中国航空学会
Chinese Society of Aeronautics and Astronautics

IAGA INTERNATIONAL ASSOCIATION FOR GREEN AVIATION

ICGA2026

2026 INTERNATIONAL CONFERENCE ON GREEN AVIATION

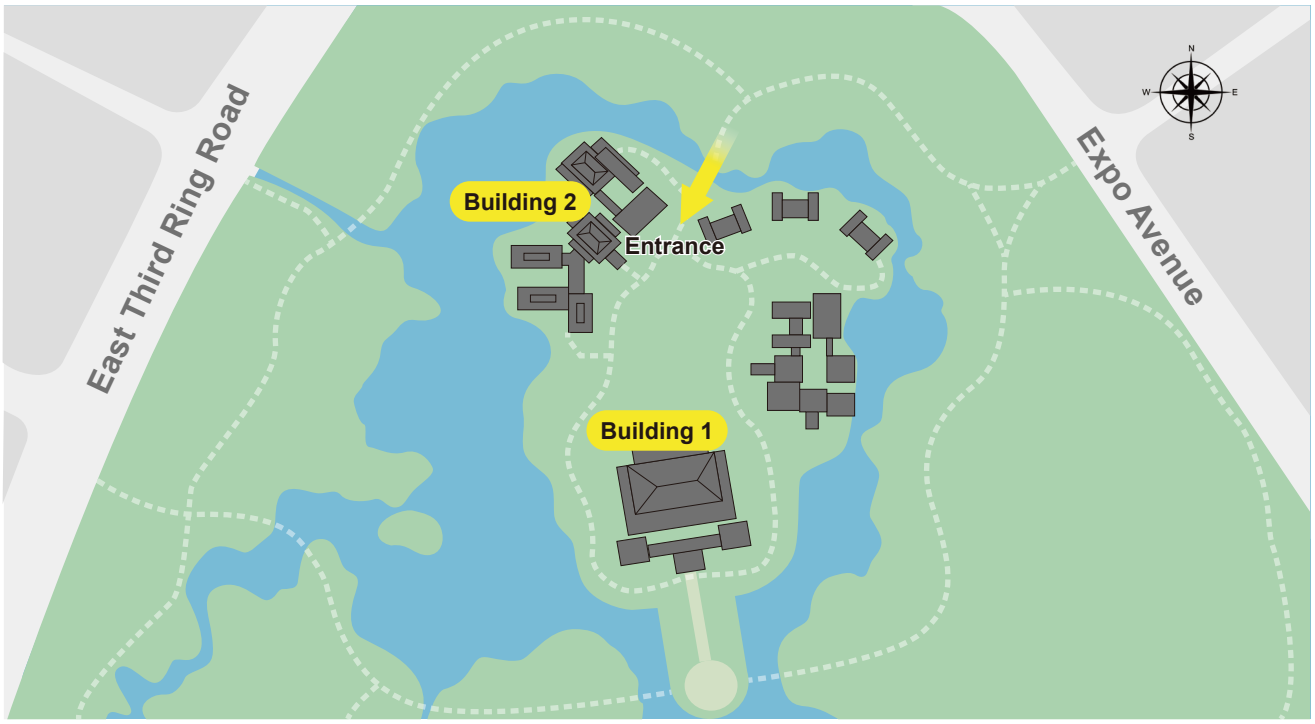
PROGRAM

XI' AN,CHINA NOV.1-3, 2026



Xi'an International Conference Center

Address：No.2626 Shibo Avenue, Chaba Ecological Area, Xi'an, Shaanxi Province ,China

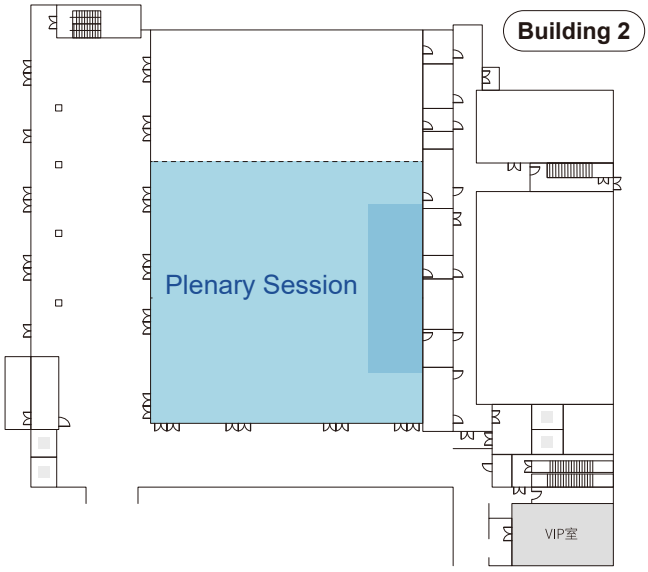


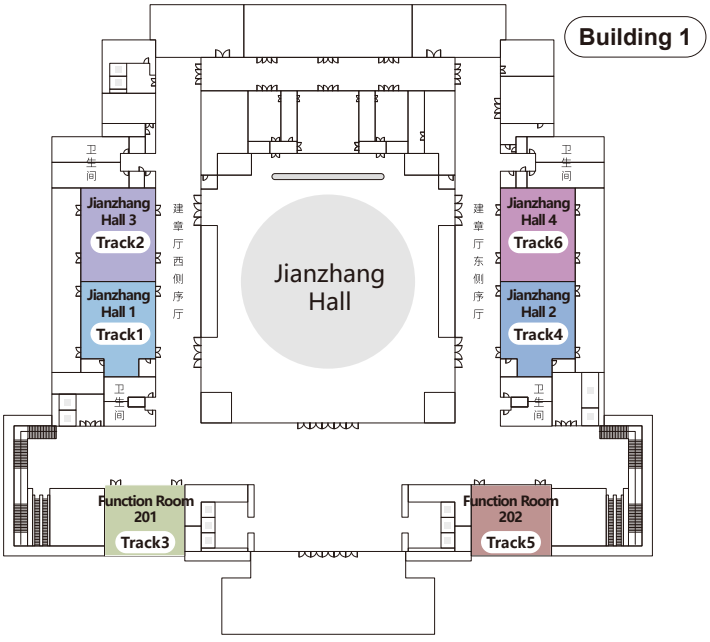
Plenary Session
(1st Floor, Building 2)

- The registration desk is located in the hotel lobby of Building 2 (ground floor).

Parallel Tracks
(2nd Floor, Building 1)

- Track1--Jianzhang Hall 1
- Track2--Jianzhang Hall 3
- Track3--Function Room 201
- Track4--Jianzhang Hall 2
- Track5--Function Room 202
- Track6--Jianzhang Hall 4





Contents

Conference Overview 01

Conference Information 01

Organizing Committee 02

Parallel Tracks Organizers 03

Schedule at a Glance 04

Agenda 05

Plenary Session 05

Track1-Green Aviation Power 07

Track2-Sustainable Aviation Fuels (SAF) 09

Track3-Green Aviation Smart Structure and Manufacturing 12

Track4-Aviation Digitalization and Intelligence 15

Track5-Advanced Air Mobility (AAM) 18

AAM Industry Matchmaking Event 20

Track6-Adaptive Aerospace Structure 21

Paper Acceptance Results and Presentation Arrangement 23

Purpose and Significance

The ICGA is an annual event started from 2023, aiming to gather stakeholders from the academia, industry, authorities, international NGOs together to enhance climate change awareness, to exchange frontier research in green aviation and develop cross-border collaborations in alignment with the sustainable development goals of the United Nations(UN SDGs) and the Long Term Aspirational Goal of the International Civil Aviation Organization (ICAO LTAG).

Date: Nov. 1-3, 2026 (Onsite check-in on Nov. 1, Plenary on Nov. 2 and Parallel tracks on Nov. 3)
Venue: Xi'an International Convention Center, Xi'an, Shaanxi Province
Official Language: English (plenary session with Chinese translation)
Theme: Clean, Smart, Safe, and Innovative Aviation
Components: Plenary Sessions, Parallel tracks, Exhibition, Business Activities

Organizer:

Chinese Society of Aeronautics and Astronautics (CSAA)

Co-organizers:

Northwestern Polytechnical University (NPU)
Beihang University (BUAA)

Cooperating Institutes:

Chinese Aeronautical Establishment (CAE)
Shaanxi Aeronautical Society

Supporters:

AVIC Composite Materials Co., Ltd.
Harbin Institute of Technology (HIT)
AEROFUGIA

Partners:

National Center for Climate Change Strategy and International Cooperation (NCSC)
Civil Aviation Research Center for Environment and Sustainable Development of China
International Council of the Aeronautical Sciences (ICAS)
International Coordinating Council of Aerospace Industries Associations (ICCAIA)
Asia SAF Association (ASAFA)
International Air Transport Association (IATA)
Canadian Advanced Air Mobility (CAAM)

Organizing Committee:

Chair:



Weihong ZHANG, Conference Chair; Chairman of Association for Science and Technology, Dean of School of National Elite Institute of Engineering, NPU; Candidate President, IAGA

