

Date: 16 November 2018

Time	Event	Venue
0830 – 0900 Hrs	Registration	BITS Auditorium
0900 – 1010 Hrs	Inaugural Function	AUDITORIUM
1010 – 1055 Hrs	Plenary Talk -I Topic: Launch Vehicle Mechanisms Shri. S. Somanath, Director VSSC, Trivandrum	AUDITORIUM
1110 – 1140 Hrs	Tea Break	AUDITORIUM

Session 1: Hall A (F 206) Topic: Satellite, Robotics, Space docking and Rover mechanisms Session Chair: <i>Dr. C.D. Sridhara, Ex. Deputy Director, URSC, ISRO</i> Session Coordinator: <i>Dr.K.VeeraBrahmam, Sc-E/ Y.Raj Alexander, Sc-D, ASL</i>		Session 1: Hall B (F 207) Topic: Simulation, Analysis and Modeling of Aerospace mechanisms Session Chair: <i>Prof. Prasanna Gandhi, IIT, Mumbai.</i> Session Coordinator: <i>Shri. A.K. Sharma,Sc-E /N. Madhavan, Sc-E,ASL</i>	
11-45- 12-15 Hrs	Invited talk-1 (I.T-1) Topic: Mechanisms for Moon Missions Dr. C.D. Sridhara, Ex. Deputy Director, URSC, ISRO	Invited talk-2 (I.T-2) Topic: Compliance Mechanisms Prof. Prasanna Gandhi, IIT Mumbai.	
1215 - 1225 Hrs	1.1. Solar Array Drive Mechanism: Design, Build and Environmental Testing <i>Dr. Shashank Khurana, BITS-DUBAI</i>	2.1 Contact Force Based Model to Simulate Impact Between Missile and Interceptor Projectiles <i>Mahesh Kotnis, IITB Mumbai</i>	
1225 - 1235 Hrs.	1.2. Configuration Studies On Parabolic Deployable Antenna Structure Using Bennett Linkages <i>Khagesh Bhardwaj, U.R.Rao Satellite Center/IIST</i>	2.2 Design & Simulation of Mechanism for Automated Material Handling of Armature Store <i>Tamanna Pattharwala, ARDE/DRDO</i>	
1235 - 1245 Hrs.	1.3. Deployment Dynamics of an Unfurlable Antenna(UFA) <i>Anshumaan Sharma, U.R.Rao Satellite Center</i>	2.3 Design and Simulation of Geometrically Articulated Suspension System for Autonomous Ground Vehicle System <i>Keyur Kurulkar, MIT Pune/DRDO</i>	
1245 - 1255 Hrs	1.4. Thermal Distortion of Stowed UFA in Transfer Orbit <i>K Balaji, U.R.Rao Satellite Center</i>	2.4 Design of Automated Test Systems for Mechanisms Performance Evaluation <i>Phani Dinakar BS, URSC-ISRO</i>	
LUNCH BREAK : 13-00 - 14-00 Hrs			

16 - Nov – 2018 (After Noon Session)

