

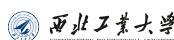
ICGA 2025

THE 3RD INTERNATIONAL CONFERENCE
ON GREEN AVIATION

PROGRAM



Co-organizers



Cooperators



Supporting International Organizations



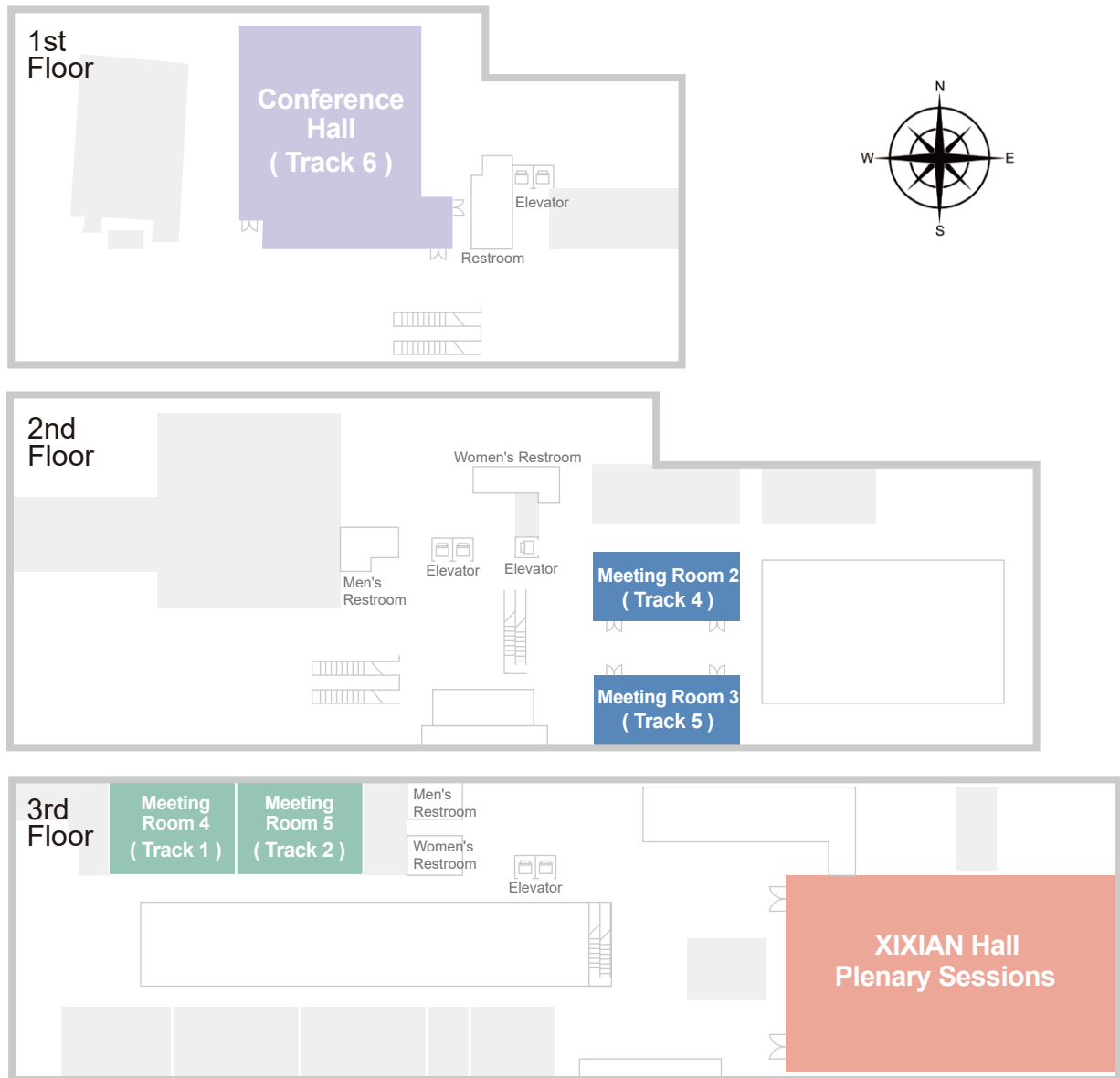
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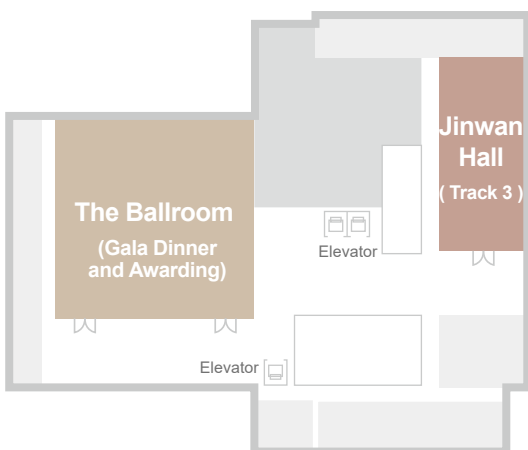
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Floor Plan of Xixian International Conference Center



Floor Plan of the Third Floor, Novotel Hotel



Purpose and Significance

The ICGA is an annual event 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 United Nations Sustainable Development Goals (UN SDGs) and the International Civil Aviation Organization (ICAO) Long Term Aspirational Goal (LTAG).

Date: October 22-24, 2025

Venue: Xi'an Xixian International Convention Center & Xixian Novotel Hotel, Shaanxi Province, China

Official Language: English (only Plenary with translation and Track 6 in Chinese)

Theme: Clean, Smart, Safe, and Innovative Aviation

Conference Components: Plenary Sessions, Parallel Forums, Exhibition, Business Activities, Student Case Study Competition

Co-organizers:

Chinese Society of Aeronautics and Astronautics (CSAA)
International Association for Green Aviation (IAGA)
Shaanxi Association for Science and Technology (SNAST)
Northwestern Polytechnical University (NPU)
Beihang University (BUAA)

Cooperators:

Shaanxi Xixian New Area Development and Construction Management Committee
Shaanxi Society of Aeronautics & Astronautics
Zhonghang Shangda Superalloys Co., Ltd.

