

ALL ZOOM RECORDED JOINT CONFERENCE ICASA-MATRIX 2020, 26 November 2020
INTERNATIONAL JOINT CONFERENCE ON AEROSPACE AND AVIATION MECHANICAL AND ADVANCE MATERIAL RESEARCH EXCHANGE Complete rundown (updated)

Information: Please click the session that you wish to attend to go the Zoom meeting via hyperlink, or see the next page. Passcode: 1B2020

08:00-08:30	Opening Welcome speech from Dr. Taufiq Mulyanto, Chair of ICASA-MATRIX 2020	https://youtu.be/H84qRba9rY	
	Welcome speech from Prof. Tatapita Dirgantara, Dean of Faculty of Mechanical and Aerospace Engineering, Bandung Institute of Technology, Indonesia.	https://youtu.be/8gHcYQa1I	

PLenary Session I (08:30 - 12:00)

08:30 - 09:15	Denary speaker 1: Associate Prof. Iqbal Shinozawa (Institute of Fluid Science, Tohoku University, Japan) [Data-Driven Analysis and Design in Mechanical and Aerospace Engineering] Moderator: Pramudita Satria Palar (Bandung Institute of Technology)	https://youtu.be/8h2WQDu5FY	
09:15 - 10:00	Denary speaker 2: Prof. Tatapita Dirgantara (Faculty of Mechanical and Aerospace Engineering, Bandung Institute of Technology, Indonesia) [Revitalizing Triple-helix in Building Indonesian Aerospace and Aviation Industry] Moderator: Pramudita Satria Palar (Bandung Institute of Technology)	https://youtu.be/0yey0PVTz	

10:00 - 10:10 BREAK

PARALLEL SESSION I	Room 1: Aerodynamics and Computational Fluid Dynamics I Chairman: Jovan Mijatovic	Room 2: Structural analysis and optimization I Chairman: Mahesa Akbar	ROOM 3: Control, Design, and Performance Analysis I Chairman: Tripto Indriyanto	ROOM 4 - MATRIX Chairman: Irena Sukmana
10:10 - 10:30	Aprilia Sakti Kusumalestari, Santoso Soekirno, Harry Sudibyo and Muhammad Suryanegara Clean Wing Airframe Noise Prediction Model by FWH Equation in Open FOAM Application https://youtu.be/010ja822FFE	Lies Banowati, Permata Sari and Bambang Kismono Hadi Comparison Analysis of Abaca Fiber/Polyester and Hybrid Abaca-E-Glass/Polyester Composites to Impact Strength and Its Application to Ballistic https://youtu.be/FG8GUvrt04	Mochammad Agoes Moelyadi, Muhammad Amin Sulthoni, Muhammad Fikri Zulkarnain, Muhammad Fahid Akbar and Balkan Khilmi Assakandari High Altitude Long Endurance UAV/ITB Solar Panel Conceptual Design https://youtu.be/NiQCY9S0-04	Romie Oktovianus Bura and Januar Ariel Martharahaaja Analysis of Telecommunication Backbone Signaling Quality at High Altitude Platform System (HAPS) N/A
10:30 - 10:50	Marco Wijaya, Fahmi Abdillah Sambodo, Willy Wahyunto, Ony Arlianto, Ghifari Hanif Mustofa and Muhammad Fikri Al-Fattah Isrianto Additional Drag Prediction on VTOL System Installation of Hybrid VTOL UAV Based on Computational Fluid Dynamics https://youtu.be/9me2n8b0m1	Muhammad Kusni, Martina Widramdhani and Bambang Hadi Sensitivity Study and Structural Optimization of an Aircraft Wing with Maximum-Stress and Flutter Constraints https://youtu.be/CT0vYhrZtg	Toto Indriyanto, Hafidz Azhar Jakaria Take off Simulation and Analysis of Aircraft with Twin Floats https://youtu.be/9MjhrBd0Hmw	Sri Anika and Dr. Albarda Classification Cherry's Coffee using k-Nearest Neighbor (KNN) and Artificial Neural Network (ANN) N/A
10:50 - 11:10	Arifin Rasyadi Soemaryanto, Muhammad Fajar, Kurnia Hidayat, Teuku Mohd Ichwanul Hakim and Sining Tirtha Pirindriya Identification of Aero-Induced Noise Sources on High-Lift Devices of Commuter Aircraft N/A	Muhammad Rizki Mahalik, Annisa Jusuf, Tatapita Dirgantara and Leonardo Gunawan Topology Optimisation and Damage Tolerance Analysis of a Small Passenger Aircraft MLG Fitting under Constant-Amplitude Loading https://youtu.be/5EVwCRA-_io	Wisnu Dewangga and Rianto adhy Sasongko Missile Threat Assessment System using Naive Bayes Classifier Approach https://youtu.be/93jA0Rfrc4	Atika Ahab, Dessy Tafuli, Sincé Baunsele, Nina Siti Aminah and Mitra Jamal Comparative Study of Mechanical, Physical, and Chemical Properties of Three Species of Timor Sea Stony Coral https://youtu.be/Fu0vU1QLWo
11:10 - 11:30	Arfie Amelia Erissonia, Reo Yudhono and Indra Permana Aerodynamic Analysis of Folded-Flat Plate Airfoils Constructed from Low Reynolds Number Airfoils https://youtu.be/SIA3TA1EWs	Dhimaz Galang Hastingkorajati, Annisa Jusuf, Pramudita Satria Palar, Andi Kuswoyo and Kemas Zakaria Numerical Simulation and Optimization of Thin-Walled Prismatic Columns Subjected to Axial Impact Loading https://youtu.be/Qgw8G6JvJg	Chandra Lusuwanto and Yazdi Ibrahim Jenie Modelling and design of flight control for quadrotor in ballistic airdrop mission under wind perturbation N/A	Putra Adnan Fadiah, Febrinyan Prayoga and M. Triprawono M. Development of Local Lung Ventilator Component for COVID-19 Patient Treatment N/A
11:30 - 11:50	Febrian Akhmad Baehaqi, Lavi Zahal and Pramudita Palar Coupling between Inviscid Panel Method and Integral Boundary Layer Equations and Its Application in Optimizing Airfoil Shape https://youtu.be/8ba6f015dM	Pramudita Palar, Ghifari Adnan Faza, Kemas Zakaria and Lavi Zahal KADAL: A Python-based Kriging / Gaussian Process Software for Analysis, Design Optimization, and Exploration in Engineering https://youtu.be/Y3X0hR0Kk	Valeria Hagar Ai Awie and Rianto Adhy Sasongko Maneuverability Analysis on Flying Vehicle with Thrust Vectoring System N/A	Anne Sukmawati and Wulan Septiani Oils and Water Absorption Behavior of Natural Hollow Fibers N/A
11:50 - 12:10	No presentation	Ali Aziz, Annisa Jusuf, Hery Setiawan and Ichaan Setya Putra Damage Tolerance Analysis of Aircraft Structure: Case Study of Multiple-Site-Damage on Hercules C-130H Center Wing Box Structure https://youtu.be/y3a-q2kxvQ	Seno Sahisnu Rawikara and Rianto Sasongko Dynamic Obstacle Avoidance System for Autonomous Air Vehicle N/A	Rupesh Mahore A review on PZT based MEMS Micropumps for Space application N/A