Co-Chairs (IAGA Founding Members):



Fengtian YANG, Chief Scientist, Liaoning General Aviation Academy, China



Qiao XIANG, Former VP, Aero Engine Corporation of China (AECC), China



Guanghui WU, Chief Scientist, COMAC; Chief Designer of C919, China



Jinsong LENG, Dean of Future Technology School, Harbin Institute of Technology, China



Zhi TAO, Professor, BUAA, China



Joachim SZODRUCH, Founder of IFAR, Candidate VP of IAGA, Germany



Raafat SAADE, Professor, Beijing Institute of Technology, Candidate VP of IAGA, Canada



Triant FLOURIS, President, New England Aeronautical University, Candidate VP of IAGA, USA



Shijun YIN, Former Chief Engineer, CAAC; VP, CSAA; IAGA Founding Member, China



Junchen YAO, Candidate VP, IAGA, China



Shuiting DING, President, Civil Aviation University of China; Candidate VP, IAGA, China



Henry HOOI, Founder, Volar Air Mobility; Candidate VP, IAGA, Malaysia

Members:



Marco AMABILI, Professor, Westlake University, IAGA founding member, Italy



Dan CARNELLY, Executive VP, International Coordinating Council of Aerospace Industries Associations (ICCAIA), France



Axel PROBST, Executive Secretary General, International Council of the Aeronautical Sciences (ICAS), Germany



Ximing WU, Chief Scientist, Chinese Aeronautical Establishment, China



Jie KONG, Vice President, NPU; President, NPU-Kazakhstan Branch Campus, China



Shihong XIAO, Chairman, AVIC Aviation High-Technology Co., Ltd., China



Weiping LI, Chief Scientist, Civil Aviation Flight University of China; IAGA Founding Member, China



Xiaorong LU, Founder, Shanghai RGL Science and Technology Company; IAGA Founding Member, US



Honglong CHANG, Dean, Office of Science and Technology, School of Mechanical Engineering, NPU, China



Shichun YANG, Professor, School of Transportation Science and Engineering, BUAA, China



Chong PAN, Dean, School of Aeronautic Science and Engineering, BUAA, China



Guo LI, Dean, the School of Energy and Power Engineering, BUAA, China



Yanju LIU, Professor, Harbin Institute of Technology (HIT), China



Fabrice ESPINOSA, Founder and CEO, Asia SAF Association(ASAFA), Singapore

Parallel Tracks Organizers:

Track 1	**Green Aviation Power**	**Jointly organized by** School of Energy and Power Engineering, Beihang University; AECC Commercial Aircraft Engine Co., Ltd
Track 2	**Sustainable Aviation Fuels (SAF)**	**Jointly organized by** Civil Aviation University of China (CAUC); Civil Aviation Flight University of China (CAFUC); Asia SAF Association (ASAFA); **Supported by** the 2nd Research Institute of CAAC
Track 3	**Green Aviation Smart Structure and Manufacturing**	**Organized by** Northwestern Polytechnical University (NPU) **Co-organized by** National Key Laboratory of Strength and Structural Integrity; Aircraft Strength Research Institute of AVIC **Supported by** Key Laboratory of Aerospace Structure Technology, School of Mechanical Engineering, NPU; International Joint Research Center of Aerospace Material-Structure Integrated Design and Additive Manufacturing Equipment Technology, Ministry of Science and Technology of China; CSAA TC of Structure and Strength; CSAA TC of PHM
Track 4	**Aviation Digitalization and Intelligence**	**Organized by** School of Aeronautic Science and Engineering, BUAA; **Supported by** School of Aerospace Engineering, Zhengzhou University of Aeronautics
Track 5	**Session 1** **Advanced Air Mobility**	**Jointly organized by** School of Transportation Science and Engineering, BUAA; AVIC Xi'an Flight Automatic Control Research Institute; **Supported by** CSAA TC of Electric Aviation, CSAA TC of Flying Cars, CSAA TC of Airworthiness
	Session 2 **AAM Industry Matchmaking Event**	**Jointly organized by**Trade Development Bureau of the Ministry of Commerce; Chinese Society of Aeronautics and Astronautics (CSAA) **Supported by** Xi'an Municipal Bureau of Commerce Canadian Advanced Air Mobility Association (CAAM)
Track 6	**Adaptive Aerospace Structure**	**Organized by** Harbin Institute of Technology (HIT); **Supported by** School of Astronautics, Harbin Institute of Technology (HIT); CSAA TC of Electromagnetic Functional Structure

Schedule at a Glance

This programme is locked as of 27 Oct. Scan the QR code to download the e-version.
The Update agenda (with speaker bios and abstracts) is available via QR code.

Chinese Agenda

English Agenda

Download

November 1 Arrival Day		
15:00-20:00	On-Site Registration/Exhibition Setup/ PPT Uploading	Lobby, Building 2, Xi'an International Convention Center

November 2 Plenary Day		
08:30-09:00	On-Site Registration	Lobby, Building 2, Xi'an International Convention Center
09:00-18:20	Plenary Sessions	1st Floor, Building 2, Xi'an International Convention Center

November 3 Parallel Forums			
08:40-18:00	Track 1: Green Aviation Power	Jianzhang Hall 1	Building 1, 2nd Floor, Xi'an International Convention Center
08:50-18:15	Track 2: Sustainable Aviation Fuels (SAF)	Jianzhang Hall 3	
08:15-18:30	Track 3: Green Aviation Smart Structure and Manufacturing	Function Room 201	
08:20-18:00	Track 4: Aviation Digitalization and Intelligence	Jianzhang Hall 2	
08:40-18:30	Track 5: Advanced Air Mobility(AAM)	Function Room 202	
08:40-18:00	Track 6: Adaptive Aerospace Structure	Jianzhang Hall 4	

Schedule

Nov. 2 Plenary Session

Venue: 1st Floor, Building 2, Xi'an International Convention Center

09:00-09:30	**Opening Ceremony** Chair: Mr. Ce YU Vice Secretary-General, CSAA; Candidate Secretary-General, IAGA
	Opening Address by Mr. Shijun YIN Former Chief Engineer, CAAC; VP, CSAA; IAGA Founding Member
	Address by Academician Guanghui WU Chief Scientist, COMAC; Chief Designer, C919 Aircraft; IAGA Founding Member
	Address by official of Shaanxi Province
09:30-10:00	**Keynote Address** Chair: Mr. Ce YU
	Topic: Global Overview on Sustainable Aviation Speaker: Prof. Joachim SZODRUCH IFAR Founder; Candidate Vice President, IAGA, Germany
10:00-10:30	**Tea Break & Exhibition Visit**
10:30-11:00	**Invited Lecture** Chair: Mr. Shijun YIN Former Chief Engineer, CAAC; VP, CSAA; IAGA Founding Member
	Topic: Advancements and Challenges for Sustainable Aviation Fuels Speaker: Prof. Shuiting DING President, Civil Aviation University of China (CAUC); Candidate Vice President, IAGA
11:00-11:50	**Panel Discussion** Chair: Mr. Shijun YIN
	Topic: Driving Green Aviation Development Through Market Mechanisms and Innovation Panelists: Dr. Guo HUA Partner, Royalsea Capital
	Mrs. Yuan GAO Head of CCER Trading Center, China Beijing Green Exchange; TAB Member for CORSIA, ICAO
	Mr. Yufang GUO Chair, Joint Sustainable Aviation Alliance (EU), Netherlands
	Dr. Zhiyu LIU Business Unit Head, Control Union
	Moderator: Dr. Xiaorong LU Founder, Shanghai RGL Science and Technology Company; IAGA Founding Member, U.S.
12:00-13:30	**Lunch and Break**
13:30-14:00	**Keynote Speech** Chair: Prof. Song FU Tsinghua University; Executive Committee Member, ICAS, IAGA Founding Member
	Topic: The International Council of the Aeronautical Sciences (ICAS) and Outcomes of the 35th ICAS Congress Speaker: Dr. Gunnar HOLMBERG President-Elect, International Council of the Aeronautical Sciences (ICAS), Sweden