Supporting International Organizations:

International Civil Aviation Organization (ICAO)
International Coordinating Council of Aerospace Industries Associations (ICCAIA)
International Council of the Aeronautical Sciences (ICAS)
Airports Council International (ACI)
International Air Transport Association (IATA)
Royal Aeronautical Society China Representative Office (RAeS-China)
International Society for Air Breathing Engines (ISABE)
Italian Association of Aeronautics and Astronautics (AIDAA)

Sponsors:

Silver: PAC (Shanghai) Co., Ltd ; Badge Lanyard: Singapore Airshow

Organizing Committee

Chair:

Weihong ZHANG, VP of CSAA, Professor of NPU, Founding Member of IAGA

Co-Chairs (IAGA Founding Members):

Fengtian YANG, Chief Scientist, Liaoning General Aviation Academy

Qiao XIANG, Former VP, AECC

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

Zhi TAO, Professor, BUAA

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

Shijun YIN, Former Chief Engineer, CAAC; VP, CSAA; Candidate VP, IAGA

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

Juncheng YAO, VP, CSAA; Candidate VP, IAGA

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

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

Triant FLOURIS, VP, Metropolitan College; Candidate VP, IAGA, Greece

Committee Members:

Marco AMABILI, Professor, Westlake University, 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

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

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

Guo LI, Dean, School of Energy and Power Engineering, Beihang University

Zuxi XIA, Vice Director, Second Research Institute of CAAC

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

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

Aziz TAHIRI, VP, Hexagon Global Aerospace and Defense, France

Fabrice ESPINOSA, Founder and CEO, Asia SAF Association(ASAF), France

Lu QIU, Vice Dean, the School of Energy and Power Engineering, BUA

Jie KONG, Director, International Cooperation Office; Dean, NPU International College; President, NPU-Kazakhstan Branch Campus

Zhenxi NIU, Director, Scientific Research Institute, Institute of Science and Technology, NPU

Xiaolu WANG, Professor, Dean of School of Aerospace Engineering, Zhengzhou University of Aeronautics

Jun CHE, Vice Chief Engineer, AVIC Xi'an Flight Automatic Control Research Institute

Ziheng XING, Head, Climate Action at Cathay Pacific

Schedule at a Glance (Up to Oct. 18, 2025)

For the update information, please always refer to the online AGENDA



October 21 Arrival Day

15:00-20:00	On-Site Registration//Exhibition Setup/ PPT Uploading	Lobby, Xi'an Xixian Novotel Hotel
19:00-21:00	Final Evaluation of the Global Green Aviation Case Study Student Competition (Open for All Conference Delegates)	Meeting Room, 2nd Floor, Xi'an Xixian International Conference Center

October 22 Plenary Day

07:50-08:30	On-Site Registration	Lobby, 1st Floor, Xixian International Conference Center
08:30-17:30	Plenary Sessions	The Main Hall, 3rd Floor, Xixian International Conference Center
18:30-20:30	Green Aviation Night (Gala Dinner and Awarding)	The Ballroom, 3rd Floor, Xi'an Xixian Novotel Hotel

October 23 Parallel Forums

08:15-18:15	Track 1: Green Aero-Power Forum	Meeting Room 4, 3rd Floor, Xixian International Conference Center
08:15-17:30	Track 2: Sustainable Aviation Fuels (SAF) Forum	Meeting Room 5, 3rd Floor, Xixian International Conference Center
08:20-18:30	Track 3: Green Aviation Smart Structure and Manufacturing Forum	Jinwan Hall, 3rd Floor, Xi'an Xixian Novotel Hotel
08:25-17:45	Track 4: Aviation Digitalization and Intelligence Forum	Meeting Room 2, 2nd Floor, Xixian International Conference Center
08:40-18:00	Track 5: Advanced Air Mobility (AAM) Forum	Meeting Room 3, 2nd Floor, Xixian International Conference Center
08:40-15:30	Track 6: Green Aviation Development Strategy	Conference Hall, 1st Floor, Xixian International Conference Center