Session 2: Hall A (F 206) Topic: Satellite, robotics, Space docking and Rover mechanisms Session Chair: Shri. R.Swaminathan,DS, ADA, Bangalore Session Coordinator: Dr.K.VeeraBrahmam,Sc-E/ Y.Raj Alexander, Sc-D, ASL		Session 2: Hall B (F 207) Topic: Simulation, Analysis and Modeling of Aerospace mechanisms Session Chair: Dr.S.Karunanidhi, Director, CSL, RCI Session Coordinator: Shri. A.K. Sharma,Sc-E/ N. Madhavan, Sc-E, ASL	
1400 -1430 Hrs	Invited talk-3 (I.T-3) Topic: Combat Aircraft Mechanisms Shri. R.Swaminathan,DS, ADA, Bangalore	Invited talk-4 (I.T-4) Topic: Control Actuation Mechanisms Dr.S. Karunanidhi, Director, CSL, RCI	
1430-1440 Hrs	1.5. Development of Non Explosive, Low Shock & Reusable Actuator(NLR) Solar Array Hold-Down Release Mechanism(HDRM) For Spacecraft Application <i>Sajeesh K N, U.R.Rao Satellite Center</i>	2.5. Dynamic Studies for On Orbit Space Craft Docking Experiment <i>Vijay Shankar Raj, URSC</i>	
1440-1450 Hrs	1.6. Hold Down and Release Mechanism for Deployable Lander Leg. <i>Sakthivel M, U.R.Rao Satellite Center</i>	2.6. Dynamics of Separation of Liquid Stage with Twin Engine Configuration from A Longer Pull-Out of Upper Stage <i>Yuvaraja R, VSSC-ISRO</i>	
1450-1500 Hrs	1.7. Hold Down and Release Mechanism for Large Solar Array Deployment Mechanism <i>Shalini, U.R.Rao Satellite Center</i>	2.7. Dynamics of Separation of Multiple Satellites Placed Inside Dual Launch Adaptors <i>Sivasakthi R, VSSC-ISRO</i>	
1505- 1515 Hrs	3.1. Reliability Norms for Research & Development (R&D) Activity <i>Manmeet Singh, HQ-DRDO</i>	2.8. Kinematic Analysis of Store Separation Dynamics in Sub-Munition Type Warheads of Large Calibre Artillery Rocket <i>Gaurav N Argade, ARDE-DRDO</i>	
1515-1525 Hrs	3.2. Reliability Analysis of Capture Mechanism for Space Docking Experiment(SPANDEX) <i>Sachin Barthwal, URSC</i>	2.9. Predicting The Trajectory of External Ejected Store from Fighter Aircraft by Numerical Simulation <i>Venkata Mahesh Punugu, R&DE</i>	
1525- 1535 Hrs	3.3. Fault Detection Study of Inflatable Structure: An FMEA Approach <i>Arvind Kaushik, ADRDE</i>	2.10. Mathematical Modeling and Simulation of Store Separation of a Military Aircraft <i>Akash Jadhav, KJEIT COE-PUNE</i>	

TEA BREAK: 15-40 to 16-00 Hrs

16 – Nov – 2018 (Evening Session)

Session 3: Hall A (F 206) Topic: Warhead, Armaments, fuses and safe arm Chair: Shri. Varaprasad Rao, Ex. DRDO, ASL Session Coordinator: Dr.K.VeeraBrahmam,Sc-E/ Y.Raj Alexander, Sc-D, ASL		Session 3: Hall B (F 207) Topic: Mechanisms in Launch vehicles and missiles Chair: Dr.Debasish Chakraborty, O.S, DRDL Session Coordinator: Shri. A.K. Sharma,Sc-E / N. Madhavan, Sc-E, ASL
1605-1615 Hrs	4.1. Development of Spin Based Safety Interlock for a Miniaturized Mechanical Fuze for Anti-Aircraft Ammunition <i>Nr Gawali, Arde/Drdo</i>	5.1 Challenges in Design of Separation for Two Identical Satellites Configuration <i>D.Vamsi Krishna, Vssc</i>
1615-1625 Hrs	4.2. Dual Mode Indirect Type Actuation Mechanism for Land Based Munitions <i>Ak Srivastava, Arde/Drdo</i>	5.2 Design of Missile Holding Mechanism Inside a Canister <i>Ravi Tiwari, R&De/Drdo</i>
1625-1635 Hrs	4.3. Recoil Mitigation System for Light Machine Gun <i>Harshpreet Singh, Irde/Drdo</i>	5.3 Design of Sliding Door Operating Mechanism for Internal Weapon Bay <i>Chandrakant Waghmare, Diat/Drdo</i>
1635-1645 Hrs	4.4. Study and Design of Steel Reinforced Polymer Magazine for Automatic Rifles <i>Pssrk Prasad, Arde/Drdo</i>	5.4 Development of Multiple Capacity, Portable System for Accurate Mass Properties Measurement of Spacecraft <i>P Shravan Kumar, Ursc-Isro</i>
1645-1655 Hrs	4.5. Structural Assessment of the Igniter Interface of a Special Purpose Solid Motor for Isro's Human Space Flight <i>Swapnil Kumar, VSSC</i>	5.5 Pressure Control Mechanisms for Aerostats <i>Vikas Rana, Adrde/Drdo</i>
1700-1730 Hrs		Sponsors Presentations (Venue: BITS Auditorium)
1830-2000 Hrs		Cultural Programme (Venue: Leonia)
2000- 2200 Hrs		Dinner (Venue: Leonia)