14:00-15:30	**Summary Report on Key Green-Aviation Technologies** Chair: Prof. Song FU
14:00-14:30	**Topic: Global Development of Hydrogen-Powered Aviation Propulsion** Speaker: Prof. Julio R. MENEGHINI Scientific Director, Research Centre for Greenhouse Gas Innovation (RCGI), University of São Paulo, Brazil
14:30-15:00	**Topic: Innovation in Sustainable Aviation: Electric, Hybrid, or Hydrogen?** Speaker: Dr. Susan YING Co-founder & CEO, EM-Power; Former President ICAS; Former VP Aerospace, SAE International; Fellow of AIAA and Fellow of RAeS, US
15:00-15:30	**Topic: Global Overview of Aviation Battery Technologies** Speaker: Prof. Yuegang ZHANG Tsinghua University
15:30-16:00	**Tea Break & Exhibition Visit**
16:00-16:45	**Panel Discussion** Chair: Mr. Henry HOOI Founder of Volar Air Mobility; Candidate VP of IAGA, Malaysia
	The Path to Carbon Reduction for Conventional Aviation OEMs Panelists: Dr. Ying SHI Deputy Chief Engineer, AECC Mr. Wei XIE VP of Marketing, Commercial Aviation, Embraer China Mr. Zhiwei ZHANG Regional General Manager, GE Aerospace China Moderator: Dr. Susan YING Co-founder & CEO, EM-Power; Former President ICAS; Former VP Aerospace, SAE International; Fellow of AIAA and Fellow of RAeS, US
16:45-17:00	**Joint Release** Chair: Mr. Henry HOOI
	Research Report on Market Acceptance of Manned eVTOL Speakers: Mrs. Louise LU Co-founder & CMO, INFLYNC Mrs. Clara JIANG Head of Commercial & Strategy, NexAvian, Singapore
17:00-18:20	**Invited Lectures** Chair: Mr. Henry HOOI
	Topic: AI and the Development of Advanced Air Mobility (AAM)
17:00-17:20	**Topic: Reflections on the Development of Low-Altitude Aerial Vehicles in Building Emerging Pillar Industries** Speaker: Prof. Ximing WU Chief Scientist, Chinese Aeronautical Establishment (CAE)
17:20-17:40	**Topic: Research and Prospects of Cutting-Edge Low-Altitude Flying Car Technology** Speaker: Prof. Shichun YANG BUAA
17:40-18:00	**Topic: The Operational Digital Twin Technology for Advanced Air Mobility** Speaker: Prof. Jae Woo LEE Professor and Director, Konkuk Aerospace Design-Airworthiness Research Institute (KADA), Konkuk University, Korea
18:00-18:20	**Topic: Canada's Pathway to Advanced Air Mobility Operation/Takeoffs** Speaker: Mr. JR HAMMOND Executive Director, Canadian Advanced Air Mobility(CAAM), Canada
19:00-20:30	**Dinner**

Nov. 3 Parallel Tracks

Venue: 2nd Floor, No. 1 Building

Venue: Jianzhang Hall 1

Track 1: Green Aero-Power Forum

Jointly organized by School of Energy and Power Engineering,
AECC Commercial Aircraft Engine Co., Ltd



Chair:
Guo LI
Dean, School of Energy and Power Engineering, BUAA



Co-chair:
Lu QIU
Deputy Dean, School of Energy and Power Engineering, BUAA

Committee:
Hamilton VARELA
Professor, Institute of Chemistry of Sao Carlos of the University of Sao Paulo (Brazil) ;
Distinguished Professor, Hangzhou International Campus, Beihang University (China), Brazil

Introduction:
Green aviation propulsion, powered by hydrogen or electricity, is driving the aviation industry toward a sustainable future. These technologies offer near-zero emissions while maintaining high performance and efficiency, aligning with global net-zero targets. However, challenges remain in energy storage, system reliability, and aircraft adaptation. With ongoing technological progress and infrastructure development, hydrogen-powered aviation is expected to become a key pillar of future green air transportation.

08:40-09:00	**Opening** Chair: Prof. Lu QIU Deputy Dean, School of Energy and Power Engineering, BUAA
	Opening Address Speaker: Prof. Hamilton VARELA Professor, Institute of Chemistry of Sao Carlos of the University of Sao Paulo (Brazil) ; Distinguished Professor, Hangzhou International Campus, Beihang University (China)
09:00-10:00	**Invited Lecture** Chair: Prof. Lu QIU
09:00-09:30	**Topic: Aerodynamic Characteristics of Hydrogen–Electric Aircraft Propulsion Systems** Speaker: Prof. Carl SANGAN University of Bath, UK
09:30-10:00	**Topic: Analysis of Hydrogen-Powered Aviation Propulsion Roadmap and Development Tendency** Speaker: Mr. Wei XIAO Researcher, Deputy Director, Future Propulsion General Department, AECC Hunan Aviation Powerplant Research Institute
10:00-10:30	**Coffee Break**
10:30-12:00	**Invited Lecture** Chair: Prof. Carl SANGAN University of Bath, UK
10:30-11:00	**Topic: High-Performance Lightweight Fuel Cells for Aviation: From Materials to Equipment** Speaker: Prof. Yan XIANG Beihang University
11:00-11:30	**Topic: Zero-Carbon Gas-Turbine Power and Propulsion** Speaker: Prof. Chih-Jen SUNG, University of Connecticut, USA
11:30-12:00	**Topic: Fuel Cell Topology Optimization** Speaker: Prof. Emilio Carlos Nelli SILVA Universidade of São Paulo, Brazil
12:00-13:30	**Lunch**
13:30-15:30	**Invited Lecture** Chair: Prof. Sha LI BUAA
13:30-14:00	**Topic: Research Progress on Key Technologies of Liquid Hydrogen Storage and Supply System for Hydrogen-Powered Aircraft** Speaker: Dr. Xiujuan XIE Technical Institute of Physics and Chemistry, CAS
14:00-14:30	**Topic: Techno-Economic Design and Assessment of Hydrogen Fuel Cell and Hybrid Propulsion Systems for 100-Seat Regional Aircraft** Speaker: Prof. Fabrizio NICOLOSI University of Naples Federico II, Italy
14:30-15:00	**Topic: Research Progress on Arrayed Microtube Hydrogen Combustors for Aero-Engines** Speaker: Prof. Xiao HAN BUAA
15:00-15:30	**Topic: Study on gliding arc plasma–based combustion enhancement of green sustainable aviation fuels** Speaker: Dr. Jinlu YU Air Force Engineering University
15:30-16:00	**Coffee Break**
16:00-18:00	**Paper Oral Presentation** Chair: Prof. Xiao HAN BUAA
	Topic: Study on Combustion Characteristics of an Array Micro-tube Annular Pure Hydrogen Combustor Speaker: Meng HAN Civil Aviation University of China
	Topic: The impact of Corona-Activated Air Supply on the Performance of Air-Cooled PEMFCs Speaker: Li SONG Beihang University
	Topic: Research on Flight Operational Risk Assessment Model under Blending Conditions of Different Grades of Aviation Turbine Fuels Speaker: Tai ZENG 2nd Research Institute of CAAC
	Topic: Sensitivity Analysis of Design Parameters for Endurance Performance Optimization of a Hydrogen Hybrid UAV Speaker: Peng NIAN AVIC Chengdu Aircraft Design & Research Institute (AVIC CADI)

Venue: Jianzhang Hall 3

Track 2: Sustainable Aviation Fuels (SAF)

Theme: From Feedstock to Wingtip: Full-Value-Chain Collaboration and Scaling Up SAF

Jointly organized by Civil Aviation University of China(CAUC);
Civil Aviation Flight University of China(CAFUC); Asia SAF Association(ASAFA);

Supported by the 2nd Research Institute of CAAC



Chair:
Shuiting DING
President, Civil Aviation University of China



Co-chair:
Weiping LI
Chief Scientist, Civil Aviation Flight University of China



Executive Co-chair:
Xiaojun YANG
Professor, Civil Aviation University of China (CAUC)



Executive Co-chair:
Lin ZOU
Professor, Civil Aviation Flight University of China(CAFUC)



Vice Chair:
Fabrice ESPINOSA
Founder and CEO, Asia Sustainable Aviation Fuel Association(ASAFA), Singapore

Committee:

Xiaorong LU Founder, Shanghai RGL Science and Technology Company; IAGA Founding Member, US
Michael SUNG CEO, Blue Carbon International Ltd.
Jinxia FU Chief Scientist, Second Research Institute of CAAC
Liangchun DENG Senior Manager, International Air Transport Association (IATA)
Gabriel HO Founder & Chief Sustainability Officer, ASAFA

Introduction:

Sustainable Aviation Fuel (SAF) refers to aviation fuel produced from renewable resources or waste feedstocks that has obtained airworthiness certification and sustainability accreditation. It can cut lifecycle greenhouse gas emissions by over 80%, making it a practical energy pathway for the aviation sector to achieve deep decarbonization by the middle of this century. SAF has gained wide recognition from governments and the aviation industry worldwide. Nevertheless, its large-scale rollout and deployment remain constrained by safety, sustainability, economic viability and other challenges.

Against this backdrop, this track will focus on SAF policies, feedstocks, production processes, safety assessment and airworthiness certification, sustainability accreditation, pricing and market dynamics, supply chains and related topics. It will bring together experts and scholars from domestic and international enterprises, R&D institutions, universities and government authorities to share state-of-the-art progress in their respective fields, facilitate information exchange and collaboration, accelerate the systematic integration of the SAF industrial chain, and advance the R&D, verification and deployment of SAF.

The seminar covers seven dimensions: SAF supply chains, four major technology pathways, standards and certification, CORSIA compliance, policies, capital investment and airline adoption, with an emphasis on full-industry-chain solutions.