October 22

AGENDA

Plenary Sessions

The Main Hall, 3rd Floor, Xixian International Conference Center

08:30-09:00	Opening Ceremony Moderator: Mr. Ce YU Associate Secretary General, CSAA; Candidate SG, IAGA	Opening Address Speaker: Prof. Weihong ZHANG, ICGA 2025 Chair Speaker: Mr. Yuqi LI, Executive President, Shaanxi Association for Science and Technology Speaker: Mr. Wensheng WU, Vice President, COMAC Launch of Sustainable Aviation Fuel and Green Aviation—Research and Development Speaker: Prof. Weiping LI Chief Scientist, Civil Aviation Flight University of China; Chair, Health, Facilitation and Crisis Re-sponse Committee (HFCRC) of ICCAIA; Founding Member of IAGA
09:00-09:30	Key-note Speech Moderator: Prof. Weihong ZHANG	Topic: Green Finance as a Driving Force for Green Aviation Development Speaker: Dr. Jun MA Former Chief Economist, PBoC's Research Bureau; Chairman, Green Finance Committee of China Society for Finance and Banking; President, Institute of Finance and Sustainability; Senior Advisor, SAFPAC Limited
09:30-09:45	Prof. Weihong ZHANG ICGA 2025 Chair VP of CSAA; Professor, NPU	Topic: Global Sustainable Transport Development Speaker: Mr. Disi LI Director, International Cooperation and Exchange Center, Global Sustainable Transport Innovation and Knowledge Center (GSTIKC)
09:45-10:00		Topic: Green Aviation and Global Climate Change Speaker: Dr. WeeKean FONG Head, Climate & Resources, Greater China World Economic Forum (WEF)
10:00-10:30	Tea Break & Exhibition Visit	
Moderator: Mr. Shijun YIN Former Chief Engineer, CAAC; VP, CSAA; Candidate VP, IAGA		
10:30-11:10	Panel Discussions 1	Topic: Global Collaboration and Cooperation for Large-Scale Deployment of SAF Moderator: Dr. Jinxia FU, Chief Scientist, Second Research Institute of CAAC Speakers: Mr. Michael LUNTER, Chair, ICAO CAEP Mr. Fabrice ESPINOSA, Founder and CEO, Asia Sustainable Aviation Fuel Association Dr. Shen WANG, CEO, SAFPAC Limited Mrs. Elaine CHEN, VP, Corporate Public Affairs, DHL Group
11:10-11:50	Panel Discussions 2	Topic: Driving Green Aviation Development Through Market Mechanisms and Innovation Moderator: Dr. Xiaorong LU Founder, Shanghai RGL Science and Technology Company; Founding Member, IAGA Speakers: Dr.Fang LIU, Former Secretary General, ICAO Prof. Weiping LI, Chief Scientist, Civil Aviation Flight University of China; ICCAIA HFCRC Chair,Founding Member of IAGA Mr.Yufang GUO, Chairman, Joint Sustainable Aviation Alliance (EU) Mrs. Yuan GAO, Director, China Certified Emission Reduction Center of China Beijing Green Exchange; CORSIA Expert

12:00-13:20	Lunch Venue: 4th Floor, Xixian International Conference Center	
13:30-14:00	Key Technologies Summary Report Moderator: Prof. Chris RUDD Former Vice -Chancellor and Provost, University of Nottingham Ningbo China	Topic: Global Development of Green Aviation Structures Speaker: Prof. Marco AMABILI Professor, Westlake University; Fellow of the Royal Society of Canada, Canadian Academy of Engineering, European Academy of Sciences, Academia Europaea, and U.S. National Academy of Engineering
14:00-14:30		Topic: Laser Processing of Carbon Fiber Reinforced Composites Speaker: Prof. Lin LI University of Manchester, Fellow of the Royal Academy of Engineering, U.K.
14:30-15:00		Topic: Global Development of Electric Aviation Joint Speakers: Dr. Susan YING CEO, EM-Power; Fellow of AIAA and RAeS; Former President, ICAS; Former VP, SAE International, U.S.A Mr. Martinus Henricus Renier Klomp, Founder and CTO, I2M Interim & Innovations B.V., Netherlands
15:00-15:30	Tea Break & Exhibition Visit	
Moderator: Mr. Chamsou ANDJORIN CEO, CDA Aviation; Former Head, Safety and Compliance of Boeing, Africa; founding member, IAGA, France/Benin		
15:30-16:30	Panel Discussions 3	Topic: The Path to Carbon Reduction for Traditional Aviation Moderator: Mrs. Alexandra PARÉ Director, ICCAIA Speakers: Mr. Philippe MOGILKA, Senior Expert, Propulsion Technology Engine ing, CoC Powerplant AIRBUS Central Entity Dr. Jun XU, President, Honeywell Aerospace Asia-Pacific Dr. Zhigang YANG, Chief Designer, COMAC Beijing Aircraft Technology Research Institute Mrs. Ying SHI, Vice Chief Engineer, AECC Commercial Aircraft Engine Co., Ltd Mr. Aziz Tahiri, Vice President, Hexagon Global Aerospace and Defense
16:30-17:10	Panel Discussions 4	Topic: Opportunities and Challenges in Building an Advanced Air Mobility Ecosystem Moderator: Mr. Henry HOOI Founder, Volar Air Mobility; Candidate VP, IAGA Speakers: Prof. Yifei ZHAO, Dean, College of Air Traffic Management, Civil Aviation University of China Prof. He REN, Overseas Expert, COMAC; Director, Shanghai GA Association Expert Committee; Deputy President, China Industrial Design Association, Australia Mr. Bernhard Adrianus OSKAM, Chairman & CEO, Beyond Imagination Management B.V, Netherlands Mrs. Louise LU, Co-founder & CMO, INFLYNC
17:10-17:30	Lecture	Development and Production of Aerospace Special Alloys Speaker: Dr. Hongya MA Chief International Business Officer, Zhonghang Shangda Superalloys Co.,Ltd
18:30-20:30	Green Aviation Night (Gala Dinner and Awarding) Venue: The Ballroom 3rd Floor, Xixian Novotel Hotel	

October 23 Parallel Forums

Track 1 : Green Aero-Power Forum

Organized by: School of Energy and Power Engineering, Beihang University
Venue: Meeting Room 4, 3rd Floor, Xixian International Conference Center

Chair: Guo LI, Dean, School of Energy and Power Engineering, Beihang University
Co-chair: Lu QIU, Deputy Dean, School of Energy and Power Engineering, Beihang University
Executive Co-chair: Xungang DIAO, Professor, School of Energy and Power Engineering, Beihang University

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.

