

Technical Program Sessions - MRAE-2016

DAY-1, 22-09-2016

Registration and Inaugural Function 9.30a.m-12.30p.m (Detailed Separate)

Time- 13.30-14.00; Venue- F-3 Seminar Hall

Invited Talk-1: Topic- **“LEAD AND EXECUTE-THE ART OF MANAGING LARGE SCALE PROJECTS”** by **Shri YOGESH KUMAR, Ex-Director, LCA, HAL. Specialist Designer & Sr. Consultant CSIR- National Aerospace Laboratories, Bangalore**

Time- 14.00-14.30; Venue- F-3 Seminar Hall

Invited Talk-2: Topic- **“Modern Missile Defence”** by **Dr. Ajay Mishra, Head of the Department, Aerospace Engineering, DIAT, PUNE**

DAY-1, Session-1, 22/09/2016 Time- 14.30-16.30

Venue: F-3 Seminar Hall

Track -1- Aerospace Propulsion

Chairman – Mr. Yogesh Kumar, Ex-Director, LCA, HAL.

Co-Chairman - Prof. A. K. Verma, Professor, Amity Institute of Space Science and Technology, AUUP

Paper Id	Paper Title	Author
T 101	Experimental Investigation on Parameters of Single Droplet Combustion of Alcoholic Fuel and its Mixture	G.K. Prashant and Mayurika Goel
T 102	Thermal Decomposition and Stabilization Studies of AND in Presence of Catalysts	Pratim Kumar, Rajiv Kumar, and Puran Chandra Joshi
T 103	Experimental Investigation of Flame speed of Fuel Air Mixture for Varying Air/Fuel Ratio	Ankur Vats
T 104	Jet Engine design validation through simulation	Vamsikrishna Undaavalli , Anmol Kumar, Yash Gupta , Ramanan S Md.Saquib Reza
T 105	Eco friendly propellant for Hybrid Rocket Motor	Aaditya Shrivastava
T 106	Design and Feasibility Analysis of Closed loop Cooling System of Turbine Blade using Helium as Coolant	Arun baby , B Ramashankar, Derin davis b, Jebin kumar k j
T 107	Fluidic Thrust vectoring of engine nozzle	Rakesh R.B, and Sijo Varghese
T 108	2D-PIV Measurements in a Novel Swirl Burner Under Isothermal Conditions	Mourya Voleti, Naga Venkata Sai Aditya Burle, Raghu Jarpala, and Rajesh Sadanandan

DAY-1, Session-2, 22/09/2016 Time- 14.30-17.30

Venue: F-3 MDP Room

Track -2- Space Research Avionics & Instrumentation

Chairman - Dr. Ajay Mishra, Head of the Department, Aerospace Engineering, DIAT, PUNE

Co-Chairman - Prof. M. S. Prasad, Director, Amity Institute of Space Science and Technology, AUUP

Paper Id	Paper Title	Author
T 201	Integrated Guidance System of a Commercial Launch Vehicle with Application of GPS Technologies.	Nickolay Zosimovych
T 202	Application of Sub-Optimal MPSC guidance for Trajectory Optimization of various Aerospace Vehicles with Terminal angle constraint.	Akshay Pal, Abhishek Pandey, Abhishek Pancholy, P. N. Dwivedi
T 203	Design of 3D Guidance Law for Tactical Missiles.	Sikander Kumar Pandit, Bhavnesh Panchal, SE Talole
T 204	Magnetic field distribution over the planet Jupiter and to examine the Jovian convective dynamo.	G. Hari Vignes, R. Karthikeyan, M. Nirmal Kumar. Mohammed Zain Razvi, G. Niruba

		Blesse,R. Shivani, K. Srimathi,L. Yoganantham
T 205	MATLAB Based Graphical User Interface Development of RADAR with the Implementation of Noise under Various Bands.	Gouresh Sood, Hitesh Arora, Aashish Choudhary, Ayush Shah, Sudhir Kumar Chaturvedi , Shagun Bishnoi and Anirudh Katyal
T 206	Control of UAV Using GSM Technology.	Subhrasmita,Krishna Mehta bhupesh, vivek kumar, MS Prasad
T 207	Orbital Magnetic Interplanetary Launch System (OMILS).	Samuel Luis, Mukit Azad Khan
T 208	Design and Analysis of Two Axis Seeker Stabilizer System	Dommeti Rajesh, A V Praveen and Prof.Mallikarjunarao Pasumarthi
T 209	UAV advancement: From Increasing Endurance, Route Replanning and Collision Avoidance, to Safe landing in Critical Conditions	Pandya Garvit Kalpesh, Kevin Nesamani

DAY-2, 23-09-2016

Time- 9.30-10.00; Venue- F-3 Seminar Hall

Invited Talk-3: Topic- “Unmanned parachute Arial vehicle development” by Dr Om Prakash, Head, Department of Aerospace Engineering, UPES, Dehradun.

