

SAEISS SKIP PROGRAM REPORT

Topic : Computational Fluid Dynamics (CFD) using openFOAM
Date : 9th & 10th September 2017
Speaker : 1. Dr. S. SENTHIL KUMAR, Associate Professor, Veltech Dr. RR & Dr.SR University
2. Dr. KANNAN B. T, Independent Trainer/Consultant
Presided By : Mr. M. Khader Basha, Division chair -Chennai Division, SAEISS
Total Strength: 22 Students
Total colleges : 12 colleges
Venue : SAEINDIA Southern Section, Guindy

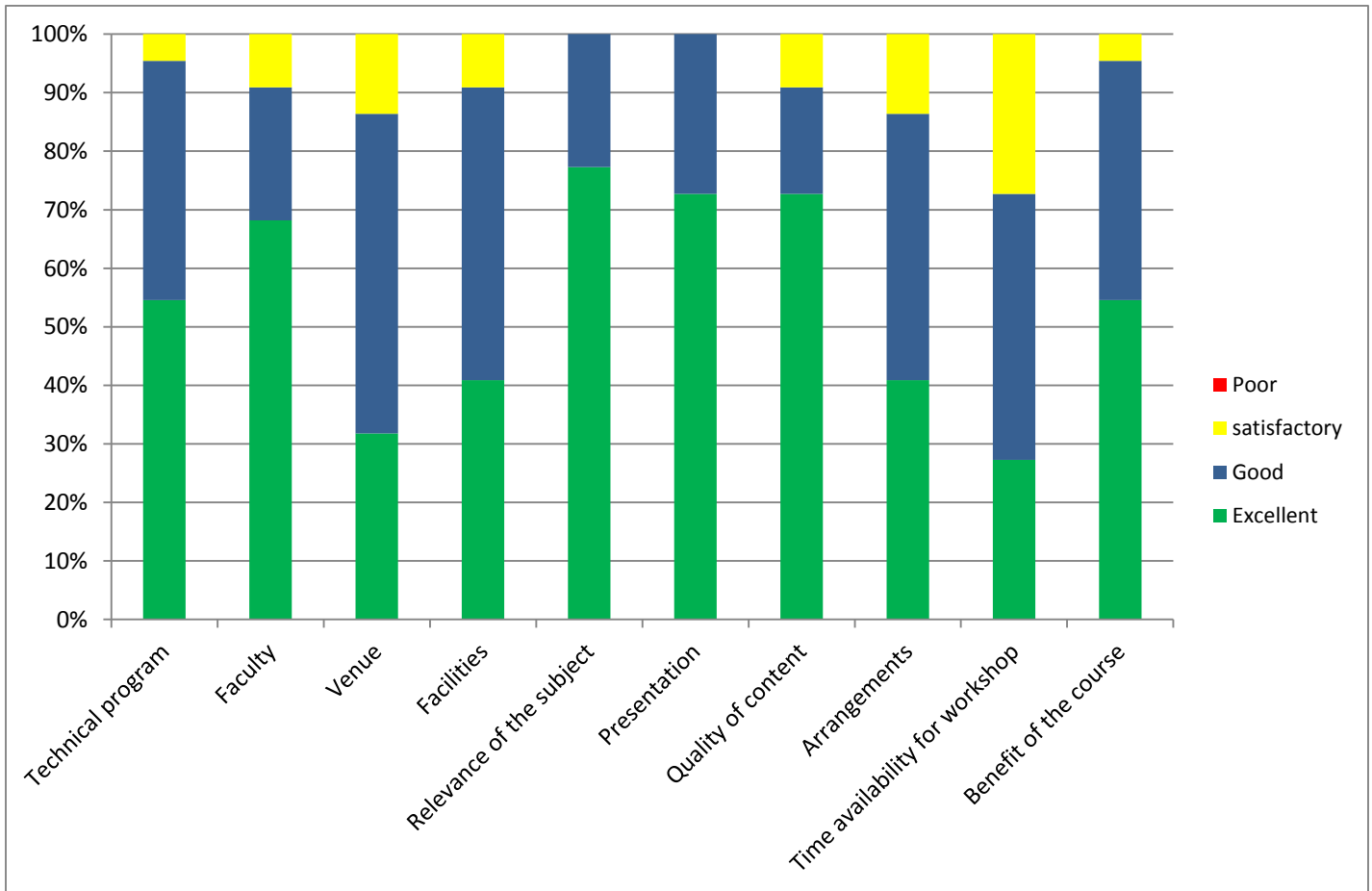
Suggested Topics for Future SKIP Program:

- ❖ Multi Body Dynamics
- ❖ Programming the script files
- ❖ CFD Advance
- ❖ Any Analysis software
- ❖ Aerodynamics , Pro-E
- ❖ Related to Motorsports
- ❖ Dynamic meshing Problems
- ❖ Vehicle Dynamic
- ❖ Engine Designing

Special Suggestion Points:

- ❖ Turbulence can be explained more briefly
- ❖ Workshop date to be extended for 3 days
- ❖ More Efficient Distribution of information
- ❖ Need more practical sessions
- ❖ End is seemed too rushed
- ❖ Increase the time availability

Criteria and Comments about the program:



Report

SKIP program on topic of “**Computational Fluid Dynamics (CFD) using openFOAM**” was organised by SAEINDIA Southern Section on 9th & 10th September 2017 at SAEINDIA Southern Section, Guindy, Chennai.

Speakers: 1. Dr. S. SENTHIL KUMAR, Associate Professor, Veltech Dr. RR & Dr.SR University
2. Dr. B.T. KANNAN, Independent Trainer/Consultant

Computational Fluid Dynamics (CFD) using openFOAM SKIP Program Introduction was done by Dr. S. SENTHIL KUMAR, and Dr. KANNAN B. T to the participants.



Dr. S. SENTHIL KUMAR started Morning session the program with a brief Introduction about Computational Fluid Dynamics. He explained about basic Requirements of CFD with slides. He explained the science of predicting fluid flow, heat transfer, mass transfer, chemical reactions, and related phenomena by solving the mathematical equations which govern these processes using a numerical process.

Dr. KANNAN B. T started the afternoon session with communicating the student how to install CFD using openFOAM in all laptop. He discussed with student with basic tools and requirement are used in CFD. He explained about experimental, Theoretical and Computational about advantage and disadvantage.



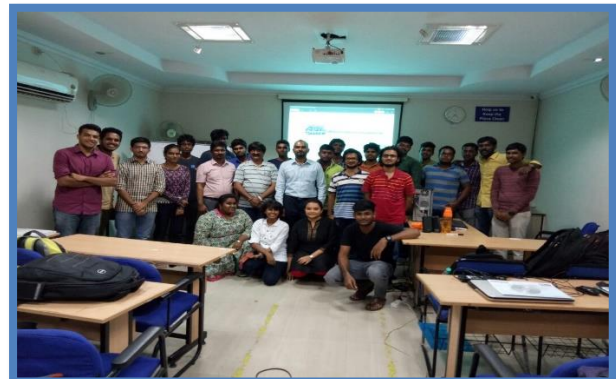
He taught about how to utilities that are available in OpenFOAM which aid in data manipulation before and after the simulations. The pre-processing utility used in the present workshop is block Mesh. He List out boundary conditions are chosen based on the physical Problem being simulated and samples.



During the valedictory session Mr. Khader Basha, Division chair- Chennai Division, SAEISS took over. Then he requested the participants to say about their view regarding the program and their feedback about it. Finally the Students gave the feedback about the program at the end of the Session to Mr. Khader Basha and Dr. S. Senthil Kumar.



Mr. M. Khader Basha, Division chair- Chennai Division ,SAEISS distributed the certificate to the participants and Felicited the speakers with the memento as the token of appreciation for conducting such a Value added program to the student community and making the event a grand success.



SKIP Champions

Dr. S. Karthikayan, MC Member/SAEISS

Mr. B. SenthilKumar, Champion

Prepared By,

V. Murali, PET.