12:10 - 13:00 LUNCH BREAK

PLenary Session II (13:00 - 14:30)

13:00 - 13:45	Denary speaker 3: Prof. Bambang Komono Hadi (Faculty of Mechanical and Aerospace Engineering, Bandung Institute of Technology, Indonesia) [Challenges and Opportunities of Aerospace Composite Structures] Moderator: Annisa Jusuf (Bandung Institute of Technology)	https://youtu.be/FjBBErfuTik	
13:45 - 14:30	Denary speaker 4: Prof. Eny YI Adesta (International Islamic University of Malaysia, Malaysia) [Industry 4.0 and Beyond: Opportunities, Challenges, and Way Forward] Moderator: Annisa Jusuf (Bandung Institute of Technology)	https://youtu.be/Wg4Wp5t6A	

14:30 - 14:40 BREAK

PARALLEL SESSION II	ROOM 1: Aircraft Design and Tools Chairman: Taufiq Mulyanto	Room 2: Structural analysis and optimization II Chairman: Mahesa Akbar	ROOM 3: Control, Design, and Performance Analysis II Chairman: Rianto Adhy Sasongko	ROOM 4 - Aviation and Maintenance I Chairman: Muhammad Luthfi Nurhakim
14:40 - 15:00	Mochammad Agoes Moelyadi, Ema Amalia, Livia Maharani Septiani, Albert Duke Tantono, Rizky Agung and Ariflan Sandovic Perdana Preliminary Design of Bionic Flapping Wing Vehicle https://youtu.be/md0Qj-WmB4k	Muhammad Kusni, Alief Taufiqurrahman and Leonardo Gunawan V-Tail Flutter Analysis of Wing in Surface Effect (Wise) Aircraft Using Msc Nastran Software https://youtu.be/MwTaduKZU	M. Iqbal, Y.K.Asalari, A.A.Arif, R.A.Sasongko Mathematical Modeling and Stability Analysis of a mini-Tilt-rotor UAV https://youtu.be/8jBwU6mV2g	Hisar Manongga Pasaribu, Rully Medianto, Javensius Sembiring, Jacky Jusuf, Rizki Oktafianto and Rasyeeds Atiqah Stochastic Modeling of Aircraft Flight Parameters in Terminal Control Area Based on ADS-B Data https://youtu.be/TBWZLSvWlQ
15:00 - 15:20	Reo Yudhono, Arfie Amelia Erissonia, Eki Dwi Nugroho and Andrie Adwinata Design of a Flapping Mechanism for Mini Flapping-Wing Unmanned Aerial Vehicle Mimic Dragonfly https://youtu.be/bRGdW4HYnc	Anggi Mardani Flexural Behaviour of Jute, Glass, Carbon Fibre Reinforced Polyester Hybrid Composites https://youtu.be/4NzX0t5swwQ	Naufal Muhammad Faras and Yazdi Ibrahim Jenie Development of a One Axis Thrust Vectoring Control System Demonstrator with Electric Ducted Fan https://youtu.be/OJHwJwJ2w	Muhammad Rizki Oktafianto and Khairul Ummah Flights Arrival Delay Prediction Model at Husein Sastranegara Airport Using Machine Learning https://youtu.be/3HcWVLU_CHSA
15:20 - 15:40	Khab Hakim, Hamitouché Toufik and Abada Omar NUMERICAL SIMULATION OF FLUIDIC THRUST VECTORING IN THE TIC NOZZLE (TRONCATED IDEAL CONTOUR NOZZLE) https://youtu.be/D2D9YnKjg	Aldyandra Hami Seno and M.H. Ferri Alabadi Novel kriging application for passive impact localisation in composite structures https://youtu.be/HY1NfVwQa	Adam Adlia Arif and Rianto Adhy Sasongko Flight Test Evaluation for TIR Rotor Unmanned Aerial Vehicle Development https://youtu.be/MBoSOwDn28	A Y Hertanto and Edy Suwondo Effectiveness Evaluation of Maintenance Tasks for the Landing Wheels of the B737-800 Aircraft https://youtu.be/D6Mv6G_vkBo

