



# SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY

(UGC Approved University)

GURGAON, Delhi-NCR

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**Faculty of Engineering & Technology**

**“Scope and Applications of Computational Fluid Dynamics”**

**Type of event: Expert Talk**

**Date: 19/06/2021**

**Time: 11:00 A.M.-12:00 P.M.**

**Venue: Google Meet, Online mode**

**Organizer:** Department of Mechanical Engineering, FEAT-SGT University.

**Objective :** The main objective of the webinar “Scope and Applications of Computational Fluid Dynamics” is to promote research-oriented projects in this field.

**About the Speaker/Guest:** Dr. Rohan R. Pande, Assistant Professor, Department of Mechanical Engineering, NIT-Surat, Gujrat., having 7+ Years of teaching and research experience. He has a great research profile in this field and a number of research papers in SCI Journals.

**Audience:** 41 students and faculty members from FEAT-SGT University.

1. ADITYA JAIN
2. SAKSHI KADIAN
3. BHAVIK DHAMIJA
4. ALOK KESHRI

5. HARSH KASHYAP
6. SAKSHI MITTAL
7. ANKIT PARASHAR
8. SEENU NIGANIA
9. SANYAM SEHRAWAT
10. AKANSHA
11. MANMEET
12. ABHISHEK
13. ANKIT JOSHI
14. DHEERAJ SHARMA
15. MOHIT KUMAR
16. DEEPANSHU
17. AKSHAY DAHIYA
18. ARYAN DAGAR
19. SRISHTI CHOUDHARY
20. ANKIT CHHIKARA
21. DEEPANSHU
22. VISHAL GULERIA
23. ANSHDEEP SINGH
24. ANKUSH DAHIYA
25. SUNIDHI BADWAL
26. NITIN KUMAR
27. DIPESH
28. VICKY KUMAR
29. ABDUL REHMAN
30. CHIRAG
31. RAHUL SHARAN
32. SANUWAR MALIK
33. ARJUN TOMAR
34. ROHIT
35. YUGAL KAUSHIK
36. LOKESH
37. DEEPANSHU KAUSHIK
38. PRIKSHIT
39. ASHISH PATHAK

40.ROHAN

41.PAWAN



**Brief Report:**

At SGT University, Faculty of Engineering and Technology, we organized a webinar on “Scope and Applications of Computational Fluid Dynamics”. An expert talk was delivered on the importance, scope and applications of Computational Fluid Dynamics in the different sectors and various disciplines by Dr. Rohan R. Pande (Assistant Professor, Department of Mechanical Engineering, NIT-Surat, Gujrat) on 19th June 2021.

In the lecture the following points were discussed:

- History of Computational Fluid Dynamics
- Scope and applications of CFD in different sectors.
- CFD in Automotive Engineering
- CFD in Biomedical Engineering.
- CFD in Civil Structures and Energy Sectors.
- Electronics and Telecommunication cooling system design.
- Heating/Ventilation and Airconditioning system design.
- Applications in IC Engines, process plants and in sports also.
- How CFD works and software requirements.

Besides this, a number of CFD based projects have been discussed that can be useful for the B. Tech as well as M. Tech students in their project and research work. This technique and the project can also be utilized by the faculty members in their research work.

**SGT UNIVERSITY**

Department of  
Mechanical Engineering  
Faculty of Engineering & Technology  
is organising a

**WEBINAR on**  
"Scope and Applications of  
Computational Fluid Dynamics"

Join with Google Meet: <https://meet.google.com/sdt-qzfc-zqs>

19<sup>th</sup> June 2021 11:00 AM to 12:00 PM

**Organizers**

Dr. Amit Kumar  
Associate Professor  
Mechanical Engg. Deptt.

Dr. Ajay  
HoD  
Mechanical Engg. Deptt.

Dr. Manish Mahajan  
DEAN, FEAT  
Faculty of Engg. & Technology

**Expert**

**Dr. Rohan R. Pande**  
Assistant Professor  
Sardar Vallabhbhai National  
Institute of Technology  
Surat

**Learning Outcome:** It was very informative session on Scope and Applications of Computational Fluid Dynamics. After attending this webinar, we understand the application of CFD in various sectors. Its importance and significance as a problem-solving modeling method.

Besides this, we have also learnt that how the CFD actually works with help a few examples. The software requirements and the configuration requirement of computer to operate with ANSYS Software.

**Shortcomings:** (i) Less Audience

**Webinar on**

**"Scope and Applications of Computational Fluid Dynamics"**

**DATE 19/06/2021**

**Attendance Data**

**Timings: 11:00 A.M. - 12:00 P.M.**

Info: armeet@gmail.com | Info: (57) - amit\_kumar | Google | WhatsApp | Meet - sdt-qzfc-zqs

meet.google.com/sdt-qzfc-zqs

Apps | Gmail | YouTube | Maps | Reading list

Dr. Rohan Pande SVNIT is presenting

### Tri/tet vs quad/hex meshes

- ✓ For simple geometries, quad/hex meshes can provide high-quality solutions with fewer cells than a comparable tri/tet mesh
- ✓ For complex geometries, quad/hex meshes show no numerical advantage, and you can save meshing effort by using a tri/tet mesh

11:43 AM | sdt-qzfc-zqs

People

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IN CALL

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Aayush Karwar

Abhay Anand

Amit Kumar

Ankit Tyagi

anurag narang

26 others

You

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11:43 19-06-2021