08:50-09:00	**Opening by Prof. Weiping LI Chief Scientist, Civil Aviation Flight University of China (CAFUC), IAGA Founding Member**
09:00-10:00	**Session 1 SAF Feedstock Supply Chain & Feedstock Foundations** Chair: Prof. Weiping LI
09:00-09:30	**Topic: Global Sustainable Aviation Fuel (SAF) Market Outlook: Production Capacity, Pricing, Feedstock Bottlenecks and Diversification of Technology Pathways** Speaker: Prof. Ljiljana MEDIC Delegate of Dean , Eastern Europe and Asia, Universidad Politécnica de Madrid, Spain
09:30-10:00	**Topic: Global SAF Feedstock Supply Overview** Speaker: Mr. Fabrice ESPINOSA Founder and CEO, Asia Sustainable Aviation Fuel Association(ASAFA), Singapore
10:00-10:30	**Coffee Break**
10:30-11:30	**Session 2 Four Major SAF Technology Pathways: A Comparative Overview**
	Panel Speakers: Mr. Shen WANG CEO, SAFPAC Limited (AtJ) Mr. Hongxi ZHANG Co-Founder, General Manager, Carbonology (PtL) Prof. Yali YAO Head of the Clean Chemical Fuels and Energy Platform, Catalysis and Energy Research Institute, University of South Africa (FT) Mr. Jianping LI Chief Engineer, Junheng Biotech (HEFA) Moderator: Prof. Xiaojun YANG Civil Aviation University of China (CAUC)
12:00-13:30	**Lunch**
13:30-15:00	**Session 3 Standards, Certification & CORSIA Compliance** Chair: Prof. Lin ZOU CAFUC
13:30-14:00	**Topic: CORSIA Compliance in Practice: MRV Mechanisms, CORSIA Eligible Fuels Registration, Airline Emissions-Reduction Accounting & Compliance Strategies** Speaker: Dr. Xiaorong LU Founder, Shanghai RGL Science and Technology Company; IAGA Founding Member, US
14:00-14:30	**Topic: Introduction to the Self-developed Aviation Fuel Sustainability Certification Scheme** Speaker: Mrs. Yiyuan DONG Senior Manager, SAF Center, Second Research Institute of CAAC
14:30-15:00	**Topic: Engine Progress and Challenges in High-Blend-Ratio SAF Validation for Domestic Aero-Engines** Speaker: Dr. Qi ZENG Deputy Director, Researcher, Engine Combustion Chamber Research Department, AECC Hunan Aviation Powerplant Research Institute
15:00-15:30	**Session 4 Investment and Practice** Chair: Prof. Lin ZOU
	Topic: SAF Project Investment & Financing: Project Economics, Offtake Agreement Structures, Debt/Equity Financing Strategies & Risk Hedging Speaker: Dr. Guo HUA Partner, Royalsea Capital
15:30-16:00	**Coffee Break**

16:00-16:45	**Session 4 Panel Discussion**
	Speakers: 1.Mrs. Jinjin XU China Lead, Boeing Global Sustainability Engagement and Partnerships, Boeing 2.Mr. Zhe WANG Director,Transportation, Hydrogen and Clean Technologies, Rocky Mountain Institute (RMI) 3.Mrs. Lulu XUE Director, Sustainable Transport Program, World Resources Institute China Moderator: Mr. Liangchun DENG, Senior Manager, External Affairs & Sustainability, IATA
16:45-17:30	**Paper Oral Presentation** Chair: Prof. Lin ZOU
16:45-17:00	**Topic: Intelligent Prediction Method for Ignition Delay Time of Sustainable Aviation Fuel Surrogate Systems: A Study on Dual-Branch Neural Networks and Transfer Learning** Speaker: Xiaoyu TIAN Civil Aviation University of China
17:00-17:15	**Topic: Bridging the Ambition Gap: ReFuelEU Aviation and the SAF Implementation Challenge** Speaker: Peng HE Aviation Industry Development Research Center of China (ADR)
17:15-17:30	**Topic: Metal-zeolite for the High-value Utilization of Pyrolysis Gas (Alkane and CO2) Produced from Biomass Pyrolysis** Speaker: Zhongpan HU Civil Aviation University of China
17:30-18:15	**Closing Dialogue** **Full-Chain Collaboration — From Commitments to Scale: How Can SAF Cross the "Valley of Death" ?**
	Topics: **1.Feedstock Constraints vs. Technology Diversification: How Can the Two Be Balanced?** **2.Policy Certainty and Its Impact on Investor Confidence** **3.Equity and Fairness in SAF Transition between Developing and Developed Countries** **4.2030 Targets: Ambitious Vision or Achievable Goal?** Panelists: Prof. Ljiljana MEDIC Delegate of Dean, Eastern Europe and Asia, Universidad Politécnica de Madrid Prof. Xiaojun YANG Professor, Civil Aviation University of China Mr. Shutong LIU China Lead, Asia Sustainable Aviation Fuel Association(ASAFA), Singapore Mr. Liangchun DENG Senior Manager, External Affairs & Sustainability, IATA Moderator: Prof. Weiping LI

Venue: Function Room 201

Track 3: Green Aviation Smart Structure and Manufacturing

Organized by Northwestern Polytechnical University (NPU)

西北工业大学 NORTHWESTERN POLYTECHNICAL UNIVERSITY

Co-organized by National Key Laboratory of Strength and Structural Integrity;
AVIC Aircraft Strength Research Institute of China

航空工业强度所

Supported by Key Laboratory of Aerospace Structure Technology, School of Mechanical Engineering, NPU;
International Joint Research Center of Aerospace Material-Structure Integrated Design and Additive Manufacturing Equipment Technology, Ministry of Science and Technology of China;
CSAA TC of Structure and Strength; CSAA TC of PHM;

With support from the Discipline Pioneer Program (Grant No. JYB2025XDXM207)



Chair:
Weihong ZHANG
Academician of Chinese Academy of Sciences;
Chairman of Association for Science and Technology,
Dean of School of National Elite Institue of Engineering, NPU;
Candidate President of IAGA



Chair:
Marco AMABILI
Professor, Westlake University,
IAGA Founding Member, Italy



Co-chair:
Jihong ZHU
Dean of Graduate School, Professor, NPU



Executive Co-chair:
Manyu XIAO
Professor, Vice Secretary-General,
Association for Science and Technology, NPU

Committee:

Kin LIAO Professor, Khalifa University of Science & Technology, IAGA Founding Member, UAE
Ludovic NOELS Professor, University of Liège, Belgium
Ikjin LEE Professor, Korea Advanced Institute of Science and Technology, Republic of Korea
Junji KATO Professor, Nagoya University, Japan
Balaji RAGHAVAN Professor, Laboratoire de Genie Civil et Genie Mecanique, INSA de Rennes, France
Zied MOUMNI Professor, École Nationale Supérieure de Techniques Avancées (ENSTA), IAGA Founding Member, France
Grzegorz DZIERZANOWSKI Associate Professor, Warsaw University of Technology, Poland
Jie HOU Associate Researcher, Northwestern Polytechnical University

Introduction:

The Forum aims to explore the cutting-edge advancements in multi-scale computational mechanics and optimization, composite materials dynamics, additive manufacturing, and intelligent materials for structural optimization. This forum brings together leading experts to discuss the latest research and innovations in these fields. Participants will delve into the analysis of multi-scale dynamic properties of composites, the optimization of design and manufacturing processes for additive manufacturing, and the integration of smart materials into aircraft structures. The goal is to foster interdisciplinary collaboration and identify solutions that promote sustainable, efficient, and advanced green aviation technologies.

08:15-08:30	**Opening** Moderator: Prof. Jihong ZHU Dean of Graduate School, Professor, NPU
	Opening Address: Prof. Weihong ZHANG Academician of Chinese Academy of Sciences; Chairman of Association for Science and Technology, Dean of School of National Elite Institue of Engineering, NPU; Candidate President of IAGA
08:30-10:00	**Invited Lecture** Moderator: Prof. Ludovic NOELS University of Liège, Belgium
08:30-09:00	**Topic: Computational Design of Sustainable Structures through Topology Optimization and Metamaterials** Speaker: Prof. Junji KATO Nagoya University, Japan
09:00-09:30	**Topic: Outlier-aware Multi-fidelity Surrogate-based Hyperparameter Optimization for Topology Optimization** Speaker: Prof. Ikjin LEE Korea Advanced Institute of Science and Technology, Republic of Korea
09:30-10:00	**Topic: Interpenetrating Phase Composites: Opportunities or Hype?** Speaker: Prof. Kin LIAO Aerospace Engineering, Khalifa University of Science & Technology, United Arab Emirates
10:00-10:15	**Coffee Break**
10:15-12:15	**Invited Lecture** Chair: Prof. Junji KATO Nagoya University, Japan
10:15-10:45	**Topic: Adaptive Design for Additive Manufacturing: A Critical Review** Speaker: Prof. Michael Yu WANG Great Bay University
10:45-11:15	**Topic: Advances in Numerical Methods for Topology Optimization and Applications** Speaker: Prof. Xiaoping WANG Chinese University of Hongkong (Shenzhen)
11:15-11:45	**Topic: AI and Data-driven Methods for Composite Multi-scale Simulations** Speaker: Prof. Ludovic NOELS University of Liège, Belgium
11:45-12:15	**Topic: Structural Topology Optimization for Acoustic Black Hole** Speaker: Prof. Gil Ho YOON Hanyang University, Republic of Korea
12:15-13:30	**Lunch**
13:30-15:30	**Invited Lecture** Moderator: Prof. Michael Yu WANG Great Bay University
13:30-14:00	**Topic: Stability of equilibrium of straight and slender elastic bars of atypical cross-sections: a combined axial, lateral, and torsional buckling analysis** Speaker: Dr. Radosław Tomas CZUBACKI Warsaw University of Technology, Poland
14:00-14:30	**Topic: Wave Scattering as a Surface Descriptor: B-Factors Unifying Crystallographic Texture and Electromagnetic Scattering** Speaker: Prof. Balaji RAGHAVAN Laboratoire de Genie Civil et Genie Mecanique, INSA de Rennes, France
14:30-15:00	**Topic: Isotropic Shallow Shells of Maximum Stiffness** Speaker: A/P. Grzegorz DZIERZANOWSKI Warsaw University of Technology, Poland
15:00-15:30	**Topic: Interaction-Based Deep Material Networks for composite structure** Speaker: Dr. Ling WU Senior researcher, University of Liège, Belgium

