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INDUSTRY VIETNAM FORUM EXHIBITION
ON AVIATION FUTURE: CHALLENGES & SOLUTIONS

NOTE SPEECHES



AGENDA AFCS 2025

THE 3RD INTERNATIONAL CONFERENCE ON AVIATION
FUTURE: CHALLENGES AND SOLUTIONS



The 3rd International Conference on Aviation Future: Challenges and Solutions

AGENDA (Preliminary)

December 10-11, 2025

**Venue: Conference Center 272 (Ho Chi Minh City Party Committee Hall)
272 Vo Thi Sau Street, District 3, Ho Chi Minh city**

Day 1 – 10 December 2025

Venue: Room Lotus
Morning Session (7:30-12:00) Room Lotus
7:30-8:00 Reception & Registration – Morning Coffee
8:00-8:30 Opening Ceremony (concert/music)
Opening Session
8:30-8:40 Dr. Nguyen Thi Hai Hang <i>Honorary Chair of AFCS 2025, President of Vietnam Aviation Academy, Vietnam</i>
8:40-8:50 Assoc. Prof. Dr. SzeKee KOH <i>Cluster Director, Business, Communication and Design, Singapore Institute of Technology</i>
8:50-9:00 Prof. Dr. Nafiz Arica <i>Rector of Piri Reis University, Turkey.</i>
Opening Keynote Session
9:05-9:30 Mr Ho Minh Tan <i>Deputy Director General of Civil Aviation Authority of Vietnam</i> “Beyond the Horizon: Challenges and Opportunities Redefining Civil Aviation Worldwide”



9:30-9:55

Prof. Dr. Hans Rück

Vice President of Worms University of Applied Sciences, Germany

“Customer Loyalty and the Net Promoter Score: Key Drivers of Airline Profitability”

9:55 – 10:20

Prof. Dr. Tahir Hikmet Karakoc

Dean of Research, Piri Reis University (PRU), Istanbul, Turkey; President of Sustainable Aviation and Energy Research Society (SARES)

“New developments in sustainable aviation and SARES activities”

10:20 – 10:45

Prof. Dr. Ruxandra Botez

Head of the Laboratory of Applied Research in Active Controls, Avionics and AeroServoElasticity LARCASE, École de technologie supérieure (ÉTS)

“Use of Artificial Intelligence Techniques for the Control of Cessna Citation X”

10:45 – 11:10

Dr. Cemil Koyunoglu

Energy Systems Engineering Department Yalova University

“Advance Towards Net-Zero Aviation: Sustainable Fuels, Digital Design, and Unmanned Systems”

11:10– 11:35

Prof. Dr. Shawei He

Nanjing University of Aeronautics and Astronautics (NUAA)

“Flying with foresights: an interactive perspective of decision making using graph model in aviation studies”

11:35– 12:00

Mr. To Viet Thang

Executive Vice President in charge of Operations, Safety, Quality and Security of Vietjet Air

“Safety Auditing: Risk-Based Approach to IOSA”

12:00 – 13:30

Lunch



Scientific Sessions

10 December 2025

13:30-15:00

Room: 1

Session: Smart Tourism

Session chair: Prof. Dr. Richard Klophaus, Worms University of Applied Sciences, Germany

382. Generative Artificial Intelligence for Smart Passenger Journeys: Connecting Aviation Operations and Tourism Experiences toward Sustainability

Tran Tuyen, The University of Social Sciences and Humanities

323. Factors Influencing Tourists' Acceptance of Sustainable Smart Tourism

Tran Nguyen Khanh Hai, University of Finance – Marketing

387. Customer Coproduction in smart tourism: The role of Digital experience quality and Engagement

Tran Thu Huong, Dong Nai Technology University; Do Hien Hoa, Faculty of Commerce and Tourism, Industrial University of Ho Chi Minh City, Vietnam; Le Quoc Hong, Sai Gon University

13:30-15:00

Room: 2

Session: Digital and Smart Tourism Behavior

Session chair: Assoc. Prof. Dr. Adam Voak, Vietnam Aviation Academy

359. The quality of smart technology applications affects tourists' willingness to participate and value co-creation behavior in Tay Ninh province

Nguyen Thi Kim Ngan, Ha Nam Khanh Giao, Vietnam Aviation Academy

333. Assessing Factors Influencing Tourists' Acceptance Behavior toward AI-Driven Smart Tourism Technologies in Vietnam: Perspectives on Trust, Personalization, and Ethical AI