08:15-08:30	Opening Ceremony Moderator: Prof. Lu QIU Deputy Dean, School of Energy and Power Engineering, Beihang University	Opening Address Prof. Guo LI Dean, School of Energy and Power Engineering, Beihang University
08:30-09:00	Moderator: Prof. Lu QIU	Hydrogen and its Role in Decarbonizing Aviation Speaker: Prof. Alberto Abánades Department Director, Universidad Politécnica de Madrid
09:00-09:30		Challenges in Clean Hydrogen Production: The Role of Basic Research in Low-Temperature Electrochemical Reforming of Methanol and Ethanol Speaker: Prof. Hamilton VARELA Director, São Carlos Institute of Chemistry, University of São Paulo, Brazil
09:30-10:00		Aviation Batteries - Today and Tomorrow Speaker: Mr. Hartung Gernot WILSTERMANN CTO, Zephyr Dynamics, Electric Aviation Fuel, Germany
10:00-10:30	Coffee Break	
10:30-11:00	Moderator: Prof. Hamilton VARELA Director, São Carlos Institute of Chemistry, University of São Paulo, Brazil	Deep Learning Models for Pre-diagnosis of Flooding and Drying in Proton Exchange Membrane Fuel Cells Speaker: Prof. Suk Won CHA Professor, Seoul National University
11:00-11:30		High-Speed eVTOL Electric Propulsion Based on Vector Ducted Wing Design Speaker: Prof. Fang CHEN Professor, Associate Dean, School of Aeronautics and Astronautics, Shanghai Jiao Tong University
11:30-12:00		Aviation Hydrogen-Electric and Hybrid Power Technology Speaker: Dr. Chengjie LI Harbin Institute of Technology

12:00-13:30	Lunch	
13:30-14:00	Moderator: Prof. Mikhael GOROKHOVSKI Ecole Centrale de Lyon, Lyon, France	Combustion Large Eddy Simulation Speaker: Prof. William Philip JONES Imperial College London, UK
14:00-14:30		Long-Endurance Powering of Gram-Scale Micro Air Vehicles Speaker: Dr. Jinzhe PENG Beihang University
14:30-15:00		Recent Advances in Polymer Viscoelasticity from General Rigid Bead-Rod Theory Speaker: Prof. Alan Jeffery GIACOMIN Editor-in-Chief, Physics of Fluids, Queen' s University, Canada
15:00-15:30		Construction of Reduced Order Models for Vortex Dominated Flows Speaker: Prof. Aikaterinaris IOANNIS Embry Riddle Aeronautical University (ERAU), USA
15:30-16:00	Coffee Break	
16:00-16:30	Moderator: Prof. Alan Jeffery GIACOMIN Editor-in-Chief, Physics of Fluids, Queen' s University, Canada	Vortex Flow Structure And Stochastic Subgrid Models Speaker: Prof. Mikhael GOROKHOVSKI Ecole Centrale de Lyon, Lyon, France
16:30-17:00		Optimization of Propulsion System for New Generation Supersonic Civil Aircraft Under Airworthiness, Mission and Environmental Criteria (Video) Speaker: Mr. Artur MIRZOYAN ICAO CAEP member from Russian Federation, Head of Department of Central Institute of Aviation Motor (CIAM), Russia
17:00-17:15	Paper Oral Presentation Moderator: Mr. Chengjie LI Harbin Institute of Technology	Analysis of the Application and Development of Airborne 100kW Aviation Hydrogen-Electric Energy System Speaker: Zhanqiang LUO Qingan Group Co. , LTD
17:15-17:30		Modeling and Performance Analysis of a Hybrid-Electric Open Fan Engine for Sustainable Aviation Speaker: Jinghui XU Fudan University
17:30-17:45		Safety Analysis of Hydrogen Internal Hydrogen Internal Combustion Engine Hybrid System Based on FRAM-ISM Speaker: Xiangrui FENG Civil Aviation University of China
17:45-18:00		A Review of the Advantages and Challenges in Hydrogen Aviation Power Speaker: Xiongbai JIA Taihang Laboratory
18:00-18:15		Comparison on NO_x Emission Empirical Models for In-Service Civil Turbofan Engines under Different Control Modes Speaker: Zhiyuan WEI Research Institute of Aero-Engine, Beihang University

October 23 Parallel Forums

Track 2: Sustainable Aviation Fuels (SAF) Forum

Organized by: Civil Aviation University of China, Second Research Institute of CAAC

Co-organized by: Asia SAF Association

Supported by: HK SAF Alliance, Cathy Pacific Airlines

Venue: Meeting Room 5, 3rd Floor, Xixian International Conference Center

Chair: Shuiting DING, President, Civil Aviation University of China

Co-chair:

Zuxi XIA, VP, Second Research Institute of CAAC

Fabrice ESPINOSA, Founder & CEO, ASAFA

Executive Co-chair:

Xiaojun YANG, Professor, Civil Aviation University of China

Jinxia FU, Chief Scientist, Second Research Institute of CAAC

Committee:

Nicola XING, Director, Climate Action, Sustainability Department, Cathay Pacific Group

Gabriel HO, Founder & Chief Sustainability Officer, ASAFA

Clement ZHANG, HK SAF Alliance

Johnny WEI, Sustainability Department, Cathay Pacific

Introduction:

Sustainable aviation fuel (SAF) defined as aviation fuels derived from renewable resources or wastes that have obtained both safety and sustainability certifications. With the full life cycle emission reduction up to 80% or more, SAF has emerged as a pragmatic energy solution to deep decarbonization of the aviation industry by the mid of 21st century. Given its pivotal role in the industry's low-carbon transition, SAF has garnered widespread attention from governments and the global aviation sector alike.

Nevertheless, the large-scale promotion and application of SA faces prominent constraints across three core dimensions: safety, sustainability, and economics. To address these challenges and advance industry collaboration, the ICGA 2025-SAF Forum has been organized. It will focus on SAF policy, feedstock, process, safety certification, sustainability certification, price & market and supply chain. Experts and scholars from domestic and foreign enterprises, R&D institutions, universities and government agencies will be invited to share their latest research progress and insights of the industry. The forum aims to promote the exchange of information, accelerate SAF industry chain integration, facilitate R&D progress, expedite validation and application of SAF.

