

**SCMS SCHOOL OF ENGINEERING & TECHNOLOGY, KARUKUTTY**

**Report on: Workshop on Introduction to Computational Fluid Dynamics**

**Date:** 03-04-2024

**Time:** 9:00 am to 3:30 pm


**Venue:** Lab 3 Academic Block 1, SSET

**Speaker:** Mr. Rakesh T V, Senior R&D Engineer, FeatherDyn, Kochi.


**Conducted by:** Research and Development Cell, SSET in collaboration with ARiME,  
Department of Mechanical Engineering, SSET

**Research and Development Cell & ARiME**  
*presents*

**WORKSHOP**  
*on*  
**INTRODUCTION TO COMPUTATIONAL FLUID DYNAMICS**



**Mr. Rakesh TV**  
Senior R&D Engineer, FeatherDyn Pvt. Ltd

|   |   |   |                             |
|---|---|---|-----------------------------|
|  | Date & Venue<br>03 April, 2024<br>Lab 3, Academic Block I |  | Time<br>09.30 AM - 12.30 PM |
|---|---|---|-----------------------------|

— Accredited by —



**SCMS** SCHOOL OF  
ENGINEERING & TECHNOLOGY

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**Introduction:**

The workshop on "Introduction to Computational Fluid Dynamics (CFD)" was organized by the Research and Development Cell of SSET in collaboration with ARiME, Department of Mechanical Engineering, SSET. The program was conducted to provide an overview and basic understanding of CFD, and hands-on training on CFD analysis using Openform.

**Overview:**

The workshop commenced at 9:30 am in Lab 3 of Academic Block 1, SSET, with an introduction by the organizers followed by welcoming of the speaker and the participants by Dr. Varun G Menon, Deputy. Dean Research and Development Cell, SSET. Mr. Rakesh T V, R&D Engineer from FeatherDyn, Kochi, served as the speaker for the session.

**Highlights:**

**Fundamentals of CFD:** Mr. Rakesh began by explaining the fundamentals of Computational Fluid Dynamics, emphasizing its role in simulating fluid flow phenomena using numerical methods with examples. He discussed the governing equations, discretization techniques, and numerical solvers commonly employed in CFD simulations.

**Applications in Engineering:** The speaker illustrated various applications of CFD across different engineering domains such as aerospace, automotive, energy systems, and environmental engineering. Participants gained insights into how CFD aids in optimizing designs, predicting performance, and analyzing complex fluid behaviors.

**Hand-on Session:** Participants were introduced to Openform software, a free open source software for CFD analysis. Mr. Rakesh explained how to approach a problem in Openform and how to set the input parameters in the software. The participants gained practical experience in setting up simulations, defining boundary conditions, and interpreting results.

**Conclusion:**

The workshop concluded at 12:30 pm with a vote of thanks to Mr. Rakesh T V for his insightful session by the student representative Mr. Austin Benny. The event provided basics in Computational Fluid Dynamics to the attendees, encouraging them solve CFD problems using