15:30-16:00	**Coffee Break**
16:00-17:30	**Invited Lecture** Chair: Prof. Xiaoping WANG Chinese University of Hongkong (Shenzhen)
16:00-16:30	**Topic: Design of Hybrid Solid-lattice Structures Using Multi-material Topology Optimization** Speaker: Prof. Liang XIA Huazhong University of Science and Technology
16:30-17:00	**Topic: Decoupled Probability Density Evolution for Reliability-Based Design Optimization and Digital Twin Updating of Engineering Systems** Speaker: Dr. Mengze LYU Assistant Research Fellow, Institute for Risk and Reliability at the Leibniz University Hannover, Germany
17:00-17:30	**Topic: A One-Dimensional Dimension-Reduced Probability Density Evolution Equation for Reliable Stochastic Dynamic Analysis** Speaker: Dr. Yi LUO Postdoctoral Fellow, Institute for Risk and Reliability at the Leibniz University Hannover, Germany
17:30-18:30	**Paper Oral Presentation** Chair: Prof. Liang XIA Huazhong University of Science and Technology & Prof. Manyu XIAO Vice Secretary-General, Association for Science and Technology, NPU
	Topic: Theory and applications of the B-factor in scattering topology optimization Speaker: Weijun KONG Northwestern Polytechnical University
	Topic: Interface-Aware Neural Newton Preconditioning for Robust Cohesive Zone Model Simulations Speaker: Zhangyong LIANG Tianjin University
	Topic: Customizable Metamaterial with Low-frequency Bandgap for Broadband Vibration Suppression and Noise Attenuation Speaker: Tian DENG Aircraft Strength Research Institute of China
	Topic: A Mesh-First Modeling Framework for Complex Stiffened Shell Structures Using All-Hexahedral Mesh Mapping Speaker: Junyi LIN Huazhong University of Science and Technology

Venue: Jianzhang Hall 2

Track 4: Aviation Digitalization and Intelligence Forum

Organized by School of Aeronautic Science and Engineering, BUAA;

北京航空航天大学 BEIHANG UNIVERSITY

Supported by School of Aerospace Engineering, Zhengzhou University of Aeronautics

郑州航空工业管理学院 ZHENGZHOU UNIVERSITY OF AERONAUTICS 航空宇航学院 SCHOOL OF AEROSPACE ENGINEERING



Chair:
Chong PAN
Dean, Professor, School of Aeronautic Science and Engineering, BUAA, China



Executive Co-chair:
Bingjun ZHU
Associate Professor,
Director of International Cooperation Office,
School of Aeronautic Science and Engineering, BUAA

Committee:
Xiaolu WANG Dean, Professor, School of Aerospace Engineering, Zhengzhou University of Aeronautics
Lei YANG General Manager, Southern Airlines Technology (Guangdong Hengqin) Co., Ltd.

Introduction:
The Aviation Digitalization and Intelligence Forum brings together industry experts, researchers, and innovators to explore the transformative impact of digital and intelligent technologies on aviation. This forum delves into the latest advancements in digital engineering, including AI-driven design and model-based systems development, which are reshaping aircraft development and operational efficiency. Discussions will also highlight the role of digital twins and high-fidelity simulations in optimizing aircraft performance and maintenance. Additionally, the event examines next-generation aviation training solutions, from advanced flight simulators to AI-enhanced learning systems that enable personalized, data-driven pilot education. By fostering collaboration and knowledge exchange, this forum aims to accelerate the adoption of cutting-edge digitalization and intelligent technologies across the aviation ecosystem, paving the way for smarter, safer, and more efficient air travel.

08:20-08:30	**Opening** Chair: Dr. Bingjun ZHU Associate Professor, Director of International Cooperation Office, School of Aeronautic Science and Engineering, BUAA
	Opening Address: Prof. Xiaolu WANG Dean, Professor, School of Aerospace Engineering, Zhengzhou University of Aeronautics
08:30-10:00	**Invited Lecture** Chair:Dr. Bingjun ZHU
08:30-09:00	**Topic: Physics-Informed Neural Networks for System Identification of a Flexible-Wing Unmanned Aircraft: Model-Based and Data-Driven Approaches** Speaker: Prof. Luiz GOES Aeronautical Institute of Technology (ITA) of Brazil
09:00-09:30	**Topic: A Mass-Oriented Conceptual Sizing Approach for Lift-Plus-Cruise eVTOL Aircraft** Speaker: Prof. Xiaolu WANG Dean, School of Aerospace Engineering, Zhengzhou University of Aeronautics
09:30-10:00	**Topic: Empowering Global Innovators: From Knowledge Creation to Advanced Air Mobility** Speaker: Mrs. Samie LY Co-founder, R&D at Innovatank, Co-chair of the World Case Committee, Canada
10:00-10:30	**Coffee Break**
10:30-12:00	**Invited Lecture** Chair: Prof. Xiaolu WANG Dean, Professor, School of Aerospace Engineering, Zhengzhou University of Aeronautics
10:30-11:00	**Topic: Toward Self-Sensing Composites for Next-Generation Aerospace Structures** Speaker: Dr. Anchalee DUONGTHIPTHEWA Hangzhou International Innovation Institute of Beihang University, Thailand
11:00-11:30	**Topic: Design, Development, and Flight Testing of a Lightweight Hand-Launched Small Unmanned Aerial Vehicle for Swarm Operations** Speaker: Dr. Phacharaporn BUNYAWANICHAKUL Department of Aerospace Engineering, Kasetsart University, Thailand
11:30-12:00	**Topic: Repair of Discontinuous Aligned Fibre Vitrimer Composite for Sustainable Aircraft Structure** Speaker: Dr. Narongkorn KRAJANGSAWASDI Department of Aerospace Engineering, Kasetsart University, Thailand
12:00-13:30	**Lunch**
13:30-15:30	**Invited Lecture** Chair:Dr. Bingjun ZHU
13:30-14:00	**Topic: AI Agent-Driven Integrated Aerodynamic Design and Simulation for eVTOL Aircraft** Speaker: Dr. Yu LIANG Institute of Unmanned System, Beihang University
14:00-14:30	**Topic: Blended Wing Body Aircraft Designing, Manufacturing and Flying** Speaker: Dr. Abbasali SABOKTAKIN Department of Aerospace Engineering, Izmir Economic University, Turkey
14:30-15:00	**Topic: Aerodynamic and Aeroacoustic Characteristics of a Variable Morphing Trailing-Edge Airfoil with Blowing and Suction Flow Control** Speaker: Dr. Ling LI School of Aeronautic Science and Engineering, Beihang University
15:00-15:30	**Topic: Deep Learning-Based Wake Reconstruction for Vortex-Induced Vibrations in a Flexible Flag System** Speaker: Prof. Zaib ALI Head of Department of Mechanical Engineering, National University of Science and Technology, Pakistan

15:30-16:00	**Coffee Break**
16:00-17:00	**Invited Lecture** Chair: Prof. Zaib ALI Head of Department of Mechanical Engineering, National University of Science and Technology, Pakistan
16:00-16:30	**Topic: Environment-Assisted Flight and Passive Glide Strategies for Extended-Endurance UAVs** Speaker: Dr. Muhammad Umar SOHAIL Institute of Space Technology (IST) Islamabad, Pakistan
16:30-17:00	**Topic: Drag reduction using asymmetric corner modification of square cylinder** Speaker: Dr. Muhammad Yamin YOUNIS Hangzhou International Innovation Institute of Beihang University, Pakistan
17:00-18:00	**Paper Oral Presentation** Chair: Dr. Bingjun ZHU
	Topic: High-Fidelity Modeling and Verification of Primary Flight Control Cockpit System Based on Digital Twin Speaker: Chang GE AVIC Xi'an Flight Automatic Control Research Institute
	Topic: A Simulation Method for Autonomous Operation of TBO-Supported Gate-to-Gate Fixed-Wing Aircraft Speaker: Lidong ZHANG China National Aeronautical Radio Electronics Research Institute
	Topic: Validator-Iterative LLM Knowledge Extraction and Model Generation for Aircraft Functional Architecture Speaker: Yusen WANG AVIC Chengdu Aircraft Design & Research Institute
	Topic: A Digital-Twin-Oriented Method for Intermittent Fault Analysis and Fault-Tolerant Improvement in Complex Avionics Equipment Speaker: Yufei MA Aviation Industry Corporation of China, Ltd.

