

Faculty Development Program



Title: Turbulence Modelling in Computational

Fluid Dynamics

Date: 2025-04-11 - 2025-04-11

Time: 16:00 - 17:30

Venue : ROOM NO 316 VIDEO CONFERENCE HALL PERIYAR EVR CENTRAL LIBRARY

Event Outcome

- The participants will get a global insight of applying various turbulence models in predicting the fluctuating components for both internal and external flows.



Resource Person 1 - Details

Name: Dr N Kulasekharan

Designation : Deputy Director CAE, CAE Quality Center **University/ Company :** VinFast Automobiles, Hanoi

Address: Vietnam, 100000.

Resource Person's Profile:

1. Profile of Dr N Kulasekharan

Dr. N. Kulasekharan has completed his doctorate of Philosophy in Engineering from Indian Institute of Technology, Madras under the able guidance of Prof. BVSSS Prasad. He has rich experience in both academic and Industrial sectors. He has been working in the field of CFD in various industries starting from GE Bangalore as Technical Lead, Assistant General Manager in Fiat Chrysler, Technology Leader in Thermal, Energy, Fluids division of Valeo India, Chennai and currently in Vinfast, Vietnam.

The session address the various methods of capturing the turbulent (or) fluctuating quantities in a fluid flow by Direct Numerical Simulation (DNS), Large Eddy Simulation (LES) and Reynolds Averaged Navier - Stokes Equation (RANS). It covers one equation, various two equation models and five equation for capturing the turbulent quantities. The expert lecture will provide a significant insight of adopting a particular turbulence model for predicting the external and internal flow more precisely.

Not Applicable

Coordinator: Teaching Learning Centre of Excellance, VIT, Vellore