08:15-08:30	Opening Ceremony Moderator: Dr. Jinxia FU Chief Scientist, Second Research Institute of CAAC	Opening Address Mr. Michael LUNTER Ministry of Infrastructure and Water Management, Directorate of Civil Aviation, Chair of ICAO CAEP, Netherlands
08:30-09:00	Moderator: Dr. Jinxia FU	APAC Policy Landscape: An Overview of Evolving Policy Frameworks in Asia-Pacific Shaping SAF Adoption Speaker: Mr. Gabriel HO CSO, ASAFA, Singapore
09:00-09:30		SkyNRG's Market Outlook for Sustainable Aviation Fuels Speaker: Mr. Oskar MEIJERINK Head, Corporate Development, SkyNRG, Netherlands
09:30-10:00		UK SAF Clearing House - Driving the Deployment of SAF through Technical Evaluation Support Speaker: Mr. Matthew JEE Director, UK SAF Clearing House, UK

10:00-10:30	Coffee Break	
10:30-11:00	Moderator: Dr. Jinxia FU	Market Analysis of Sustainable Aviation Fuel in Asia Speaker: Mrs. Fiona XUE Market Analyst, Net Zero & Biofuels, Argus Media, UK
11:00-11:30		Global Sustainable Aviation Fuel Development Trends Under CORSIA Regulations Speaker: Mr. Samuel WONG, Global VP of PAC; Expert, ISO - Technical Committees; member, ASTM
11:30-12:00		R&D policy and Diffusion of Carbon Abatement Technologies in the Air-transport Industry Speaker: Prof. Lei XU CAUC
12:00-13:30	Lunch	
13:30-14:00	Moderator: Mr. Gabriel HO CSO, ASFA, Singapore	Axens Diverse Technologies Support Low Carbon SAF Production Speaker: Mr. Yvon BERNARD Business development Manager, Axens, France
14:00-14:30		Hydrodeoxygenation of Biomass Oil: Rational Design of Catalysts and Reaction Mechanism Speaker: Dr. Changhai LIANG Director, Chengdu Research Institute, Dalian University of Technology
14:30-15:00		P2X for Sustainable Aviation Fuel (SAF) in Europe – Pathways and Challenges Speaker: Prof. Liliana MEDIC Delegate of Dean for Eastern Europe and Asia, Universidad Politécnica de Madrid, Spain
15:30-16:00	Coffee Break	
16:00-16:30	Moderator: Mr. Gabriel HO	Production of Sustainable Aviation Fuel from Biomass Catalytic Conversion Speaker: Dr. Qian JIANG Associate Researcher, Guangzhou Institute of Energy Conversion (GIEC)
16:30-16:45	Paper Oral Presentation Moderator: Mr. Gabriel HO	From CO₂ to SAF: Compliance Essentials for CO₂-Derived Feedstocks Speaker: Yiyuan DONG Development Research Center for Sustainable Aviation Fuel, Second Research Institute of CAAC
16:45-17:00		Life Cycle Assessment of Gasification-Fischer Tropsch for Sustainable Aviation Fuel Production from Arundo Donax Speaker: Hao LI Civil Aviation University of China
17:00-17:15		Experimental Validated Combustion Kinetic Model and Surrogate for A Bio-Derived Jet Fuel Speaker: Ruixin WANG AECC Commercial Aircraft Engine Co., Ltd
17:15-17:30		Comprehensive Analytical Characterization of Key Physicochemical Properties for Accelerated Qualification of Sustainable Aviation Fuels Speaker: Alex Weiming LIU School of Physics, Trinity College Dublin, Ireland

October 23 Parallel Forums

Track 3: Green Aviation Smart Structure and Manufacturing Forum

Organized by: Northwestern Polytechnical University(NPU)

Co-organized by: AVIC Composites Co., Ltd; Aircraft Strength Research Institute of China

Venue: Jinwan Hall, 3rd Floor, Novotel Hotel

Chair: Marco AMABILI, Professor, Westlake University

Co-chair: Yan GAO, Deputy General Manager, AVIC Composite Materials Co., Ltd.

Jihong ZHU, Dean, Graduate School, NPU

Executive Co-chair: Manyu XIAO, Professor, NPU

Committee: Jie HOU, Associate Research Fellow, NPU

Introduction:

The Green Aviation Smart Structure and Manufacturing 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.

08:20-09:00	Opening Ceremony Moderator: Prof. Jihong ZHU Dean, Graduate School, NPU	Opening Address Speaker: Prof. Weihong ZHANG Academician of Chinese Academy of Sciences; VP of CSAA; Professor, NPU Prof. Marco AMABILI Westlake University Mr. Yang ZHANG Associate Manager, AVIC Composites Co., Ltd
09:00-09:30	Moderator: Mr. Jinjun YANG Researcher, Deputy Chief Engineer, Distinguished Technical Expert, AVIC	Synthetic Data Generation for Machine Learning in Multiscale Simulation Speaker: Prof. Piotr BREITKOPF, University of Technology of Compiègne; Former Deputy Director, Laboratoire Roberval, France
09:30-10:00		Advanced CUF-Based Computational Models for Aerospace Structures including Aeroelasticity, Manufacturing and Composite Laminates Speaker: Dr. Giuseppe PALAIA & Prof. Carrera ERASMO Dr. Giuseppe PALAIA AIDAA, PoliTO, Italy Prof. Carrera ERASMO Polytechnic University of Turin; President, Italian Association of Aeronautics and Astronautics (AIDAA), Italy
10:00-10:30	Coffee Break	
10:30-11:00	Moderator: Prof. Zied MOUMNI École Nationale Supérieure de Techniques Avancées(ENSTA), France	Metallic lattices with superior buckling strength for light-weight structures Speaker: Prof. Michael Yu WANG Chair Professor & Dean, School of Engineering, Great Bay University; Chairman and Chief Scientist, Daimon Robotics
11:00-11:30		Multi-scale topology optimization of composite structures Speaker: Prof. Jun YAN Dean, School of Mechanics and Aerospace Engineering, Dalian University of Technology
11:30-12:00		Research on the Construction and Performance of Multi-Scale Synergistic Noise-Reduction Honeycomb Sandwich Structures Speaker: Mr. Jinjun YANG Researcher, Deputy Chief Engineer, Distinguished Technical Expert, AVIC