Venue: Function Room 202

Track 5: Advanced Air Mobility(AAM) Forum

Jointly organized by School of Transportation Science and Engineering, BUAA;
AVIC Xi'an Flight Automatic Control Research Institute

北航 交通科学与工程学院 SCHOOL OF TRANSPORTATION SCIENCE AND ENGINEERING 中国航空工业集团自控所

Supported by CSAA TC of Electric Aviation; CSAA TC of Flying Cars; CSAA TC of Airworthiness



Co-chair:
Shichun YANG
Professor, School of Transportation Science and Engineering, BUAA



Co-chair:
Kwanjung YEE
Professor, Director of VTRC (VTOL Technology Research Center), Seoul National University



Executive Co-chair:
Min MIN
Professor, School of Automation Science and Electrical Engineering, BUAA

Committee:
Hong GUO Professor, BUAA, IAGA Founding Member
Jae Woo LEE Professor, Konkuk University, President of Korean Academy of Space Security(KASS), IAGA Founding Member
Zhuoran ZHANG Professor, Nanjing University of Aeronautics and Astronautics, IAGA Founding Member
Yiheng LI CEO, Zero-Gravity
Yuanyang GAO Director of General Aviation Industry Research Center of Beihang University; Advisor of ICAO AAM Study Group
Jun CHE Deputy Chief Engineer, AVIC Xi'an Flight Automatic Control Research Institute, ICAS PC member
Tianxing HE VP, EHang
Mingkai WANG Associate Professor, Hangzhou International Innovation Institute of Beihang University
Samie LY Co-founder, R &D at Innovatank, Co-chair of the World Case Committee

Introduction:

The forum focuses on transformative electric vertical takeoff/landing (eVTOL) and flying car innovations. These advanced air mobility solutions promise to revolutionize urban and regional transport by offering congestion-free, point-to-point travel with low noise and emissions, utilizing vertical takeoff/landing capabilities for urban rooftop/helipad operations. Key challenges include proposing energy-efficient configurations and propulsion systems for longer ranges, flight system dynamics modelling/control/planning for better flying quality and ride comfortability, and improving safety/reliability by system engineering and airworthiness technologies. Regulatory frameworks for airspace integration are also critical. Bringing together industry experts and researchers, the forum facilitates exchanges on technological breakthroughs and collaborative solutions. By addressing technical hurdles, participants aim to accelerate commercialization, driving a sustainable, accessible future where these innovative aerial vehicles complement traditional aviation, reshaping global mobility. During this track, top 3 winners of the Year 3/Green Aviation Case Study Competition will be invited to present their projects.

08:40-09:00	**Opening** Chair: Prof. Min MIN School of Automation Science and Electrical Engineering, BUAA
	Opening Address
	1. Prof. Shichun YANG Professor, School of Transportation Science and Engineering, Beihang University
	2. Mr. Jun CHE Vice Chief Engineer, AVIC Xi'an Flight Automatic Control Research Institute
	3. Prof. Kwanjung YEE Professor & Director, Vertical Takeoff and Landing Vehicle Technology Research Center (VTRC), Seoul National University, Republic of Korea
	4. Mr. JR HAMMOND Executive Director of AAM Industry Association of Canada(CAAM)
09:00-10:00	**Invited Lecture** Chair: Prof. Min MIN
09:00-09:30	**Topic: Global Advances in AAM: Policies and Developments** Speaker: A/Prof. Yuanyang GAO Director of General Aviation Industry Research Center of Beihang University; Advisor of ICAO AAM Study Group
09:30-10:00	**Topic:AI-Assisted Architecture-Agnostic Aircraft Design Methodology** Speaker: Prof. Kwanjung YEE Professor & Director, Vertical Takeoff and Landing Vehicle Technology Research Center (VTRC), Seoul National University, Republic of Korea
10:00-10:30	**Coffee Break**
10:30-12:00	**Invited Lecture** Chair: Prof. Kwanjung YEE Professor & Director, VTRC, Seoul National University, Republic of Korea
10:30-11:00	**Topic: Some Thoughts on Advanced Air Mobility and AI** Speaker: Mr. Luohui SU Researcher & Vice Chief Engineer, AVIC Xi'an Flight Automatic Control Research Institute
11:00-11:30	**Topic: eVTOL Human-Computer Interaction Design and Passenger Comfort Enhancement Technologies** Speaker: Prof. Yuhan LI Nanjing University of Aeronautics and Astronautics
11:30-12:00	**Topic: Unlocking Low-Altitude Commercialization: The Avionics & Flight Control Path to Market** Speaker: Mr. Weiwei MAO Marketing Director, Aviage Systems
12:00-13:30	**Lunch**
13:30-14:30	**Green Aviation Case Study Presentation** Chair: Mrs. Samie LY Co-founder, R&D at Innovatank, Co-chair of the World Case Committee, Canada
	Project 1: SAFE-TO-SCALE TriWing , Southwest Jiaotong University, School of Transportation and Logistics & Civil Aviation Flight University of China, China
	Project 2: Building Public Trust and Impact Wings of Change, McGill University & Concordia University, Canada
	Project 3: From Certification to Scale: A Risk-Constrained and Market-Driven Commercialization Strategy for the AE200eVTOL UrbanWings, Nanjing University of Aeronautics and Astronautics, China
	Project 4:Scaling Beyond China: Aerofugia's International Growth Strategy (Video) Skybound, McGill University, Canada
14:30-15:00	**Paper Oral Presentation** Chair:A/P. Mingkai WANG Hangzhou International Innovation Institute of Beihang University
	Topic: Research on the Future Development Spectrum of Transportation Aircraft Driven by New Configuration and New Energy Speaker: Zhengbo ZHU AVIC The First Aircraft Institute
	Topic: Study on the Global Acoustic Method for Aircraft ECS Piping Speaker: Jiafeng YANG Aircraft Strength Research Institute of China
	Topic: Parametric Modeling and Analysis of Acquisition Cost for eVTOL Vehicles Speaker: Gang LI AVIC Development Research Center
15:00-15:30	**Coffee Break**

Venue: Function Room 202

Export to China—AAM Industry Matchmaking Event

Organizer: Trade Development Bureau of Ministry of Commerce;
Chinese Society of Aeronautics and Astronautics(CSAA)

商务部外贸发展事务局 Trade Development Bureau of Ministry of Commerce TDB
中国航空学会 Chinese Society of Aeronautics and Astronautics

Supported by: Xi'an Municipal Bureau of Commerce, Canadian Advanced Air Mobility Association (CAAM)

Introduction:
At present, the global Advanced Air Mobility (AAM) industry is undergoing rapid development, while China's low-altitude economy continues to expand. Demand across China's AAM industry for advanced technologies, core components, airborne systems, and specialized integrated solutions is steadily increasing. This import promotion event is designed to connect leading enterprises across China's AAM industry chain with high-quality international suppliers, showcasing advanced AAM products, technologies, and supporting services from around the world. It will also provides domestic and international suppliers in the low-altitude economy with a dedicated business platform for face-to-face engagement with Chinese UAV and eVTOL manufacturers, as well as aviation operation and service providers, thereby facilitating practical cooperation and targeted business matchmaking.