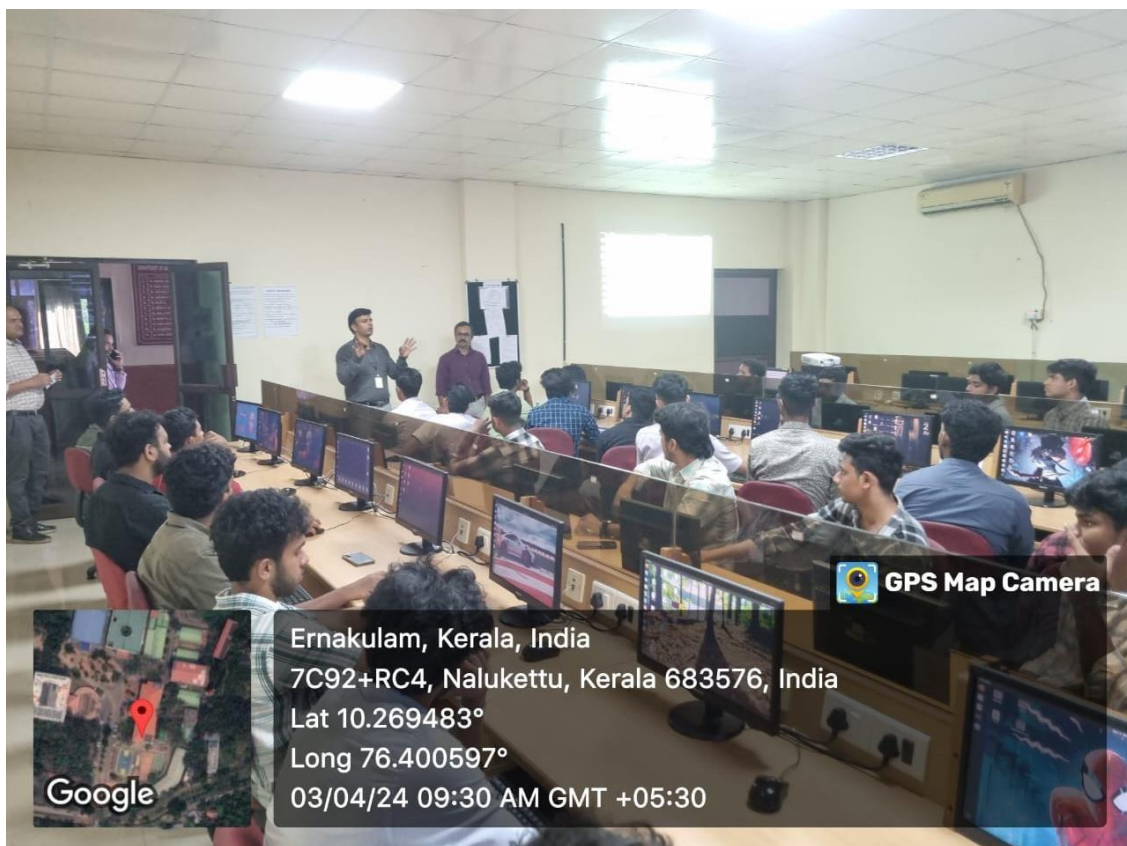
Openform. Overall, the workshop successful in introducing CFD concepts and practical understanding through hands-on exercises.

### Participation


No. of student participants: 42

No. of faculty participants: 10

### Photos



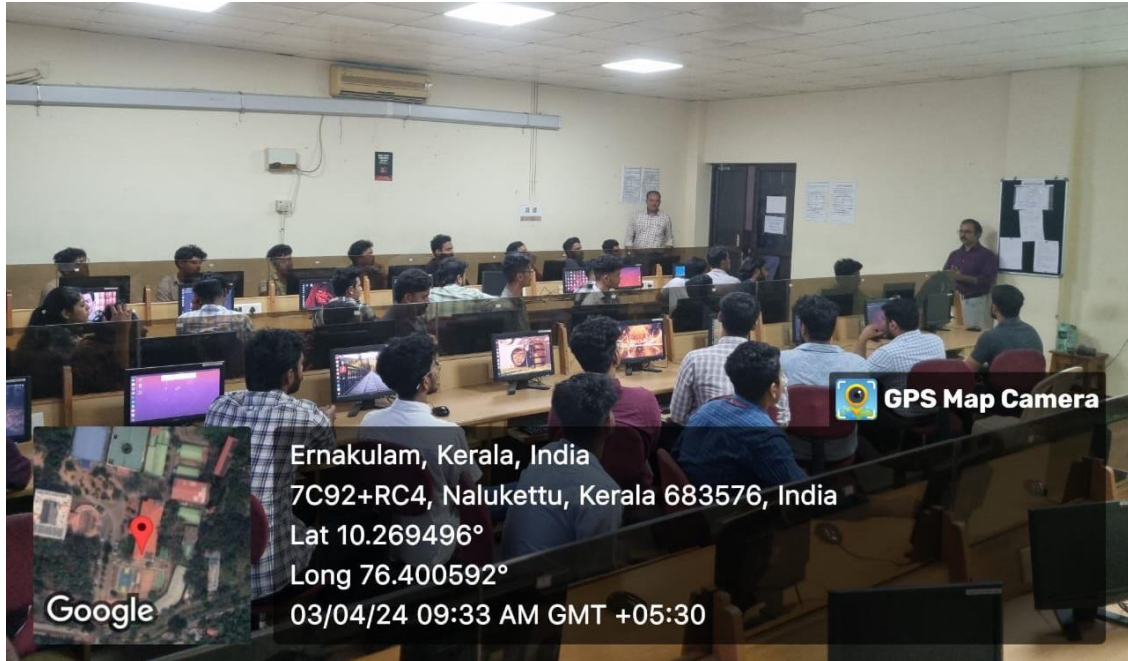



 **GPS Map Camera**



Google

Ernakulam, Kerala, India  
7C92+RC4, Nalukettu, Kerala 683576, India  
Lat 10.269483°  
Long 76.400597°  
03/04/24 09:31 AM GMT +05:30