12:00-13:30	Lunch	
13:30-14:00	Moderator: Prof. Michael Yu WANG Chair Professor & Dean, School of Engineering, Great Bay University; Chairman and Chief Scientist, Daimon Robotics	A Multi-scale, Multi-Physics Field Integrated Approach for Smart Materials and Structures Design Speaker: Prof. Zied MOUMNI École Nationale Supérieure de Techniques Avancées (ENSTA)
14:00-14:30		A Strategic Approach to Implementing Composites within A Green and Sustainable Aviation Framework Speaker: Prof. Chris RUDD Pro-Vice-Chancellor and Provost, University of Nottingham Ningbo China
14:30-15:00		A Generalized Background Vector Method for Tailoring 3D Non-Periodic Woven Composites Speaker: Dr. Zhenpei WANG Senior Research Fellow, Agency for Science, Technology and Research (A*STAR), Singapore
15:00-15:30		High-fidelity Modeling of Multi-material Additive Manufacturing Speaker: Dr. Wentao YAN Associate Professor, National University of Singapore
15:30-16:00	Coffee Break	
16:00-16:30	Moderator: Prof. Piotr BREITKOPF Professor, University of Technology of Compiègne; Former Deputy Director, Laboratoire Roberval, France	Recent Advances in Parameterized Level Set-Based Structural Topology Optimization Methods Speaker: A/P. Peng WEI South China University of Technology
16:30-17:00		Structural topology optimization design method considering structural degradation performance Speaker: A/P. Huanhuan GAO Jilin University
17:00-17:30		From Design to Application: A Review of Computational Approaches for Mechanical Metamaterials (Video) Speaker: Prof. Balaji RAGHAVAN Lab of Civil and Mechanical Engineering, INSA de Rennes, France
17:30-17:45	Paper Oral Presentation Moderator: Prof. Jihong ZHU Dean, Graduate School, NPU	Research on Energy-Saving Effects of Hypersonic Morphing Vehicles Speaker: Yixuan TAO National University of Defense Technology
17:45-18:00		Surface Corrosion Phenomenon and Mechanism Analysis of SiC Particle-Reinforced Aluminum Matrix Composite Forgings after Anodization Speaker: Jianing ZHENG Avic Harbin Aircraft Industry Group Co.,Ltd.
18:00-18:15		Self-consistent Clustering Analysis for Efficient Prediction of Material Strength: A Case Study of C/SiC Composites Speaker: Xinhang DAI Avic Harbin Aircraft Industry Group Co.,Ltd.
18:15-18:30		Thermal Optimization Design of the Electro-Hydraulic Power System Based on Phase Change Heat Storage Units Speaker: Xinzhu MOU Nanjing University of Aeronautics and Astronautics

October 23 Parallel Forums

Track 4: Aviation Digitalization and Intelligence Forum

Organized by: School of Aeronautic Science and Engineering, Beihang University(BUAA)

Supported by: School of Aeronautic Engineering, Zhengzhou University of Aeronautics

Venue: Meeting Room 2, 2nd Floor, Xixian International Conference Center

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

Executive Co-chair: Bingjun ZHU, Associate Professor, BUAA

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.

08:25-08:30	Opening Ceremony Moderator: A/Prof. Bingjun ZHU Associate Professor, BUAA	Opening Address
08:30-09:00	Moderator: Mr. Zhansen QIAN Director, Department of General Planning, Chinese Aeronautical Establishment(CAE)	Multidisciplinary Numerical Simulation Technology for Aircraft Speaker: Prof. Zhansen QIAN Director, Department of General Planning, Chinese Aeronautical Establishment(CAE)
09:00-09:30		Cognitive Digital Twins : an application case in the Aerospace Sector Speaker: Prof. Dimitris KYRITSIS Professor Emeritus, EPFL; Senior Advisor, University of Oslo
09:30-10:00		Modern Flight Simulation Technology Speaker: Dr. Yubin WANG General Manager, Technical Director, Netherlands Winton Technology BV, Netherlands
10:00-10:30	Coffee Break	
10:30-11:00	Moderator: A/Prof. Bingjun ZHU	Electric Power Train in Green Energy Aviation and its International Nature Speaker: Mr. Martinus Henricus Renier Klomp , Founder and CTO, I2M Interim & Innovations B.V., Netherlands
11:00-11:30		A System-of-systems General Design and Simulation Optimization Method for Aviation Equipments Speaker: A/P. Xiaobo LI National University of Defense Technology
11:30-12:00		AI4MBSE and Its Applications in Aircraft Manufacturing System Design Speaker: A/P. Xiaochen ZHENG Southern University of Science and Technology

