 p.m. The session was handled by Aaqib Chokwala, Outreach Manager, at Ahmedabad University. He gave the participants a clear idea about Composite Engineering and its future scope. The session was arranged at Skill Development Centre in NSSCE. The program started with a welcome speech by Kailasnath, a student at NSSCE. Almost 60 participants attended the session, most of whom were in their final years.

The session started by explaining what a composite is, its importance, and its applications. He used a PPT presentation for better understanding. He talked about the peculiarities of composites and how they differ from other materials. A brochure was circulated among the students about the course offered by Ahmedabad University. They provide an Mtech in Composite Engineering, which is a very relevant course at present. He gave a very clear idea about their campus and its facilities. They also offered to conduct a test in our college for interested students. Students can attend it, and those who are selected get an opportunity to attend a training program in their labs.

Toward the end of the session, a memento was presented to Aaqib Chokwala as a token of love and appreciation for giving his valuable time to take the session. The program ended with a vote of thanks, and a group photo was also taken.







IE(I) Mechanical Students Chapter in collaboration with Placement Training & information Bearue NSSCE

# TECHNICAL SESSION ON

# **COMPOSITE ENGINEERING**

- **(2)** 11.03.2025
- 2Pm to 3Pm
  - Skill Development centre

Aaqib Chokwala
OUTREACH MANAGER
AHMEDABAD UNIVERSITY



# **BIODATA OF THE SPEAKER:**

#### **Experience**



#### Manager

Ahmedabad University · Full-time Oct 2023 - Present · 1 yr 6 mos Ahmedabad, Gujarat, India · On-site



#### **Outreach Manager**

GUS Global Services India Pvt. Ltd.  $\cdot$  Full-time

May 2022 - Sep 2023 · 1 yr 5 mos Ahmedabad, Gujarat, India · On-site

- o Conducting workshops.
- o Lead Generation through mark... see more
- Sales Campaigns, Sales and +6 skills



#### **Deputy Centre Manager**

BYJU'S · Full-time

May 2020 - May 2022 · 2 yrs 1 mo Ahmedabad, Gujarat, India · On-site

- o Management of BYJU'S Tuition Centre.
- o Managing Lead Generation Te... see more
- Sales Campaigns, Sales Strategy and +3 skills



#### **Team Lead**

Grenzenlos Solutions Pvt Ltd · Full-time Mar 2019 - Jan 2020 · 11 mos Ahmedabad, Gujarat, India · On-site

Devised, deployed and monitored processes to boost long-term business suc... see more

Account Management, Sales Strategy and +2 skills



#### Bell

Full-time · 5 yrs
Toronto, Ontario, Canada · On-site

#### Store Manager

Sep 2015 - Dec 2018 · 3 yrs 4 mos

Motivating the sales team to meet sales objectives by training and mento... see more

Account Management and Communication

#### Education



#### Yorkville University

Master of Business Administration - MBA, General Sales, Merchandising and Related Marketing Operations

Dec 2016



#### **Cambrian College**

Bachelor of Business Administration - BBA, Business Administration and Management, General

Jan 2013 - Dec 2015

#### **Skills**

#### **Inbound Marketing**



Deputy Centre Manager at BYJU'S

#### **Account Management**



2 experiences across Grenzenlos Solutions Pvt Ltd and 1 other company