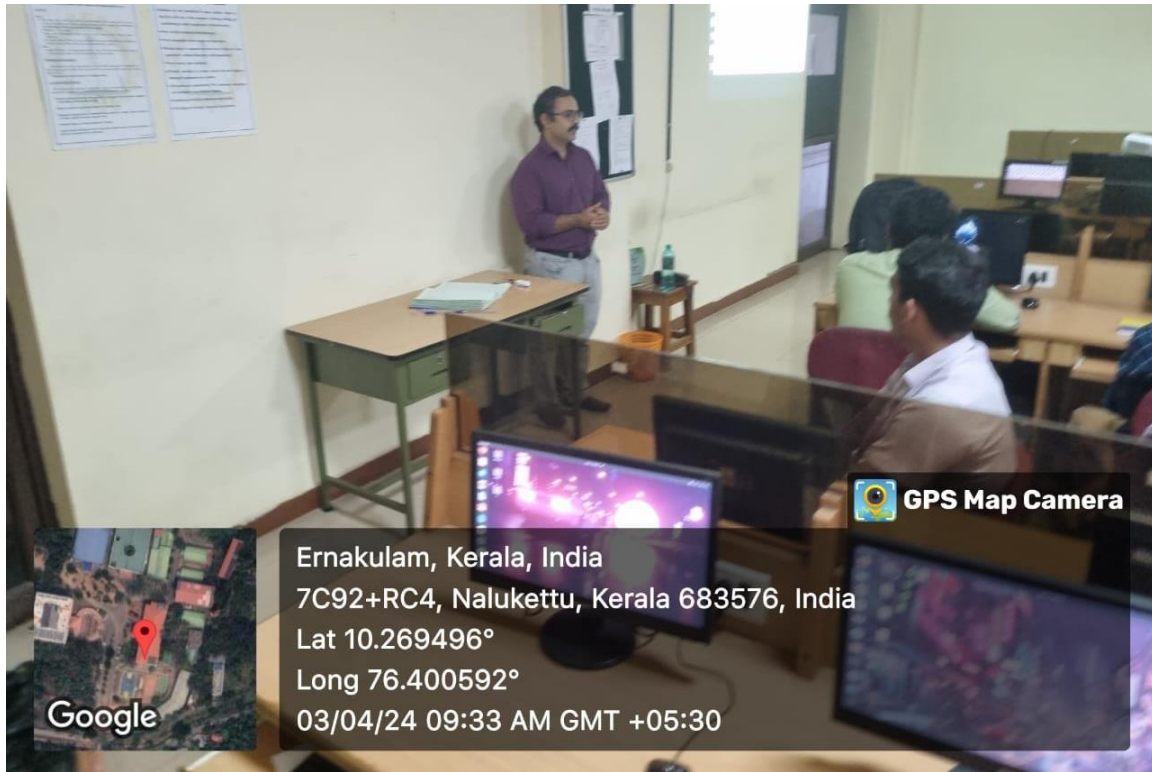


 **GPS Map Camera**



Google

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7C92+RC4, Nalukettu, Kerala 683576, India  
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Long 76.400592°  
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**Prepared by: Dr. Gibin George**