Huynh Vu Chi, Hue University; Ha Nam Khanh Giao, Vietnam Aviation Academy



13:30-15:00

Room: 3

Session: Passenger experience and Loyalty

Session chair: Prof. Dr. Frank Fichert, Worms University of Applied Sciences, Germany

409. Unpacking Brand Loyalty in the Skies: The Roles of E-WOM and Customer Experience in the Airline Industry

Dat Dao, Industrial University; Thao Lam, Dai Nam University; Thuy Nguyen, Cracow University of Economics; Nham Dinh, University of Economics; Tien Nguyen, Asian Institute of Technology Center

393. Digital Transformation: The Role of Self-Service Technologies in Passenger Satisfaction at Tan Son Nhat Airport

Nguyen Ngoc Trung, Office of the Ho Chi Minh City Party Committee; Duong Ngoc Hong, University of Economics Ho Chi Minh City

325. Passenger satisfaction of using services at Hall B – Terminal 1 Tan Son Nhat international airport

Ha Nam Khanh Giao, Vietnam Aviation Academy

13:30-15:00

Room: 4

Session: Travel behavior 1

Session chair: Dr. Thu Huong Nguyen, Victoria University, Melbourne, Australia

505. Green skies, green stays: The role of green identity in shaping sustainable travel intentions in Vietnam

Nguyen Phuoc Hien, Doan Quang Dong, Vietnam Aviation Academy

378. How green landscape affect revisit intention through satisfaction and trust at coastal hotels in Vietnam

Nguyen Thi Phuong Nga, Thuy Loi University; Ha Nam Khanh Giao, Vietnam Aviation Academy; Huynh Vu Chi, Ho Chi Minh City University of Economics and Finance

427. From Recommendations to Bookings: How Recommender Systems Influence Gen Z's Online Booking Decisions in Vietnam

Thu Trang Phan, Viet Anh Le and Thi Minh Tam Dang, Ha Noi Industry University

Tea break

15:00-15:30

15:30-17:00

Room 1

Session: Sustainable Tourism

Session chair: Assoc. Prof. Dr. Adam Voak, Vietnam Aviation Academy, Vietnam

420. Assessing the Carbon Footprint of Community-Based Tourism for Sustainability: Evidence from Hon Dung, Vietnam

Nguyen Quang, Nha Trang University



413. Carbon Transparency in Online Tourism Services: Shaping Gen Z's Sustainable Flight Booking Intentions

Phan Thu Trang, Ha Noi University of Industry; Do Viet phuong Linh, Foresia International Joint Stock Company, Hanoi

15:30-17:00

Room 2

Session: Travel behavior 2

Session chair: Dr. Thu Huong Nguyen, Victoria University, Melbourne, Australia

383. The influence of short travel videos on destination brand love and travel Intentions

Le Thi Thanh Ha, Ho Cao Quang, Ho Chi Minh University of Industry and Trade

449. Tourist Revisit Intention Research (2004–2024): A Bibliometric Analysis and Future Directions

Vuong Duc Hoang Phuong, Hotel and Tourism Management and Strategy, Pham Thai Phuong Tuyen, Ho Chi Minh City University of Law

285. Analyzing tourist experiences at Khai Dinh Tomb Hue through TripAdvisor Reviews: A Netnographic Approach

Nguyen Thi Thuy Van, Thi Hong Ngoc Nguyen, Hue University

15:30-17:00

Room 3

Session: AI, Learning, and Sustainable Innovation

Session chair: Dr. Nguyen Van Luc, Vietnam Aviation Academy, Vietnam

461. Virtual Reality–Based Aviation Training: Effects on Learners' Achievement Emotions in Aircraft Maintenance

Nguyen The Hoang, Singapore Institute of Technology & Vietnam Aviation Academy; Do Uyen Tam, Vietnam Aviation Academy; Seck Tan, Singapore Institute of Technology; Nguyen The Son, University of British Columbia; Huynh Hoang An, Vietjet Aviation Academy; Luu Van Thuan, Vietnam Aviation Academy

349. Schrödinger-based graph semi-supervised learning method

Tran Loc, Vietnam Aviation Academy

516. From AI Capability to Sustainable Innovation Performance: The Mediating Role of Strategy and the Paradoxical Effect of Green Capability