Date: 17 November 2018

Time	Event	Venue
0900 – 0945 hrs	Plenary Talk -II Topic: Mechanisms in Armaments Dr.K.M.Rajan, D.S, Director, ARDE, Pune	AUDITORIUM
0945 – 1030 hrs	Plenary Talk -III Topic: Man mission mechanisms Dr.S. Unnikrishnan Nair, PD,ASTS, VSSC	AUDITORIUM
1030 – 1100 hrs	Tea Break	AUDITORIUM

Session 4: Hall A (F 206) Topic: Ignition System, Explosives and Flow control systems Session Chair: Dr.A.Subhananda Rao, Ex. D.G(Aero), HEMRL, DRDO Session Coordinator: Dr.K.VeeraBrahmam,Sc-E/ Y. Raj Alexander, Sc-D, ASL		Session 4: Hall B (F 207) Topic: Testing of mechanisms Session Chair: Shri. V.V.Parlikar, R&D(E), Pune, DRDO Session Coordinator: Shri. A.K. Sharma,Sc-E/ N. Madhavan, Sc-E, ASL	
1100- 11-30 Hrs	Invited Talk-5 (I.T-5) Topic: Explosive based Mechanisms Dr.A.Subhananda Rao, Ex.DG(Aero), DRDO	1100- 11-30 Hrs	Invited Talk-6 (I.T-6) Topic: Robotics Mechanisms Shri. V.V.Parlikar, R&D(E), Pune, DRDO
1130-1140 Hrs	6.1 A Design and Development Approach of Cartridge Cable Cutter for Helicopter Application <i>Bhupesh Ambadas Parate, ARDE/Drdo</i>	1130-1140 Hrs	7.1 Ejection Experiment Facility (E2f) At R&De <i>Vikas Jawaria, R&DE/Drdo</i>
1140-1150 Hrs	6.2 Effect of Wave Shaper in Shaped Charge Warheads <i>Mukesh Kumar, TBRL/DRDO</i>	1140-1150 Hrs	7.2 Experimental Investigation of Aerodynamic Interference of Fore Body On Parachute <i>Vipin Kumar Verma, ADRDE/DRDO</i>
1150-1200 Hrs	6.3 Landing Gear Shock Absorber Design and Experimental Validation for an UAV <i>Vijayvittal P.Nadagouda, ADE/DRDO</i>	1150-1200 Hrs	7.3 Random Vibration Test of Aircraft Store Release & Ejection Mechanism (ASREM) <i>Paras Ram, R&DE/DRDO</i>
1200-1210 Hrs	6.4 Mathematical Modelling of Electro-Hydrostatic Actuation System <i>Atul S Vivek, VSSC</i>	1200-1210 Hrs	7.4 Development of pyro based closure severance system for turbine nozzle of cryogenic engine <i>Ciju Paul, VSSC, ISRO</i>

1210-1220 Hrs	6.5 Sneak Paths in Launch Vehicle Pyro Electrical Systems and Its Mitigation <i>N.Sairam, VSSC</i>	7.5 Simulation Based Design of Flap Deployment Mechanism <i>P.Vasundhara Kumari, DRDL</i>
1220-1230 Hrs	6.6 Design of Fins Deployment, Tail Unit Locking and Release Mechanism of Multistage Rocket Assisted Bomb for 120mm Mortar <i>Milind S Bokade, ARDE</i>	7.6 Separation Dynamic Analysis of Dual Satellite Simultaneous Separation Studies <i>Narendra Nath, VSSC</i>
1230-1240 Hrs	6.7 Design and Analysis of Drive System for an Eccentrically Loaded Bowl Used in Mixing of Hazardous Propellants <i>D Debnath, HEMRL</i>	7.8 Design & Development of Advanced Parachute for Paratrooper <i>Vipin Kumar Verma, ADRDE/DRDO</i>
1240-1250 Hrs	6.8 Design and Analysis of a Fixture to Check the Health of Reaction Control System(RCS) Of an Aerospace Vehicle <i>Vikranth Sagar Reddy, BITS - Pilani</i>	7.9 Performance Evolution of Ram Air Parachute for Tandem Applications <i>Vipin Kumar Verma, ADRDE/DRDO</i>
LUNCH BREAK : 1300 to 14-00 Hrs		