12:00-13:30	Lunch	
13:30-14:00	Moderator: Prof. Chong PAN Dean, School of Aeronautic Science and Engineering, BUAA	Progress in Velocity Field and Density Field Measurement Technologies for Compressible Flows Speaker: Prof. Chong PAN Dean, School of Aeronautic Science and Engineering, BUAA
14:00-14:30		Hybrid-Electric Trainers for Tomorrow's Airline Pilots Speaker: Mr. Rolf STUBER CEO and Head of Design, Smartflyer
14:30-15:00		Training Analysis and Design for Improving Human Factor Performance Speaker: Mr. Jun YANG Former Deputy Director, Customer Training Department, COMAC Customer Center
15:00-15:30	Coffee Break	
15:30-16:00	Moderator: Mr. Yufang GUO Chairman, Joint Sustainable Aviation Alliance (EU)	A Look into AeroDelft's Journey to Liquid Hydrogen Powered Flight Speaker: Elisa Yixuan ZHAO & Martijn Guust Antoin KOCHUIJT Elisa Yixuan ZHAO Gaseous Hydrogen Propulsion Engineer, AeroDelft, Netherlands Martijn Guust Antoin KOCHUIJT Chief Flight Testing Engineer, AeroDelft, Netherlands
16:00-16:30		Transition paths towards green energy for Aviation Speaker: Mr. Joseph VRANCKEN Director, VR2 Advice
16:30-16:45	Paper Oral Presentation Moderator: Prof. Xiaolu WANG Dean School of Aeronautic Engineering, Zhengzhou University of Aeronautics	Wind Energy Utilization for UAVs via Deep Reinforcement Learning Speaker: Wei WANG Northwestern Polytechnical University
16:45-17:00		LGFG-Net: A Short-Term Trajectory Forecasting Approach Integrating Multi-Feature Extraction and GAN-GCN Framework Speaker: Haiming DONG Civil Aviation University of China
17:00-17:15		A Model and Data Dual-Driven Framework of Gas Path Fault Diagnosis for Aero Engines Speaker: Qi ZHANG Fudan University
17:15-17:30		Range and Endurance Calculation of Propeller/Rotor Aircraft Based on the Linear Relationship between Engine Fuel Flow Rate and Shaft Power Speaker: Anhong LIN BUAA
17:30-17:45		Fuel-Efficient Trajectory Optimisation through Tailwind-Aware Routing Speaker: Olivia CURTIS Royal Melbourne Institute of Technology (RMIT) University

October 23 Parallel Forums

Track 5: Advanced Air Mobility (AAM) Forum

Organized by: School of Transportation Science and Engineering, Beihang University

Co-organized by: AVIC Xi'an Flight Automatic Control Research Institute

Hosted by: CSAA TC of Electric Aircraft, CSAA Technical Committee of Flying Car

Venue: Meeting Room 3, 2nd Floor, Xixian International Conference Center

Chair: Shichun YANG, Professor, School of Transportation Science and Engineering, BUAA

Co-chair: Luohui SU, Researcher, Vice Chief Engineer, AVIC Xi'an Flight Automatic Control Research Institute
Min MIN, Executive Dean, Associate Researcher, Zhizhen College, BUAA

Executive Co-chair: Mingkai WANG, Associate Professor, Hangzhou International Innovation Institute, BUAA

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.

08:40-09:00	Opening Ceremony Moderator: Prof. Min MIN Executive Dean, Associate Researcher, Zhizhen College, BUAA	Opening Address Prof. Shichun YANG Professor, School of Transportation Science and Engineering, BUAA Mr. Jun CHE Vice Chief Engineer, AVIC Xi'an Flight Automatic Control Research Institute
09:00-09:30	Moderator: Prof. Min MIN	Integrating Advanced Air Mobility (AAM) into Existing Air Transportation System Speaker: Mr. Philip KWOK Senior Manager, Economics of ACI Asia-Pacific & Middle East (Airports Council International), HK, China
09:30-10:00		AAM and Development in Africa Speaker: Mr. Chamsou ANDJORIN CEO, CDA Aviation; Former Head, Safety and Compliance of Boeing, Africa; founding member, IAGA, Benin
10:00-10:30	Coffee Break	
10:30-11:00	Moderator: Mr. Konstantinos KONSTANTINOPOULOS Project manager, Certification in electric aviation, Simac Aerospace Technologies BV, Netherlands	SAE AE-7D Committees' International Charging Standards Speaker: Mr. Richard WATSON Chief Commercial Officer, Electro Aero, Australia
11:00-11:30		Research and Practice on Full-Tilt eVTOL Technology Speaker: Luohui SU Researcher, Vice Chief Engineer, AVIC Xi'an Flight Automatic Control Research Institute
11:30-12:00		The Renaissance of the Seaplane and Amphibious Aircrafts Speaker: Mrs. Grethe SKUNDBERG Executive Chair of EI-Fly

12:00-13:30	Lunch	
13:30-14:00	Moderator: Mrs. Grethe SKUNDBERG Executive Chair of EI-Fly	Opportunity and Challenge:- Learning Journey from UTM and UAM to an Emerging Low Altitude Economy (LAE) Speaker: Prof. Kin Huat LOW Distinguished Professor, Chief Scientist, Research Institute of Airspace Integration and Safe Operations, Civil Aviation University of China
14:00-14:30		Certification of New Energy Aircraft: the Role of Digital Maintenance Data and Predictive Reliability Analysis Speaker: Mr. Konstantinos KONSTANTINOPOULOS Project manager, Certification in electric aviation, Simac Aerospace Technologies BV, Netherlands
14:30-15:00		Avionics System Innovation and Market Trends for eVTOL Speaker: Mr. Weiwei MAO Marketing Director, Aviage Systems
15:00-15:30		Autonomous Flight Technology Empowers the Large-Scale Application of eVTOL Speaker: Shi Wei, CEO Shanghai INSKY Intelligent Technology Co., Ltd
15:30-16:00	Coffee Break	
16:00-16:30	Moderator: Prof. Min MIN	Aviation Turboelectric System Speaker: Mr. Wei SUN Director of Marketing, Eptaerospace
16:30-17:00		ICAO's Work and Recent Progress of AAM (Online) Speaker: A/P. Yuanyang GAO School of Economics and Management, Beihang University
17:00-17:15	Paper Oral Presentation Moderator: A/Prof. Mingkai WANG Hangzhou International Innovation Institute, BUAA	Tiltrotor Blade Parametric Design Study from an Aerodynamic Perspective and its Validation Speaker: Yonghui XU Ningbo Institute of Materials Technology & Engineering
17:15-17:30		Synergistic Optimization of UAV Swarm Path Planning for Proactive Forest Disturbance Intervention and Ecological Efficacy Quantification Speaker: Jisong LV Civil Aviation University of China
17:30-17:45		Online Four-Dimensional Trajectory Planning for eVTOL Based on Rolling Optimization Speaker: Jiaxuan LI Beihang University
17:45-18:00		Path Planning of Large Fixed-Wing Unmanned Aircraft Subject to Specific Operational Ground Risk Assessment Speaker: Kuan SUN Beihang University