Scan the QR code to register

13:30-15:30	**On-site Registration Foyer of Function Room 202**
15:30-15:40	**"Export to China" Promotional Video**
15:40-16:00	**Opening Ceremony** Chair: A/Prof. Yuanyang GAO Adviser to the ICAO AAM Study Group
	Address by Mr. Shuyan YIN Deputy Director-General, TDB
	Address by Mr. Ce YU Associate Secretary-General, CSAA
16:00-16:40	**Keynote Speech** Moderator: A/Prof. Yuanyang GAO
16:00-16:20	**Topic: The Global AAM Industry Chain Landscape** Speaker: Mr. He REN President, Shanghai Low-Altitude Economy Association; Specially-Invited Vice President, China Industrial Design Association; COMAC Overseas Expert; Founding Member, International Association for Green Aviation(IAGA)
16:20-16:40	**Topic: Advances in Cutting-Edge Technologies of eVTOL Aviation Power Batteries** Speaker: Dr. Chen CAO Research and Development Director of CALB
16:40-17:40	**Company Roadshow (3-5 minutes each)** Chair: Mr. Michael SUNG Chair and General Manager, Carbon Blue International, IAGA Founding Member, UAE
	THELSYS — Germany Zephyr Dynamics — Netherlands AVIC Xi' an Flight Automatic Control Research Institute— China Volar Air Mobility — United Kingdom INFLYNC — China AEROFUGIA — China European Academy of Aviation Technics (EAAT) — Netherlands E-magy (Battery Materials Technology) — Netherlands Canadian Advanced Air Mobility (CAAM) — Canada
17:40–18:30	**Free Matchmaking and Networking**

Venue: Jianzhang Hall 4

Track 6: Adaptive Aerospace Structure Forum

Organized by Harbin Institute of Technology(HIT)

哈爾濱工業大學 HARBIN INSTITUTE OF TECHNOLOGY

Supported by School of Astronautics, HIT; CSAA TC of Electromagnetic Functional Structure

哈尔滨工业大学航天学院 SCHOOL OF ASTRONAUTICS HARBIN INSTITUTE OF TECHNOLOGY



Chair:
Yanju LIU
Professor, HIT



Executive Co-chair:
Jian SUN
Professor, HIT

Committee:
Jinglei YANG The HongKong University of Science and Technology
Pavel UTKIN HIT, Russia
Xiang ZHOU Shanghai Jiao Tong University
Fei JIA HIT
Hongli JI Nanjing University of Aeronautics and Astronautics
Chenchao FANG Professor, HIT
Jie ZHOU Northwestern Polytechnical University
Yonglin ZHANG The HongKong University of Science and Technology
Muhammad Ahmed KHAN HIT, Pakistan
Noor Zeb KHAN HIT, Pakistan

Introduction:

The Adaptive Aerospace Structures Forum (AASF) aims to explore the cutting-edge advancements in the design, analysis, and application of intelligent aerospace systems. This forum brings together leading experts to discuss the latest research and innovations in the convergence of advanced materials, mechanics, and intelligent systems. Participants will delve into the development of smart sensing systems for real-time structural awareness, the integration of high-performance smart actuators for morphing and vibration control, and the analysis of unsteady aerodynamics in dynamic flight regimes. Furthermore, the forum will highlight the design and optimization of adaptive metastructures with programmable properties. The goal is to foster interdisciplinary collaboration and identify solutions that enable resilient, lightweight, and high-performance aerospace structures for a new era of aviation and space exploration.

08:40-09:00	**Opening** Chair: Prof. Fei JIA HIT
	Opening Address Speaker: TBD
09:00-10:00	**Invited Lecture** Chair: Prof. Fei JIA
09:00-09:30	**Topic: Ionic-Liquid Based Shear Thickening Fluid for Impact Energy Absorption** Speaker: Prof. Jinglei YANG The HongKong University of Science and Technology
09:30-10:00	**Topic: Numerical Study of Unsteady Aerodynamics of Particles in Compressible Flows** Speaker: Prof. Pavel UTKIN HIT, Russia
10:00-10:30	**Coffee Break**
10:30-12:00	**Invited Lecture** Chair: Prof. Jian SUN HIT
10:30-11:00	**Topic: Structural Design of Multi-Configuration Morphing Airfoils** Speaker: A/Prof. Xiang ZHOU Associate Dean, Associate Professor Shanghai Jiao Tong University
11:00-11:30	**Topic: Designs and Applications of Tunable Frequency Selective Surfaces** Speaker: Mrs. Mengyuan LI Senior Engineer, AVIC Research Institute for Special Structures of Aeronautical Composites
11:30-12:00	**Topic: Snap-through Events in Indentation of Perforated Membranes, and Peeling Behavior of a Film from a Tube** Speaker: Prof. Fei JIA HIT
12:00-13:30	**Lunch**
13:30-15:30	**Invited Lecture** Chair: Dr. Pavel UTKINHIT
13:30-14:00	**Topic: Application of Acoustic Black Holes in Panel Flutter Suppression** Speaker: Prof. Hongli JI Nanjing University of Aeronautics and Astronautics (NUAA)
14:00-14:30	**Topic: Acoustic Metamaterial Design for Aircraft Noise Reduction** Speaker: Prof. Jie ZHOU NPU
14:30-15:00	**Topic: Shape Memory Polymers in Morphing Aircraft** Speaker: Prof. Jian SUN HIT
15:00-15:30	**Topic: Intrinsic Interfacial Electric Fields in Interfacial Polymerization: In-situ Monitoring and Modeling** Speaker: Dr. Yonglin ZHANG The HongKong University of Science and Technology
15:30-16:00	**Coffee Break**
16:00-17:00	**Invited Lecture** Chair: Dr. YonglinZHANG The HongKong University of Science and Technology
16:00-16:30	**Topic: Unveiling Magnetoelectric Coupling in Tri-phasic Multiferroic Composite for Robust Mechanical Sensors: A Correlated Analysis of Experimental and Finite Element Approach for Interfacial Interactions** Speaker: Dr. Muhammad Ahmed KHAN HIT, Pakistan
16:30-17:00	**Topic: Magnetohydrodynamic Natural Convection and Entropy Generation of a Ternary Hybrid Nanofluid in a Corrugated Porous Enclosure: A Finite Element Study for Efficient Aerospace Thermal Management** Speaker: Dr. Noor Zeb KHAN HIT, Pakistan
17:00-18:00	**Paper Oral Presentation** Chair: Dr. Yonglin ZHANG The HongKong University of Science and Technology
	Topic: KinetiX-Inspired 3D Metamaterial: Mechanism and Design of In-Plane to Out-of-Plane Deformation Coupling for Folding Wings Speaker: Yuting ZHAO HIT
	Topic: Adaptive Design Method of RCS Low Scattering Carrier Speaker: Bing CHI AVIC Luoyang Electro-Optical Equipment Research Institute
	Topic: Thermo-Hydraulic Performance of a Corrugated Channel with Oriented Triangular Porous Baffles for Aerospace Thermal Management Speaker: Shah Imtiaz ALI Department of Aerospace and Mechanics, HIT
	Topic: Neural Networks Based Inverse Design of Inhomogeneous Tetrachiral Honeycombs for Desired Deformation Speaker: Linzhe DU HIT

Paper Acceptance Results and Presentation Activities

Paper ID (Type)	Title	Author	Institute	Presentation Type
Track 1 : Green Aero-Power Forum				
ICGA2026-046 Full paper	Research on Flight Operational Risk Assessment Model under Blending Conditions of Different Grades of Aviation Turbine Fuels	Tai ZENG, Qiang WANG, Zhiqiang SONG, Bin WU, Yixia QIU, Yicheng HUANG, Zhengliang SU, Hua LIU	The Second Research Institute of CAAC, Commercial Aircraft Corporation of China, Ltd.	oral
ICGA2026-061 Full paper	Study on Combustion Characteristics of an Array Micro-tube Annular Pure Hydrogen Combustor	Meng HAN, Lichuan ZHANG, Xiaojun YANG, Jianchen WANG, Haoqi REN	Civil Aviation University of China, Beihang University	oral
ICGA2026-045 Full paper	Sensitivity Analysis of Design Parameters for Endurance Performance Optimization of a Hydrogen Hybrid UAV	Peng NIAN, Yu ZHANG, Yusen WANG, Jintao YANG, Xuan PEI, Chengxi WANG	AVIC Chengdu Aircraft Design and Research Institute	oral
ICGA2026-023 Full paper	The impact of Corona-Activated Air Supply on the Performance of Air-Cooled PEMFCs	Li SONG	Beihang University	oral
ICGA2026-065 Full paper	Research on Architecture Optimization Design and Multi-Dimensional Evaluation Method for Aircraft Fuel Thermal Management Systems	Linhai ZHU, Xiulong CUI, Chuang CHEN, Yichao MA, Haoda XIE, Wenxuan ZHANG, Xianglin ZHANG	Shenyang Aircraft Design Institute, Beihang University	poster
ICGA2026-039 Full paper	Techno-Economic Design Assessment of Hydrogen Fuel-Cell and Hybrid-Electric Propulsion for a 100-Passenger Regional Aircraft	Fabrizio NICOLOSI, Mario Di STASIO, Giuseppe MELONE	University of Naples Federico II	poster
ICGA2026-027 Full paper	Fuel Supply Strategy Assessment for a PEMFC Hybrid Electric-Fuel Aircraft under Fixed Onboard Mass Ratio	Chengxi WANG, Yusen WANG	AVIC Chengdu Aircraft Design and Research Institute	poster
ICGA2026-038 Full paper	Aerodynamic Challenge of Wide-Working-Condition High-Speed Low-Pressure Turbine for Green and Efficient Aviation Power	Jing-ying XU	AECC Commercial Aircraft Engine Co., Ltd.	poster
ICGA2026-036 Full paper	Integrated Seven-Switch SiC Power Module Topology Upgrade for Aviation Electric Propulsion and Servo Systems	Xue TIAN, Qimeng GAO, Pengfei SHI, Chao CHEN, Zhihua HAN	Xi'an Hengxiang Control Technology Co., Ltd, AVIC Xi'an Flight Automatic Control Research Institute	poster
ICGA2026-020 Full paper	Based on the improved relative coupling control of the multi-motor collaborative control system for electric propulsion	Zhangang YANG, Yu ZHAO	Civil Aviation University of China	poster
ICGA2026-019 Full paper	Research on Estimating the Size of Engine-off Taxiing Towing Fleet and Optimal Assignment Strategy for an Airfield Area	Wei ZHANG, Xiaokun LI, Xiuzheng SHI, Chao HU	Civil Aviation University of China	poster
ICGA2026-007 Full paper	Supersonic Ejector Nozzle Primary-Secondary Flow Matching and Separated Flow Control	Hui ZHANG, Junfu LI, Kun QIN	The First Aircraft Institute, Aviation Industry Corporation of China	poster
Track 2: Sustainable Aviation Fuels (SAF)				
ICGA2026-048 Full paper	Intelligent Prediction Method for Ignition Delay Time of Sustainable Aviation Fuel Surrogate Systems: A Study on Dual-Branch Neural Networks and Transfer Learning	Xiaoyu TIAN, Qingmiao DING, Yanyu CUI	Civil Aviation University of China	oral

