

4th International Conference Advanced Air Mobility Systems

ICAAMS-4

Jointly Organised by VFS Chapters/Representatives



Banquet and Awards and Workshop
Sponsored by
TBA

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ICAAMS-4

Tentative Program Based on *Accepted Abstracts*

24-26 Nov 26

*American University in Dubai
Dubai, UAE*

Supported by VFS Education Members



Tuesday - 24 Nov 26

Tentative

Time	Activity	Presenter/Authors
0730-0745	All Keynote and Paper Presenters Briefing	Nicolas Hernandez Saenz Valiente Presentations Coordinator
0800-0815	Briefing - ICAAMS-4	Auraluck Pichitkul Deputy Chair ICAAMS Series
0815-0830	Welcome Address – Host VFS Chapter	David Holmes President UAE Chapter, Vice Chair ICAAMS 4
0830-0845	Welcome Address – Venue Host	Kyle Long President American University in Dubai
0845-0900	Program Address – ICAAMS 4	Bharath Govindarajan Program Chair ICAAMS Series
0900-0915	Introductory Address - ICAAMS Series	Arvind Sinha Convenor-in-Chief ICAAMS Series
0915-0930	Opening Address – ICAAMS 4	Vijaya Kumar Mudubagilu Chair ICAAMS Series
0930- 1000	Keynote 1– AAM Design and Development Updates Chair: Wael Bazzi, UAE	xxxxxxxxxxx Coordinator: TBA
1000-1030	Tea/Coffee/Drinks/Networking	
Session 1 – xxxxx Chair: xxxxx, Thailand - Coordinator: xxxxx		
1030-1100	Forward-Flight Stability Margin Analysis of a Coaxial Rotor eVTOL with CFD-Derived Aerodynamic Disturbance Injection	Chunhua Sheng, Qiuying Zhao, Sunil Basnet (University of Toledo)
1100-1130	Bladeless Ducted Propulsion System for Small-scale VTOL Applications	Sorabh Bordia, J.V.R. Prasad (Georgia Institute of Technology)
1130-1200	The Role of Artificial Intelligence in Designing Future Automated Airports	Bwalya Chongo (Qatar Airways)
1200-1230	Lunch & Networking	
1230-1330	Keynote 2 – AAM Research & Innovation Updates Chair: Wael Bazzi, UAE	Rafic Ajaj – Khalifa University Coordinator: TBA
Session 2 – xxxxx Chair: xxxxx, India- Coordinator: xxxxx		
1330-1400	Digital Flight-Test Validation Framework for Rapid Air Data Sensor Technology Transition Across Multi-Rotorcraft Platforms	Dinesh Vagicharla, Karuna Tomar (HAL)
1400-1430	Hydrogen (H2) Certification - Legality and Authentication of Safety	GEORGE BRIAN (SATS LTD)
1430-1500	Tea/Coffee/Drinks/Networking	
Session 3 – xxxxx Chair: xxxxx, Australia - Coordinator: xxxxx		
1500-1530	Parametric CAD Modeling and Structural Optimization of Multi-Rotor Airframes for Unmanned Advanced Air Mobility Platforms	Jimil Shah (K J Somaiya College of Engineering)
1530-1600	Aerodynamic Characterization and Flight Control of Deployable Grid Fin Attitude Systems for UAVs in Subsonic Flight	Shivam Mathur (University of Wollongong NASA)

1600-1630	Beyond the Metro-First Consensus: An Operational Case for Prioritising India's High-Altitude Pilgrim Corridors in Regional Air Mobility	Suneet Sohal (Indian Aviation)
1630-1700	Day 1 - Vote of Thanks	Bharath Govindarajan, Program Chair ICAAMS
1700-1745	Day 1 – Closing Remarks	Auraluck Pichitkul, Deputy Chair ICAAMS
1930-2200	ICAAMS 4 – Awards, Drinks & Dinner <i>Coordinator: xxxxx</i> Sponsored by XXXXX	
	ICAAMS Handing Taking Over – UAE to Australia <i>Coordinator: xxxxx</i>	

