

Schedule of the Talks by Research Scholars on the “Research Scholars Day 2017”
Department of Aerospace Engineering, IIT Kanpur

Session-01: Aerodynamics and Propulsion

Venue: PBCEC Classroom-1

April 15, Time: 10 am to 12:30 pm

Sl. No.	Time Slot	Presenter	Title of the Talk	Discipline
1.	10am –10:12am	Abhishek Dubey	Investigation of reverse flow slinger combustor	Propulsion
2.	10:12am –10:24am	Pushpender Sharma	Error Evolution of Two-Dimensional Simulation of Taylor-Green Vortex Problem	Aerodynamics
3.	10:24am – 10:36am	Srihari Dinesh Kumar	Hydrodynamic instabilities in liquid fuelled gas turbine combustor	Propulsion
4.	10:36am – 10:48am	Mohd Furquan	Fluid-Structure Interaction during Inflation of Balloons	Aerodynamics
5.	10:48am – 11:00am	Tribhuvan Prasad Singh	GO ₂ / GCH ₄ Combustion Studies in High Pressure Rocket Combustors	Propulsion
6.	11:00am – 11:12am	Puja Sunil	Experimental Studies on Rotationally Oscillating Cylinder with an Attached Filament	Aerodynamics
7.	11:12am – 11:24am	Imran Rasheed	Spray characterization of twin-fluid atomizer with internal impactor	Propulsion
8.	11:24am – 11:36am	Joydeep Bhowmik	Aerodynamics of a flapping wing with fixed bend spar	Aerodynamics
9.	11:36am – 11:48am	Mayank Verma	Flow Behaviour in a Parabolic Contour Nozzle	Propulsion
10.	11:48am – 12:00pm	Ragavendiran R	Experimental studies on path and shape of rising bubbles	Aerodynamics
11.	12:00pm – 12:12pm	Gaurav Chopra	Numerical simulations of flow past a circular cylinder using the Sigma subgrid-scale model	Aerodynamics
12.	12:12pm – 12:24pm	Sritay Mistry	Coaxially Rotating Carbon Nanotubes: A Nanoscale Approach to Pumping Water	Aerodynamics

Session-01: Flight Mechanics and Structures

Venue: PBCEC Classroom-2

April 15, Time: 10 am to 12:30 pm

Sl. No.	Time Slot	Presenter	Title of the Talk	Discipline
1.	10am –10:12am	Vigneshwaran K	Micromechanical coupled Elasto-Plastic and Damage behaviour for ductile materials	Structures
2.	10:12am –10:24am	Ajit Kumar	Aerodynamic Parameter Estimation using Neuro-Fuzzy model based Method	Flight Mechanics
3.	10:24am – 10:36am	David Kumar	Structural Dynamic Analysis of Membranes and Flapping Wings	Structures
4.	10:36am – 10:48am	Kuldeep Kumar Dhiman	Quadrotor Carrying a Cable Suspended load with Controlled Swing	Flight Mechanics
5.	10:48am – 11:00am	Abdelhak Khechai	Strength Degradation and Analysis of E-glass Laminates with Notch using Digital Image Correlation	Structures
6.	11:00am – 11:12am	Vanshdeep Mahajan	H-Infinity Controller Design for Helicopter	Flight Mechanics
7.	11:12am – 11:24am	Sakthivel. T	Estimation of Handling Quality Parameters of a Helicopter	Structures
8.	11:24am – 11:36am	Ambuj Srivastava	Estimation of Lift and Drag Characteristics of Light Transport Aircraft in the presence of Ground effect during Landing	Flight Mechanics
9.	11:36am – 11:48am	Kathiresan K	Effect of Filler Shape, Volume Fraction and Post Curing Temperature on the Fracture Behavior of Glass-filled Epoxy Particulate Composites	Structures
10.	11:48am – 12:00pm	Vishvendra Rustagi	Gyroscopic Stabilization of Flying Wing Aircrafts	Flight Mechanics
11.	12:00pm – 12:12pm	Sarthak S Singh	Effect of Dynamic Compression Behaviour on the Shape and Size of Particulate Reinforced Epoxy Composites	Structures
12.	12:12pm – 12:24pm	Vijay Shankar Dwivedi	Medium Altitude High Endurance Solar Powered UAV	Flight Mechanics