Paper ID (Type)	Title	Author	Institute	Presentation Type
ICGA2026-008 Full paper	Bridging the Ambition Gap: ReFuelEU Aviation and the SAF Implementation Challenge	Peng HE	Aviation Industry Development Research Center of China	oral
ICGA2026-059 Abstract	Metal-zeolite for the high-value utilization of pyrolysis gas (alkane and CO2) produced from biomass pyrolysis	Zhongpan HU	Civil Aviation University of China	oral
ICGA2026-056 Abstract	Aircraft Level Digital and Intelligent Evaluation and Airworthiness Certification Architecture for Novel Alternative Aviation Fuels	Fan YANG, Xin HUI, Yuwei WANG	Beihang University, COMAC Beijing Civil Aircraft Technology Research Center	poster
ICGA2026-009 Full paper	Research on Microstructure and Properties of Internal Plasma Sprayed WC10Co4Cr Coatings based on Orthogonal Experiment	Ziyang ZHANG	Nanjing Mechanical and Electrical Hydraulic Engineering Research Centre	poster
Track 3: Green Aviation Smart Structure and Manufacturing				
ICGA2026-067 Abstract	A Mesh-First Modeling Framework for Complex Stiffened Shell Structures Using All-Hexahedral Mesh Mapping	ChunI LIN, Liang XIA	Huazhong University of Science and Technology	oral
ICGA2026-062 Full paper	Theory and applications of the B-factor in scattering topology optimization	Weijun KONG, Manyu XIAO, Xirou BAI, Linhui DUAN, Jinzhou SUN	Northwestern Polytechnical University	oral
ICGA2026-051 Full paper	Interface-Aware Neural Newton Preconditioning for Robust Cohesive Zone Model Simulations	Zhangyong LIANG, Huanhuan GAO	Tianjin University, Jilin University	oral
ICGA2026-031 Full paper	Customizable Metamaterial with Low-frequency Bandgap for Broadband Vibration Suppression and Noise Attenuation	Tian DENG	Aircraft Strength Research Institute of China	oral
ICGA2026-042 Full paper	Collaborative Planning and Dual-Trajectory Control Methods for Mobile Manipulators under Complex Spatiotemporal Constraints	Hua BAI, Qingwen YUN	Harbin Aircraft Industry Group Co., Ltd.	poster
ICGA2026-066 Abstract	Topology Optimization of Periodic Thin-Walled Stiffened Panels Based on Generalized Plate Homogenization	Huoqing WEI, Liang XIA	Huazhong University Of Science and Technology	poster
ICGA2026-032 Abstract	Numerical Simulation Study on Aerodynamic Interference of Vegetation Turbulence to Low-Altitude UAV Flight	Caiping JIN	Zhengzhou University of Aeronautics	poster
ICGA2026-043 Full paper	Research on Alternatives to Halon Fire Suppression Systems for Civil Aircraft	Tai ZENG, Zhiqiang LI, Bin WU, Huiwen YU, Wenwu WANG, Qi YANG, Hua LIU	The Second Research Institute of CAAC, COMAC Beijing Civil Aircraft Technology Research Center	poster
ICGA2026-041 Full paper	Study on Storage Degradation Mechanism and Long-term Storage Stability of 2-BTP Fire Extinguishing Agent	Tai ZENG, Zhiqiang LI, Bin WU, Huiwen YU, Wenwu WANG, Qi YANG, Hua LIU	The Second Research Institute of CAAC	poster
ICGA2026-069 Abstract	Hybrid DNN-GA Framework for Metamaterials with High-Precision Customizable Properties and Broadened Bandgaps Guided by Topology-Optimized Configurations	Liang WANG, Weizhi LUO, Liang XIA	Huazhong University Of Science and Technology	poster

Paper ID (Type)	Title	Author	Institute	Presentation Type
ICGA2026-068 Abstract	Topology optimization of viscoelastic composite structures with stiffness–damping synergy from flat plates to curved shells	Lanxiao PENG	Huazhong University of Science and Technology	poster
ICGA2026-055 Full paper	Multi-dimensional Transformation and Paradigm Reconstruction of Aviation Green Low-Carbon Manufacturing Technology	Xiao LIANG	Commercial Aircraft Engine Co., Ltd., AECC	poster
Track 4: Aviation Digitalization and Intelligence Forum				
ICGA2026-054 Full paper	High-Fidelity Modeling and Verification of Primary Flight Control Cockpit System Based on Digital Twin	Chang GE, Yan LIU, Zhuo CHEN, Tianqi MENG	AVIC Xi'an Flight Automatic Control Research Institute	oral
ICGA2026-029 Full paper	Validator-Iterative LLM Knowledge Extraction and Model Generation for Aircraft Functional Architecture	Yusen WANG	AVIC Chengdu Aircraft Design and Research Institute	oral
ICGA2026-021 Full paper	A Digital-Twin-Oriented Method for Intermittent Fault Analysis and Fault-Tolerant Improvement in Complex Avionics Equipment	Yufei MA	AVIC Aeronautical Radio Electronics Research Institute	oral
ICGA2026-014 Full paper	A Simulation Method for Autonomous Operation of TBO-Supported Gate-to-Gate Fixed-Wing Aircraft	Lidong ZHANG, Haohan LUO, Yizhou YAN, Shiheng WANG, Hairui YANG, Zhipeng CUI, Dezhen HU, Jizhi MAO	China Aeronautical Radio Electronics Research Institute	oral
ICGA2026-050 Full paper	Numerical Simulation Study on the Effects of Cooling Airflow Rate on Fire Characteristics in Aircraft Electronic Bays	Bin WU, Tai ZENG, Bo XIN, Zhengliang SU	The Second Research Institute of CAAC, Jiangxi Aircraft Airworthiness Certification Center of CAAC	poster
ICGA2026-049 Full paper	Numerical Simulation Study on the Dynamics and Heat Transfer Characteristics of Droplet Impact on a Hot Surface	Bin WU, Tai ZENG, Bo XIN, Zhengliang SU	The Second Research Institute of CAAC, Jiangxi Aircraft Airworthiness Certification Center of CAAC	poster
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ICGA2026-047 Full paper	Numerical Simulation of Heat Transfer and Evaporation Characteristics of Aluminum Alloy Fuel Tanks under High-Temperature Conditions	Yicheng HUANG, Bin WU, Tai ZENG, Zhengliang SU	The Second Research Institute of CAAC	poster
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Track 5: Advanced Air Mobility(AAM) Forum				
ICGA2026-015 Full paper	Research on the Future Development Spectrum of Transportation Aircraft Driven by New Configuration and New Energy	Zhengbo ZHU	The First Aircraft Institute, Aviation Industry Corporation of China	oral
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ICGA2026-071 Full paper	Parametric Modeling and Analysis of Acquisition Cost for eVTOL Vehicles	Gang LI, Huifeng WEI, Jingmin WU	Aviation Industry Development Research Center of China	oral
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ICGA2026-010 Full paper	Design and Implementation of an SoC-Based Integrated Cockpit Display Unit for general aviation Aircraft	Shu LIN, Yijun XIE, Zhi LIU, Mei WANG, Liwen CAO, Hongjun LI	China National Aeronautical Radio Electronics Research Institute	poster
Track 6: Adaptive Aerospace Structure Forum				
ICGA2026-053 Abstract	KinetiX-Inspired 3D Metamaterial: Mechanism and Design of In-Plane to Out-of-Plane Deformation Coupling for Folding Wings	Yuting ZHAO	Harbin Institute of Technology	oral
ICGA2026-040 Abstract	Neural networks based inverse design of inhomogeneous tetrachiral honeycombs for desired deformation	Linzhe DU	Harbin Institute of Technology	oral
ICGA2026-028 Abstract	Adaptive Design Method of RCS Low Scattering Carrier	Bing CHI	AVIC Optronics	oral
ICGA2026-074 Abstract	Thermo-Hydraulic Performance of a Corrugated Channel with Oriented Triangular Porous Baffles for Aerospace Thermal Management	Shah Imtiaz ALI	Harbin Institute of Technology	oral

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