**Position: Associate Professor, Dept. Mechanical Engineering, SSET**

**Date: 03-04-2024**

*Gibin George*  
03-04-2024  
Dr. Gibin George

*Dibyankhandre*  
03/04/24

# SCMS SCHOOL OF ENGINEERING AND TECHNOLOGY

Vidya Nagar, Palissery, Ernakulam

## DEPARTMENT OF MECHINICAL ENGINEERING

Attendance Sheet – Workshop on 03/04/2024

| Sl No. | Name of Student   | Semester          | Branch | Signature |
|--------|-------------------|-------------------|--------|-----------|
| 1      | JOSHUA BAIJU      | S <sub>2</sub> ME | ME-1   |           |
| 2      | ASTLE K J         | S <sub>2</sub>    | ME-I   |           |
| 3      | Jeron Benny       | S <sub>2</sub>    | ME-1   |           |
| 4      | Charuelwh.R.Maron | S <sub>2</sub>    | ME-1   |           |
| 5      | J. Vignesh        | S <sub>2</sub>    | ME-1   |           |
| 6      | Jessick P.Josi    | S <sub>2</sub>    | ME-1   |           |
| 7      | Abhiram Y.D       | S <sub>2</sub>    | ME-1   |           |
| 8      | DARAN SAMOOR      | S <sub>2</sub>    | ME-1   |           |
| 9      | Athul shaju.      | S <sub>2</sub>    | ME-I   |           |
| 10     | Hisham Abdulsalam | S <sub>2</sub>    | AU     |           |
| 11     | Aldain K George   | S <sub>2</sub>    | ME-1   |           |
| 12     | Udit P. Pravin    | S <sub>2</sub>    | ME-2   |           |
| 13     | Jisha Suresh      | S <sub>2</sub>    | ME-2   |           |
| 14     | Kaustha S.A       | S <sub>2</sub>    | ME-2   |           |
| 15     | Muhammed Taha     | S <sub>2</sub>    | ME-2   |           |
| 16     | RAZIN MUHAMMED P  | S <sub>2</sub>    | ME-2   |           |
| 17     | SABARISH S        | S <sub>2</sub>    | ME-2   |           |
| 18     | DONIS Antony      | S <sub>2</sub>    | ME-1   |           |
| 19     | Aarster Benny     | S <sub>2</sub>    | ME-1   |           |
| 20     | JITHISS.C         | S <sub>2</sub>    | AU     |           |
| 21     | Adithyenu         | S <sub>2</sub>    | AU     |           |
| 22     | Arshad Vaidikhan  | S <sub>2</sub>    | ME-1   |           |
| 23     | CRIVIND T.V       | S <sub>2</sub>    | ME-1   |           |
| 24     | Alan Bini         | S <sub>2</sub>    | ME-1   |           |
| 25     | Guro Davis        | S <sub>2</sub>    | ME-1   |           |
| 26     | Nickson M.S       | S <sub>2</sub>    | ME-2   |           |
| 27     | RANUL P SHAIJU    | S <sub>2</sub>    | ME-2   |           |

| Sl No. | Name of Student         | Semester | Class  | Signature          |
|--------|-------------------------|----------|--------|--------------------|
| 28     | Sankaradas M S          | 8        | ME 2   | <i>[Signature]</i> |
| 29     | Beebasri V Baidya       | 8        | ME 2   | <i>[Signature]</i> |
| 30     | Joyal Theobaldo         | 8        | ME 2   | <i>[Signature]</i> |
| 31     | Alan Iannappan          | 8        | ME 1   | <i>[Signature]</i> |
| 32     | Alvin A                 | 8        | ME 1   | <i>[Signature]</i> |
| 33     | Ashley Poly             | 8        | ME - 1 | <i>[Signature]</i> |
| 34     | Indrajith P B           | 8        | ME - 1 | <i>[Signature]</i> |
| 35     | Christo Jari            | 8        | ME - 1 | <i>[Signature]</i> |
| 36     | Asif Siddiqui           | 8        | ME - 1 | <i>[Signature]</i> |
| 37     | Abhijnan Raj            | 8        | ME - 1 | <i>[Signature]</i> |
| 38     | Alvin Matheew           | 8        | ME - 1 | <i>[Signature]</i> |
| 39     | Jawahar Mohd ali        | 8        | ME - 1 | <i>[Signature]</i> |
| 40     | Abhis pauly.            | 8        | "      | <i>[Signature]</i> |
| 41     | Melvin C Goshy          | 8        | AD     | <i>[Signature]</i> |
| 42     | C Sandhyashree Srinivas | 8        | AD     | <i>[Signature]</i> |
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*[Signature]*  
Rakesh T.V