October 23 Parallel Forums

Track 6 : Green Aviation Development Strategy Forum (Presented in Chinese Only)

Organized by: Civil Aviation Flight University of China

Venue: Conference Hall, 1st Floor, Xixian International Conference Center

Chair:

Weiping LI, Chief Scientist, Civil Aviation Flight University of China; Chair, Health, Facilitation and Crisis Response Committee (HFCRC) of ICCAIA; Founding Member of IAGA

Co-chair:

Jianfeng ZHAN, Full Professor, Chinese Academy of Sciences; Director, Research Center for Distributed Systems at Institute of Computing Technology; Founding Chair, International Open Benchmark Council; Editor-in-Chief, BenchCouncil Transactions on Benchmarks, Standards and Evaluation

Lin ZOU, Professor, Civil Aviation Flight University of China; Executive Dean, Institute of Data Engineering and Behavioral Science; Vice Director, National-Local Joint Laboratory of System Trustworthiness Automatic Verification

Committee:

Zhiqiang ZHOU, President, Plastic Recycling Association of CRRA

Xin ZHANG, Chief Economist, National Center for Climate Change Strategy and International Cooperation (NCSC); Deputy Director, CETA

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

Yiran HE, Specialist, Industry Decarbonization, World Economic Forum(WEF)

Introduction:

This forum focuses on four core issues: global environmental governance and international cooperation, green finance and sustainable investment, green trade and green technology innovation, and green aviation assessment system and evaluation standards, and focuses on the regulatory and catalytic roles that the five key elements of investment, carbon tax, carbon market, green aviation product platform, and whole life cycle carbon footprint tracking play in promoting sustainable development of the aviation industry. Experts in the field of investment will analyze how carbon tax incentives and carbon market mechanisms can effectively guide capital flow to low-carbon technology innovation; green aviation product platforms will elaborate on their core function as a key hub in standardizing environmentally friendly solutions; and experts in certification and technology will emphasize that the cornerstone of building a credible carbon accounting system lies in a comprehensive life-cycle emissions tracking system. The four elements of market signals from tax and trade policies, targeted investment guidance, platform-based collaboration, and stringent regulatory mechanisms together constitute a regulatory ecosystem that will synergize efforts to promote the application of green aviation products and lead the industry's growth in line with global carbon neutrality goals.

08:40-09:00	Opening Speech	Opening Speech by Prof. Weiping LI
09:00-09:30	Moderator: Prof. Lin ZOU Professor, Civil Aviation Flight University of China; Executive Dean, Institute of Data Engineering and Behavioral Science; Vice Director, National-Local Joint Laboratory of System Trustworthiness Automatic Verification	Prospects for Recycled Plastics in the Aviation Sector Speaker: Mr. Yunfei ZHOU Deputy Secretary-General, China Plastic Recycling Association of CRRA
09:30-10:00		The SAF Engineering Technology Evaluation System Speaker: Prof. Jianfeng ZHAN Full Professor, Chinese Academy of Sciences; Director, Research Center for Distributed Systems at Institute of Computing Technology; Founding Chair, International Open Benchmark Council; Editor-in-Chief, BenchCouncil Transactions on Benchmarks, Standards and Evaluation

10:00-10:30	Coffee Break	
10:30-11:00	Moderator: Mr. Huasheng WANG Senior Engineer, Deputy Director, Hydrogen-Based Fuel Innovation Center, China Power Engineering Consult- ing Group Co., Ltd. (CPECC)	From “Dual Carbon” to “Dual Wings” — SAF Leading the Way in Green Aviation Speaker: Prof. Lin ZOU Professor, Civil Aviation Flight University of China; Executive Dean, Institute of Data Engineering and Behavioral Science; Vice Director, National-Local Joint Laboratory of System Trustworthiness Automatic Verification
11:00-11:30		Investment Strategies of National-Level Funds in the Field of Green Aviation Speaker: Mr. Huan YU Former General Manager, Investment Management Department, National Green Development Fund
12:00-13:30	Lunch	
13:30-14:00	Moderator: Dr. Xiaorong LU Founder, Shanghai RGL Science and Technology Company; Founding Member, IAGA	Research and Innovative Practice of Advanced Sustainable Aviation Fuel Speaker: Mr. Huasheng WANG Senior Engineer, Deputy Director, Hydrogen-Based Fuel Innovation Center, China Power Engineering Consulting Group Co., Ltd. (CPECC)
14:00-14:30		Junheng Bio's 1-Million-Ton HEFA Process Industrial Plant Speaker: Mr. Ryan HU COO, Henan Junheng Industrial Group Biotechnology Co., Ltd
14:30-15:00		Green Aviation's New Frontier: Shaanxi's Carbon-Neutrality Blue Sky Initiatives Speaker: Mr. Shao WANG Executive VP and Secretary-General, Shaanxi Carbon Neutrality Technology Development Association
15:00-15:30	Moderator: Prof. Lin ZOU	Q&A and Discussion



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