Khai Nguyen The, University Canada West Vancouver, Tam Huynh Luong, An Nguyen Thi Thuy, Ho Chi Minh City Open University

15:00-17:00

Room 4

Session: Airspace network, Diplomacy and Green Travel

Session Chair: Dr. Huyen Vuong, University of Technology Sydney, Australia

430. Regional patterns in en-route delays: Analysing spatial autocorrelation in the European airspace

An Thi Thuy Vo; Frank Fichert, Worms University of Applied Sciences



423. Strategic Air Routes as Tools for Cultural Diplomacy: Evidence from Vietnam–Korea (2009–2025)

Quynh Huong Vu, Diamond Brand Institute; Le Thu Trang, University of Social Sciences and Humanities; Tung Thanh Tran, Cu Long University; Hong Ha Nguyen, University of Social Sciences and Humanities

369. Uncovering the Intellectual Structure of Green Travel Behavior Research: Evidence from Bibliometric

Tran Thi Ngoc Tram, Vietnam Aviation Academy

Gala Dinner 17:30

Place: tbc

11 December 2025

09:00–10:30

Room 1

Session: UAV Control and Thermal Performance

Session chair: Assoc. Prof. Dr. Victor Wang, Singapore Institute of Technology, Singapore

531. Online Adaptive Optimal Trajectory Tracking Control of Quad-copter Unmanned Aerial Vehicles

Cong-Thanh Pham; Quang-Duc Lam Huynh; Van-Thien Tran, Vietnam Aviation Academy

402. Performance Analysis of UAV-Assisted Backscatter NOMA Networks with Jammer Selection

Tran Anh Tuan, Vietnam Aviation Academy; Trieu Phong Nguyen, Vietnam Aviation Academy; Nguyen Duy Nhat Huy, University of Transport Ho Chi Minh City; Ha Dac Binh, Duy Tan University

525. Analysis And Evaluation Of Heat Transfer Performance In Cooling Channels With Pin-Fin. Using Recessed-Extruded Endwall Coupling In Gas Turbine Blade

Tran Anh, Vietnam Aviation Academy

09:00–10:30

Room 2

Session: Aerospace Design

Session chair: Dr. Sy Ngoc Nguyen, Ho Chi Minh City University of Technology, Vietnam National University-Ho Chi Minh City

529. Design and manufacture of aerodynamic balance for use in low speed wind tunnel

Nguyen Minh Hung; Nguyen Binh Thuan; Luu Van Thuan, Vietnam Aviation Academy

390. Redesigning lightweight arm structure of a delivery quadcopter using topology optimization

Le Huynh Duc; Cao Thanh Binh; The Hoang Nguyen, Vietnam Aviation Academy

429. Novel graph convolutional neural network based ranking method

Nguyen Bao Tran, Loc Hoang Tran, Vietnam Aviation Academy

09:00–10:30



Room 3

Session: Tourism and Aviation

Session chair: Dr. Huyen Vuong, University of Technology Sydney, Australia

315. From Air Access to Destination Development: A Bibliometric Analysis of Research Linking Aviation and Tourism

Nguyen Thi Thien Trang, Vietnam Aviation Academy

368. Exploring Tourists' Co-Creation Experiences with Smart Aviation Technology for Environmentally Sustainable Development: A Case Study at Tan Son Nhat airport, Vietnam

Huynh Diep Tram Anh; Nguyễn Thị Hải Hằng; Nguyễn Thị Thu Hằng, Vietnam Aviation Academy

291. The Role of Transport in Distinguishing Tourists from Travellers

Richard Klophaus; Sibylle Lauth, Worms University of Applied Sciences

09:00-10:30

Room 4

Session: Simulation and Optimization in Air Transport

Session chair: Dr. Cao Thanh Binh, Vietnam Aviation Academy, Vietnam

419. Towards Efficient Airplane Boarding: Comparative Simulation of Different Practices

Khai Kien Lao; Khang Vy Nguyen; Quang Thuan Nguyen; Phu Vinh Huynh; Thanh Bao Hoang, Ho Chi Minh City University of Technology

493. A Hybrid PPO-Imitation Learning Approach for Dynamic Real-Time Airport Gate Assignment

Thanh-Minh Phan; Viet V. Lam; Xuan-Cong Nguyen, Vietnam Aviation Academy, Vietnam