17 – Nov – 2018 (After Noon Session)

Session 5: Hall A (F 206) Topic: Future Aerospace Mechanisms Session Chair: Shri. A.K.Saxena, ADRDE, DRDO Session Coordinator: Dr.K.VeeraBrahmam, Sc-E/ Y. Raj Alexander, Sc-D, ASL		Session 5: Hall B (F 207) Topic: Advanced Aerospace Mechanisms Session Chair: Dr. Niladri Sarkar, BITS, Pilani, Rajasthan Session Coordinator: Shri. A.K. Sharma, Sc-E / N Madhavan, Sc-E, ASL
14-00 - 14-30 Hrs	Invited talk-7 (I.T-7) Topic: Space Recovery Mechanisms Shri. A.K.Saxena, ADRDE, DRDO	Invited talk-8 (I.T-8) Topic: Recursive convolution finite Difference time domain method for targets with plasma sheath in stealth technologies Dr.Niladri Sarkar, BITS, Pilani, Rajasthan
1430-1440 Hrs	8.1. Passive Flexural Ring Micro-Vibration Isolator for Spacecraft Actuators <i>Abhilash M, ISRO ISU</i>	9.1. Design of Elevation and Azimuth Mechanism for Missile Canisters Payload <i>Prasad S Shivdas, R&DE/DRDO</i>
1440-1450 Hrs	8.2. Composite Nano Ferrite Substrate Based Miniaturized Patch Antenna for Onboard Sensor in Proximity Fuzes <i>Ashish Saini, TBRL/DRDO</i>	9.2. Finite Element Analysis of Wooden Skid Board Used to Drop Logistics from Aircraft <i>Pradeep Kumar Pal, ADRDE/DRDO</i>

1450-1500 Hrs	8.3. Conceptual Design and Sizing of a Wing-Tip Extension Mechanism for HALE UAV <i>Tanisha Joshi, IITB</i>	9.3. Design and Synthesis of Robotic Manipulator for Space Debris Removal and Satellite Refueling <i>Biju Prasad B, VSSC-ISRO</i>
1500-1510 Hrs	8.4. Novel Concept for A Steerable and Anchorable Tumbleweed Rover <i>Manavi Araga, IISST</i>	9.4. Design of Large Deflecting Flexural Beam for Compliant Mechanisms <i>P.N.Verma, VSSC-ISRO</i>
1510- 1520 Hrs	8.5. Modeling and Simulation of a Stewart Platform Based Docking Mechanism <i>ArunChand CV, Samson A, CoE, Thiruvananthapuram</i>	9.5. Mathematical Modeling and Numerical Simulation of Programmable Feel Unit <i>Mukesh S Baghel, R&DE</i>
1520-1530 Hrs	8.6. Aerial Plane Concept for Martian Application <i>Krishna Kaushik Yanamundra, BITS-DUBAI</i>	9.6. Design and Modeling of Span Owise Adaptive Wings for A Reconfigurable VTOL <i>Kunal Gajanan Nandanwar, BITS-P</i>
TEA BREAK : 15-30 to 16-00 Hrs		
1600 – 1630 Hrs	: Panel Discussion	Venue: HALL- A (F 206)
1630 – 1700 Hrs	: Valedictory function	Venue: Auditorium
1700 – 1730 Hrs	: AGM Meeting	Venue: HALL-B (F207)

Contact Persons:

HALL-A: 1. Dr.K.VeeraBrahmam, Sc-E (M: 9441426860) / Shri. Y. Raj Alexander, Sc-D (M: 9908572957)

HALL-B: 1. Shri. A.K.Sharma, Sc-E (M: 9490956564) / Shri.N.Madhavan, Sc-E (M: 9490956639)