Time- 10.00-10.30; Venue- F-3 Seminar Hall

Invited Talk-4: Topic- “Military Airworthiness and Certification: Global Scenario” by Mr. Kanchan Biswas, Consultant CSIR-NAL, Bangalore; Adjunct Faculty, Jain University, Bangalore; Sc G (Retd.) CEMILAC, DRDO, Bangalore.

DAY-2, Session-1, 23/09/2016 Time- 10.45-13.30

Venue : F-3 Seminar Hall

Track -3- Aerodynamics, Wind Tunnel and CFD

Chairman – Dr Om Prakash, Head, Department of Aerospace Engineering, UPES, Dehradun.

Co-Chairman - Dr. Sanjay Singh, Director, Amity Institute of Aerospace Engineering, AUUP

Paper Id	Paper Title	Author
T 301	High Angle of Attack Analysis of Cascade Fin in Subsonic Flow	Manish Tripathi, Mahesh M. S, and Ajay Misra
T 302	Simulating Flapping pair to Study Effective Aerodynamic Forces	Vishnu Kumar G C, Dilip A Shah
T 303	CFD investigation of a generic CD nozzle in a Supersonic free jets	Sathish kumar S, Muthuraj C
T 304	Numerical Study of Influence of Gap-to-Chord Ratio on Cascade Fins	Parul Aghi, Ajay Misra
T 305	Study and Design of Golf Ball like Dimpled Aircraft 2-D Wing and Effects on Aerodynamic Efficiency	Awadh Kapoor*, JayKrishnan R.
T 306	Computational Investigation of the Effect of Various Spike Geometries Mounted on Supersonic Vehicles	Anjali chopra, Aishwarya Kushari, U. Vamsikrishna and Jayanta Sinha
T 307	Effect of Leading Edge Tubercle on Aerodynamic Performance of NACA 0021 Airfoil	Alok Mishra, Sarvanan Kumar Lakshmanan and Ashok De
T 308	Optimized Fractional Order Longitudinal Pitch Control : Evolutionary Algorithm	Sheetal Kumar
T 309	Investigations on effect of long slender protrusions on tail control effectiveness of a flight vehicle	Siddhant Dipak Nirmale, Parul, S.Rama

T 3010	Conceptual design of a Personal Air Vehicle and Theoretical Estimation of Aerodynamic Coefficients	R. Naveen, B. Abinaya, D. Abinaya and K. Kalaiyarasi
T 3011	Propeller Experimental Investigation of the performance of a propeller	Sumit Krishnan, A. K. Jouhari and Vinod Saxena
DAY-2, Session-2, 23/09/2016 Time- 10.45-13.30		
Venue : F-3 MDP Room		
Track -4- Structural Analysis and FEM		
Chairman – Mr. Kanchan Biswas, Consultant CSIR-NAL, Bangalore		
Co-Chairman - Prof. R K. Chauhan, Professor, Amity Institute of Aerospace Engineering, AUUP		
Paper Id	Paper Title	Author
T 401	Evaluation of the Structural Integrity of Full-Scale Wing of Aerial vehicle.	D.Venkata Sivakumar, M Varadanam, K.Kishore Kumar & P.S.R. Anjaneyulu
T 402	Finite Element Analysis of Hyperbolic Paraboloid Composite shells for Static Analysis under Uniform Pressure.	Anil Garhwal, Yogesh Kaushik and Divya
T 403	Finite element analysis of rectangular laminated composite plate with central circular hole under transverse loading.	SumitRathi, Yogesh Kaushik, SabitaMadhvi Singh
T 404	Non Destructive Evaluation and Localization of Crack in thin Plates using Lamb Waves Excitation.	Mayank Nirbhay, Anurag Dixit and R. K. Misra
T 405	Effect of Aspect Ratio Change on Nonlinear Resonance of Rectangular Aircraft Panel.	Nisar Ali and Mahesh M. S,
T 406	Experimental validation of the structural integrity of a CFRP aircraft fuselage.	R Gopikrishna, R S Rawat, R Girish, K Kishore Kumar, PSR Anjaneyulu
T 407	Effect of Natural Frequency of Slender Structure on VIV at Higher Reynolds Numbers.	Rahul Jadhav, P.R. Maiti and Sabita Madhvi Singh
T 408	Evaluation of Vibration of a Crankshaft and a Drive Shaft using FEM.	Apoorv Rathi, Joy Banerjee, Anurag Dixit, R. K. Misra and H. S. Mali
T 409	MAGNETIC ANALYSIS OF AN ELECTROMAGNETIC BAND BRAKE (EMBB)	Anupam Tiwari, Jayanta Sinha, Vishakha Baghel, Gouresh Sood, and Aayushi Agrawal
T 410	Static and Dynamic Characteristics of Epicycle Lug Wrench.	Sahil Grover, Rajan Goyal, Atul Sharma
T 411	Experimental Evaluation of Circular Cylindrical Shells with Cut-outs Under the Combined Effect of Structural and Thermal Loads	S. Narendar, R. Gopikrishna, T. Srinivasa Kumar, M. Varadanam
Time- 14.30-15.00; Venue- F-3 Seminar Hall		
Invited Talk-5: Topic- “How Safety is managed in Civil Aviation” by Mr. Arun Chopra, Retd. Joint Director General of Civil Aviation		
Time- 15.00-15.30; Venue- F-3 Seminar Hall		
Invited Talk-6: Topic- “Latest Trends in Fuzzy Computing Algorithms for Application in Non Linear Control Systems in Aerospace Engineering” by Wg. Commander Dr. Anil Kumar, Director, Amity School of Engineering and Technology, AUUP, Lucknow Campus		
DAY-2, Session-3, 23/09/2016 Time- 15.30-17.30		