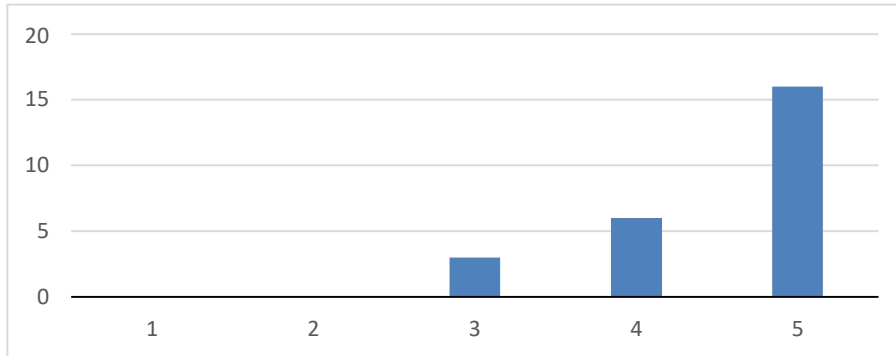




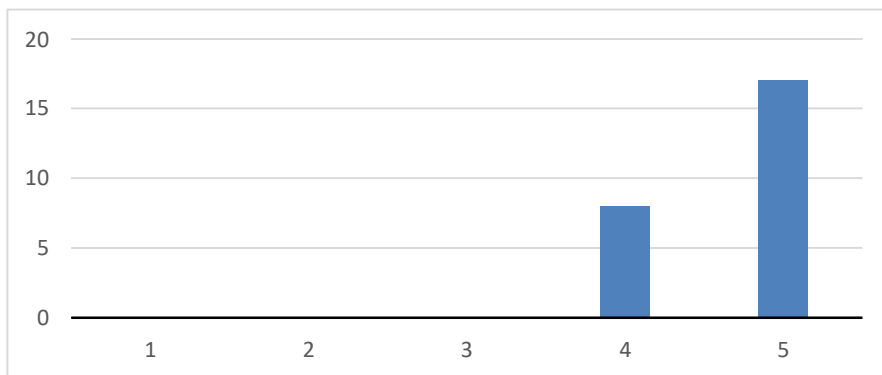
## Feedback

25 participants have responded through google form and marked their feedback.

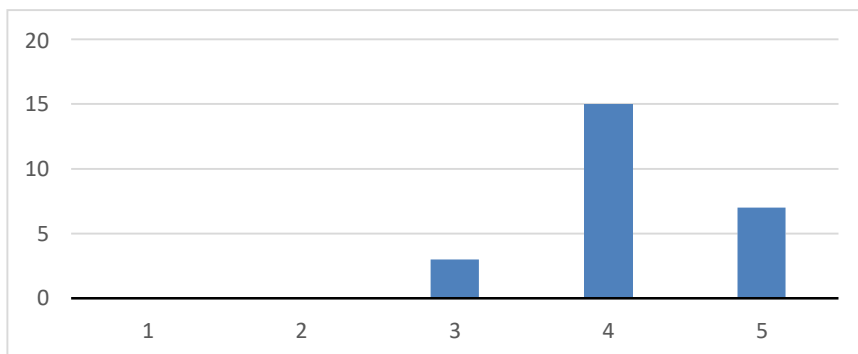
Was the topic relevant to Mechanical Engineering?



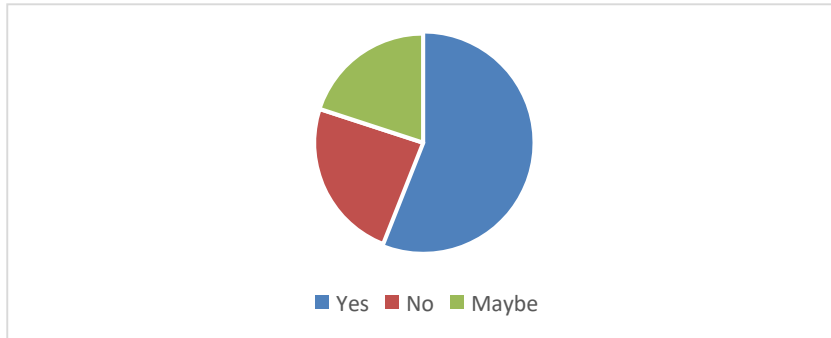
Participation and interaction were encouraged during the session.



How is the content covered in the session relevant to you?



Will you attend similar talks by the speaker in future?



What was the most interesting aspect about this session?

- Coordination
- Good resource person
- Hands on Training on CFD
- Interactive
- Application in Mechanical Field
- Resource Persons, facilities provided
- New topic-openform
- Excellent
- Hands on training
- delivery and interaction
- The coordination
- GOOD SESSION
- short and engaging
- Machine learning algorithm
- Subject coverage
- The hands on session
- Practical session
- Hands on
- Hands on training
- delivery and interaction
- The coordination
- GOOD SESSION
- short and engaging
- The hands on session
- Practical session

**Coordinator**

*George*  
03-04-2024  
Dr. Gibin George

**HOD, ME**

*D. S. S. S.*  
03/04/24