AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY
OMR, PAIYANOOR, CHENNAI - 603104

VINAYAKA MISSION'S RESEARCH FOUNDATION
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DEPARTMENT OF MECHANICAL ENGINEERING

THRUST AREA RESEARCH GROUP :CAD / CAM

&

ENGINEERING DESIGN AND COLLEGIATE CLUB (EDCC)

WORKSHOP ON "COMPUTATIONAL FLUID DYNAMICS (CFD) USING FLUENT" – 31.07.19

Department of Mechanical Engineering in association with Engineering Design Collegiate Club (EDCC) - Thrust Area Research Group - CAD / CAM organised a workshop on **"COMPUTATIONAL FLUID DYNAMICS"** on 31.07.2019. Around 66 Final year students from Department of Mechanical Engineering had attended the programme. Dr. M. Prabhahar, Associate Professor / Mechanical Engineering welcomed the expert trainers **Mr. Monishwaran, Senior Trainer, CAD Centre**. The workshop was very helpful in understanding the basics of CFD. Hands on Training was provided to the students in solving few problems.

CFD FLUENT – FDP CONTENT

Introduction to CFD – Fluent, Overview, basic steps, domain, Mouse Functionality, Tri/Tet v/s Quad/Hex, Compute solution, Examine Results.

Solver Basics - Solver Execution, Solver Inputs, Reading Mesh, Scaling Mesh & changing units, Defining Fluid Properties using Fluid Database, Material Assignment.

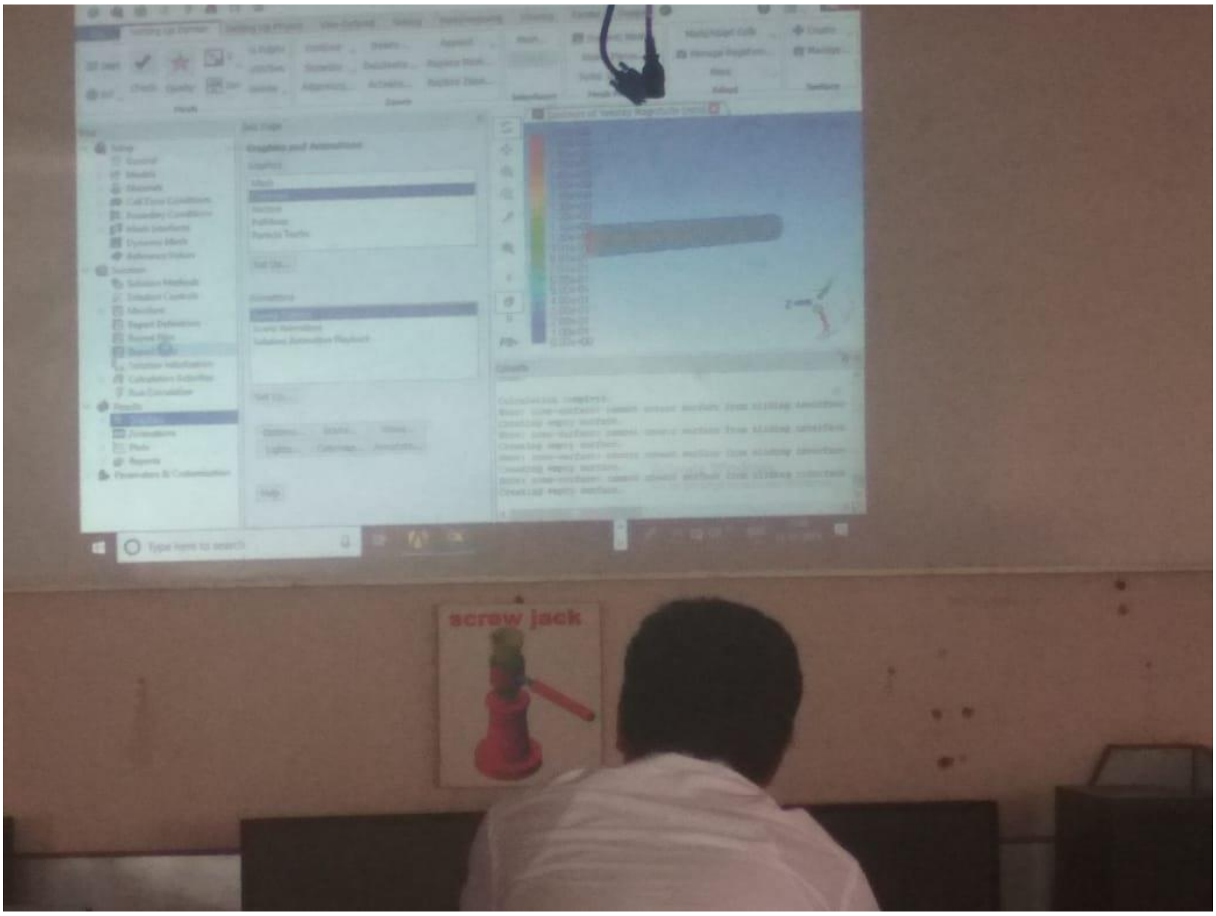
Boundary conditions - Locating Boundaries, Boundary Condition Types, Wall Boundaries, Symmetric & Asymmetric Boundaries, Cell Zone conditions, Periodic Boundaries, Interior Boundaries.

Solver settings - Changing Solver, Changing Pressure-Velocity Couplings, Discretization Schemes, Solution Control Parameters, Monitoring stability, Accelerating convergence.

ANSYS FLUENT - Post Processing, Introduction, General Settings, Adding Lights, Creating Iso-surfaces, Creating Result Contours, Displaying Velocity Vectors, Creating Animation. Solutions using solver.

Mr. P. Kumaran, Assistant Professor (Gr-II), proposed the vote of thanks. Mr.V. Aravindan, Assistant Professor / Mech. Co-ordinated the event.

EVENT PHOTOS: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