392. Comparative Analysis of Radial Basis Function, Reaction-Diffusion Equation, and Velocity Field Approaches in Level Set Topology Optimization for a Cantilever Beam with a Circular Hole

Le Tan Loc; Le Thinh Phu, Vietnam Aviation Academy

Tea break

10:00-11:00

11:00-12:30

Room 1

Session: Human Resources in Aviation and Hospitality in Vietnam

Session chair: Dr. Duong Thi Quynh, Vietnam Aviation Academy

515. Factors Influencing Cabin Crew Job Performance: An SEM-Based Analysis of Vietnam Airlines

Vu Thi Phuong Thao, Vietnam Aviation Academy; Duong Cao Thai Nguyen, University of Economics and Finances; Dong Thi Thu Hoai, Vietnam Aviation Academy; Phan Thanh Trung, Vietnam Aviation Academy



513. Investigating the chain mediation model reveals the link between social media addiction and employee well-being of the aircraft mechanics at Vietnamese airlines

Dinh Manh Nguyen, Ho Chi Minh City Open University; The Khai Nguyen, University Canada West Vancouver, Canada; Thuan Nguyen, Ho Chi Minh City Open University

510. The effect of stressors and work motivation on work performance at Silverland Hospitality Group

Ha Nam Khanh Giao, Vietnam Aviation Academy

11:00-12:30

Room 2

Session: Airport ownership and future mobility

Session chair: Assoc. Prof. The Hoang Nguyen, Singapore Institute of Technology, Singapore

353. Cooperation between airports and air transport and investment strategies under cross-ownership conditions

Tran Nguyen Phuoc Thong, Van Hien University

384. Economic and Passenger Benefits of eVTOL Airport Feeder Services: A Case Study on the Heilbronn–Frankfurt Route

Christoph Klingenberg, Worms University of Applied Sciences; Jens Hujer, Heilbronn University of Applied Sciences; Arthur Piechotzek, Heilbronn University of Applied Sciences

313. Linking Autonomous Technologies at Airports: Impact on Airport Satisfaction and Growth Potential via ESG Competitiveness

Seock-Jin Hong, University of North Texas; Clinton Purtell, Oklahoma State University; Brian Hiatt, University of North Texas



11:00-12:30

Room 3

Session: Passenger choices and Branding

Session chair: Prof. Dr. Richard Klophaus, Worms University of Applied Sciences, Germany

312. The impact of Perceived privacy risks and Acceptance Usage of ICT Airport services on Willingness to pay of International tourists: A case study of Tan Son Nhat airport, Vietnam

Huynh Diep Tram Anh, Vietnam Aviation Academy

410. Investigating Air Passengers' Willingness to Reduce Baggage Using Nudge-Style Interventions

Jin-Long Lu, National Kaohsiung University of Science and Technology, Taiwan; Yen-Hua Lin, National Cheng Kung University, Taiwan

362. The Semiotics of Heritage Branding Some Observations on UAE Carriers

Adriaan De Man, United Arab Emirates University

11:00-12:30

Room 4

Session: Optimization and Advanced Modeling in Aerospace

Session chair: Assoc. Prof. Dr. Tseng Wen-Chun, Singapore Institute of Technology, Singapore

465. Developing a platform for airline fleet assignment optimization in higher education

Nguyen The Hoang, Singapore Institute of Technology & Vietnam Aviation Academy; Nguyen The Son, University of British Columbia; Nguyen Kim Thao, Royal Melbourne Institute of Technology; Tseng Wen-Chun, Singapore Institute of Technology; Colin Law, Hong Kong Shue Yan University

391. Application of structure optimization on the rapid development of an aircraft seat leg for 3D printing

Nguyen Thi Ngoc Anh, Nguyen The Hoang, Vietnam Aviation Academy

444. A Unified RZT-Based Framework: Advanced Finite Elements and Neural Networks for Multilayered Composite Analysis in Aerospace Engineering

Sy Ngoc Nguyen, Ho Chi Minh City University of Technology, Vietnam National University-Ho Chi Minh City; Alexander Tessler, Structural Mechanics and Concepts Branch, NASA Langley Research Center