Session-02: Aerodynamics and Propulsion

Venue: PBCEC Classroom-1

April 15, Time: 02:35 pm to 04:55 pm

Sl. No.	Time Slot	Presenter	Title of the Talk	Discipline
1.	02:35pm – 02:47pm	Kuntalika Das	Observations in Taylor-Couette flow with a rotating inner cylinder	Aerodynamics
2.	02:47pm – 02:59pm	Shreshth Gupta	Investigation of Reverse Cross Flow Colorless Distributed Combustor	Propulsion
3.	02:59pm – 03:11pm	Malaikannan G	Development of Hybrid DSMC-CL Numerical Algorithm for High Speed Rarefied Flows	Aerodynamics
4.	03:11pm – 03:23pm	Rajat Arora	Three Axis Nozzle Thrust Measurement Facility	Propulsion
5.	03:23pm – 03:35pm	S Jawahar Sivabharathy	Wake Transitions and Laminar Separation Bubble in the Flow past an Eppler 61 Airfoil	Aerodynamics
6.	03:35pm – 03:47pm	Tushar Sikroria	Liquid Jet Breakup in Swirling Cross flow of Air	Propulsion
7.	03:47pm – 03:59pm	Navneet Kumar	Vortex Breakdown in a Closed Cylinder with Rotating Bottom Disk	Aerodynamics
8.	03:59pm – 04:11pm	T Chandra Sekar	Challenges in Estimating the Kinematic Parameters of a Rigid Body using Accelerometer(s)	Propulsion
9.	04:11pm – 04:23pm	Dhiraj Kumar	Self-Induced Oscillation of Rectangular Cylinder Hinged at its Leading Edge	Aerodynamics
10.	04:23pm – 04:35pm	M. C. Keerthi	Radial Variation of Aerodynamic Damping of Compressor Blades at Large Mean Incidence	Propulsion
11.	04:35pm – 04:47pm	Vivek Kumar	Experimental Study of the Complex Vortical Flow Structures over a Flying Wing Configuration	Aerodynamics

Session-02: All Disciplines
Venue: PBCEC Classroom-2
April 15, Time: 02:35 pm to 04:55 pm

Sl. No.	Time Slot	Presenter	Title of the Talk	Discipline
1.	02:35pm – 02:47pm	Lingesh V	Influence of Surface Morphology and Strain Rate on Aluminium/Epoxy Interfacial Strength in Tension	Structures
2.	02:47pm – 02:59pm	Ram D Gadekar	Design and Development of an Autonomous, Single Power plant Variable Pitch Quadrotor	Flight Mechanics
3.	02:59pm – 03:11pm	Soban Babu B	Micro-fibre based Strengthening of Interface in Laminated Composites	Structures
4.	03:11pm – 03:23pm	Team Pushpak	Presentation on SAE Aero Design East: Micro Class by Team Pushpak	Flight Mechanics
5.	03:23pm – 03:35pm	Gaurav Seth	A Foldable Wing Design of an Improved Flapping Wing Aerial Vehicle	Structures
6.	03:35pm – 03:47pm	Arun Kumar C	Modeling of Gas-Granular Flow using DSMC Method	Aerodynamics
7.	03:47pm – 03:59pm	Manish Chaudhary	Vortex-streets in Flow Past Different Shaped Objects in an Inclined Soap-film Tunnel	Aerodynamics
8.	03:59pm – 04:11pm	Nikhil Nayak	Criteria for selection of solidity in design of contra rotating fan stage.	Propulsion
9.	04:11pm – 04:23pm	Deval Purohit	Computational Study of Aerospike Nozzles using the DSMC Framework	Aerodynamics
10.	04:23pm – 04:35pm	Pawan Shetty	Flutter of Plate(s)	Aerodynamics
11.	04:35pm – 04:47pm	Kishore Kumar Kammara	Study on Effect of Momentum and Energy Accommodation Coefficient on Flow Properties	Aerodynamics