15:40 - 15:50 BREAK

PARALLEL SESSION III	Room 1: Aerodynamics and Computational Fluid Dynamics II Chairman: Ema Amalia	Room 2: Numerical simulation in aerodynamics and structures Chairman: Mahesa Akbar	ROOM 3: Control, Design, and Performance Analysis III Chairman: Rianto Adhy Sasongko	ROOM 4 - Aviation and Maintenance II Chairman: Muhammad Luthfi Nurhakim
15:50 - 16:10	Abada Omar, Abada Aberahim, Khab Hakim and Abdallah Elhritsi Ahmed Analysis and Design of Plug Shape of an Aerospace Nozzle https://youtu.be/E9u48frcvzc	Petrus Setyo Prabowo, Stefan Mardikus and Ewaludus Credo Eukharisto 3D Simulation of Parallelgram Vortex Generator on Performance Characteristic of Heat Transfer on Heat Exchanger using Computational Fluid Dynamic https://youtu.be/GvP-CWZvms	M. Fadhil Dzaki Syamsul and Rianto Adhy Sasongko Dynamic response analysis of aircraft with actuation system failure: open-loop and closed-loop cases https://youtu.be/0g5llybMAM	Freddy Franciscus FEASIBILITY ANALYSIS OF DEVELOPMENT OF JET AIRCRAFT THE RETREADING FACILITIES IN INDONESIA AND ITS DEVELOPMENT STRATEGY N/A
16:10 - 16:30	Andrea Eka Putri, Mochammad Agoes Moelyadi and Ema Amalia Investigation of Aerodynamics Interactions in Car Racing in Overtaking Maneuver https://youtu.be/_Xq470kPwmc	Arif Rahman Budhanifa, Annisa Jusuf, Leonardo Gunawan and Djaret Widagdo Numerical simulation of a bird-strike on an island-hopping aircraft windshield for various conditions https://youtu.be/LF4tWm8y8	Nu'Man Amri Mallik, Andrea Eka Putri and Ony Arlianto Design of High Maneuverability Unmanned Aerial Vehicle for Target Drone Purposes https://youtu.be/21a0WVF7tY	Dave Graciosa and Edy Suwondo Developing a Non-routine Maintenance Load Forecasting Procedure in MRO XYZ (Case Study: B737NG) N/A
16:30 - 16:50	Taufiq Mulyanto and Muhammad Fikri Zulkarnain Indonesian Glider GL-3 Spoiler Preliminary Design and Computational Fluid Dynamics Analysis using EASA CS-22 Performance Requirements https://youtu.be/GR46u0086o	Muhammad Raihan Firdaus, Annisa Jusuf, Tatapita Dirgantara, Bambang Komono Hadi and Leonardo Gunawan Crashworthiness Analysis of Hybrid Steel-Composite Double-Hat Multi-Corner Thin-Walled Column Under Axial Loading https://youtu.be/9R0Kv0dG5s	Muhammad Ridho Rosa and Erwin Susanto Distributed Robust Adaptive Output-Feedback Synchronization https://youtu.be/1a0WVF7tY	Muhammad Khairul Makirin, Leonard Mathews Wasugranata and Alexander Duffa On-Board Drone Detection for Drone Chasing and Collision Avoidance through a Single Mounted Camera N/A
16:50 - 17:10	Romie Oktovianus Bura, Putra Adnan Fadiah and Febrinyan Prayoga Effect on Propeller Slipstream Flow to the RPAS Gull Wing Performance https://youtu.be/Gru1E5o0838	Anggela Levino, Bambang Kismono Hadi and Andi Kuswoyo Numerical Simulation on the Permeability of Non-Crimp Carbon Fiber Epoxy Using Out-of-Autoclave Manufacturing Method https://youtu.be/1A2HHE72aM	No presentation	

17:10 - 17:30 <https://youtu.be/8ba6f015dM> Chairman of ICASA-MATRIX 2020 <https://youtu.be/8h2WQDu5FY>