Venue : F-3 Seminar Hall**Track -5- Materials, Manufacturing & Air Safety****Chairman** – Mr. Arun Chopra, Ex-Joint DG, DGCA**Co-Chairman** - Dr. Ravi Prakash, Director, Amity Institute of Technology, AUUP

Paper Id	Paper Title	Author
T 501	Vehicle Weight Curtailment by the Introduction of Composite Materials and their Implications.	Medhavi Sinha, R. K. Tyagi, and P. K. Bajpai
T 502	Optimization of Surface Grinding Process Parameters through RSM.	Harshita Khangarot, Shubham Sharma, Umesh Kumar Vates, Gyanendra Kumar Singh, Vivek Kumar
T 503	Magnetic Abrasive Finishing for Flat surface.	Rajat Sharma, Gyanendra Kumar Singh, Umesh Kumar Vates, Vivek Kumar
T 504	Fabrication and Mechanical Characterization of Sisal Fiber Reinforced Polymer Composites.	Dayananda Pai, Rajat Sharma, Aman Chavan and Ayush Kumar
T 505	Experimental Study of Disintegration Mechanism of Aero structure in Supersonic Flow.	Raghunathan abhilash, mahesh m sucheendran
T 506	Evaluating Significance of Green Manufacturing Enablers using MOORA Method for Indian Manufacturing Sector.	Varinder Kumar Mittal, Rahul, Sindhvani, Vivek Kalsariya, Faizan Salroo
T 507	Military Airworthiness & Certification: Global Scenario.	Kanchan Biswas
T 508	Improving Assembly Line Efficiency and Output Using Assembly Line Balancing and Reducing Non-Value Added Activities.	Prateek Sharma
T 509	Mechanical Behavior of Laminated Composite Curved Tubes.	Hamidreza Yazdini Sarvestani, Mehdi Hojati

DAY-2, Session-4, 23/09/2016 Time- 15.30-16.30

Venue : F-3 MDP Room**Track -6- Aircraft Environmental and Control System and Stability****Chairman** – Wing Commander Dr. Arun Kumar, Director, ASET, Amity University, Lucknow Campus**Co-Chairman** – Prof. Vinod Saxena, Professor, ASET, AUUP, Lucknow Campus

Paper Id	Paper Title	Author
T 601	Cruise Missile Mission planning using Genetic Algorithm	G Naresh Kumar, Shweta Dadarya, Akshay Verandani, AK Sarkar, and SE Talole
T 602	Design of Power Efficient SRAM and FPGA	Tarun Agrawal
T 603	Routing Protocols to Improve Security and Performance in Wireless Network- A Roadmap.	Kantveer, Navdeep Singh
T 604	Fault Tolerance Technique to Improve Routing in Magnet	Priya Kapoor, Dr. Dinesh Grover