Wednesday – 25 Nov 26

Tentative

Time	Activity	Presenter/Authors
0815-0830	Day 2- Conference Introductory Briefing	Auraluck Pichitkul, Deputy Chair ICAAMS Series
0830-0900	AAM – Workshop Program	David Holmes, Workshop Chair
0900--0930	Keynote 3 – AAM Safety Regulation Updates Chair: Wael Bazzi, UAE	General Civil Aviation Authority UAE Coordinator: xxxxx
Session 4 –xxxxx Chair: xxxxx, Singapore – Coordinator: xxxxx		
0930-1000	On the Development of the Turbulent Energy Cascade in the Near Wake of a Rotor	Eman Saddoun, Immanuel Paul, Ching Man Yu (Khalifa University)
1000-1030	Propeller-Assisted Deep-Stall Landing of a Small Fixed-Wing UAV	Priyam Gupta, Jaivin Bharania, Lachlan Truong, Pietro Zanetti Ferreira, Santosh Tantravahi, Aditya Paranjape, Hoam Chung, Julio Soria (Monash University)
1030-1100	UAV-Based Surveying, Mapping and Fire Detection using Onboard AI	Rudra Chaplot, Ninan Mehendale (KJ Somaiya School of Engineering, Somaiya Vidyavihar University, Mumbai)
1100-1130	Tea/Coffee/Drinks/Networking	
Session 5– xxxxx Chair: xxxxx, UAE – Coordinator: xxxxx		
1130-1200	AI-Enabled UAV for Early Wildfire Detection in Forest Environments	Rudra Chaplot, Ninan Mehendale (KJ Somaiya School of Engineering, Somaiya Vidyavihar University, Mumbai)
1200-1230	Creation Of Certification Standards for Unmanned Aerial Vehicles (UAVs) Flight Simulators	Thiveshraj Segaran (AeroXperience)
1230-1330	Lunch and Networking	
1330-1400	Keynote 4 – AAM Airspace Management Updates Chair: Wael Bazzi, UAE	xxxxx, Road & Transport Authority UAE Coordinator: xxxxx
Session 6 –xxxxx Chair: xxxxx, xxxxx, – Coordinator: xxxxx		
1400-1430	Development and Testing of Quadrotor Biplane Tailsitter with Variable Pitch Propellers	Mayank Lonkar, Bharath Govindarajan (Indian Institute of Technology Madras)*
1430-1500	Quantum Federated Learning for Privacy-Preserving Anomaly Detection	S. Nazia Banu, Atmakur Sindhu, Farooq Sunar Mahammad, M.V. Subramanyam, R. Siva Subramaniam (Santhiram Engineering College)
1500-1530	Tea/Coffee/Drinks/Networking	
Session 7 – xxxxx Chair: xxxxx, xxxxx – Coordinator: xxxxx		
1530-1600	Multi Agent Generative AI Framework for Reliable and Trustworthy Decision Support	P. Jacob Vijaya Kumar, Shaik Fayaz, Farooq Sunar Mahammad, M. V. Subramanyam (Santhiram Engineering College) S. Mahaboob Basha (SVR Engineering College) P. Lakshmi Shailaja (St. Peter's Engineering College)

1600-1630	Flight Safety to Mission Safety: Operational Safety Implications of Alternative Fuels and Autonomous Air Mobility Systems	Lt Col Sukhwant Singh (Retd) Army Aviation, India
1630-1700	Operational and Supply-Chain Readiness for Advanced Air Mobility in the UAE	Subhash Ravindran FCILT Independent Researcher, Dubai, United Arab Emirates
1700-1730		
1730-1745	ICAAMS-4 Closing Address	Vijaya Kumar Mudubagilu, Chair ICAAMS Series

Thursday – 26 Nov 26

Workshop

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Enhancing Future VTOL (AAM) usage in the UAE

Chair – David Holmes, Vice Chair ICAAMS 4

Panel – Mike Hirschberg USA, Somen Chowdhury and UAE Keynote Presenters

Coordinators - TBA

The Workshop aims to provide a platform to all stakeholders from the field of research & development to manufacturers, regulators, operators, and other leaders in the industry to discuss the present status of limited use of the helicopters in the West/Central/Southeast Asia and Australia Region and its associated issues and challenges.

As future Advanced Air Mobility (AAM) aircraft are likely to share the airspace with helicopters and are likely to be operated under similar regulations, the present problems facing the helicopter industry are likely to be carried forward to future AAM operations. The Workshop will discuss how we can ensure the smooth induction and operationalization of the new platforms while ensuring that the regulatory and operational hurdles are overcome to allow AAM to fulfill its promise as a gamechanger for society.

The Workshop will also highlight the global status of the efforts by various stakeholders in AAM. This includes the design and development, standards & certification, airspace management and operationalization of the AAM platforms. The Workshop will discuss the challenges which the industry is likely to face as we embrace new concepts and technology.

The outcome of the Workshop will help generate ideas to develop a generic “AAM Roadmap” for the West/Central/Southeast Asia and Australia region, in the immediate future by the relevant authorities to enhance the usage of not only its present helicopter fleet, but also the expected introduction of AAM platforms, by customization of the roadmap.



Friday – 27 Nov 26

Tour – Desert Safari (Tentative)

Coordinator –xxxxx, VFS UAE Chapter

Guides – xxxxxxxx



This tour being planned is across the desert of Dubai with several stops for photography. During an exciting dune drive your first destination is to be a beautiful sunset. Watch the sunset and continue with Dune bashing to finally reach a campsite. Here you can do a camel ride, sand boarding and try out a henna design on hand or feet. After working up an appetite you get to enjoy a delicious barbecue dinner and shisha (the famous Arabic water pipe). You also get to enjoy Fire show and Tanura show performance around the campfire by starlight.