12:30-13:30

Lunch

13:30-15:00

Room 1

Session: Logistics

Session chair: Prof. Dr. Adam Voak, Vietnam Aviation Academy, Vietnam



501. Willingness to Apply Green Logistics in Vietnamese Logistics Enterprises
Viet Anh Nguyen, Phenikaa University; Thi My Ngoc Le, Dainam University; Quang Vinh Nguyen, Thuongmai University; Viet Thanh Do, Dai Nam University

452. Exploring the intention to use digital platform in freight forwarding: A study with a hybrid PLS-SEM-ANN approach
Quynh Thi Thuy Duong; Trung Thanh Nguyen; Viet Dang Anh Hoang; Hao Nhat Phan; Thinh Tien Huynh, University of Da Nang

367. Customer satisfaction with the logistics service quality of special cargo services company
Tran Dieu Hang; Le Thi Chau Kha; Nguyen Mai Duy; Huynh Thi Ngoc Tram, Vietnam Aviation Academy

13:30-15:00

Room 2

Session: Human Resources in Aviation

Session chair: Assoc. Prof. Dr. Jin-Long Lu, National Kaohsiung University of Science and Technology

428. Exploring Generation Z's Career Perception in Aviation: A Qualitative Study of Young Employees at IGA Istanbul Airport
Hüseyin Önder Aldemir, Elinur Özyurt, Özyeğin University, Türkiye

406. Green human resource management practices and airport environmental performance in Vietnam: The mediating role of employee green behavior
Hoang Thi Kim Thoa, Vietnam Aviation Academy, Vietnam

514. Linking Psychological Capital to Job Satisfaction: The Mediating Roles of Organizational Commitment and Work Engagement in Vietnam Airline
Phan Thanh Trung, Vietnam Aviation Academy; Duong Cao Thai Nguyen, University of Economics and Finance; Vu Thi Phuong Thao; Dong Thi Thu Hoa, Vietnam Aviation Academy

13:30-15:00

Room 3

Session: Sustainable Aviation

Session chair: Prof. Dr. Frank Fichert, Worms University of Applied Sciences, Germany

507. Navigating the Skies of Sustainability: A Comparative Analysis of Global and ASEAN Legal Frameworks for Sustainable Aviation Fuel
Huyen Vuong, Long Nghiem, University of Technology Sydney, Australia; The Hoang Nguyen, Singapore Institute of Technology, Singapore

307. Sustainable Aviation Fuel: A systematic review
Wenting Liu; Cheng-Hsien Hsieh; Wen-Chun Tseng, Singapore University of Social Sciences



490. Efficacy or Efficiency: Optimizing Airline Fleet Strategies and Defying Fuel Trends in the Asia-Pacific Skies towards Sustainable Aviation

Colin Law, Hong Kong Shue Yan University, Seck Tan, The Hoang Nguyen, Singapore Institute of Technology

13:30-15:00

Room 4

Session: AI for Safer and Smarter Aviation

Session chair: Assoc. Prof. Dr. Seck Tan, Singapore Institute of Technology, Singapore

512. The relationship between AI- human collaboration and incremental creativity: the role of cognitive flexibility and task significance

Trung Thanh Ngo; Thuy Hong Hoang, Ho Chi Minh City Open University

397. From Chatbots to Virtual Reality: Integrating AI Tools into Aviation Training for Human Factors Learning

Nguyen Vinh Khuong, Nguyen Kim Thao, RMIT University; Nguyen The Hoang, Vietnam Aviation Academy

376. A Visionary Framework for AI-Driven Predictive and Real-Time Analytical Analysis of Aviation Anomalies, Incidents, and Accidents

Nguyen Thi Huong, Vietnam Aviation Academy

Tea break

15:00-15:30

15:30-17:00

Room 1

Session: Deep learning and Network method

Session chair: Assistant Prof. Dr. Shawei He, Nanjing University of Aeronautics and Astronautics

502. A CNN-based approach for swimming style classification

Nguyen Bao Tran, Luong Anh Tuan Nguyen, Vietnam Aviation Academy

348. Sparse Laplacian Eigenmaps and Applications

Tran Loc, Vietnam Aviation Academy

407. Comparative Analysis of the AI-25 and V2527-A5 Engines: Structure, Performance, Auxiliary Systems, and Future Perspectives

Nguyen Manh Hung; Nguyen Lam Kien Thinh; Phan Tri Khang, Vietnam Aviation Academy

15:30-17:00

Room 2

Session: Tourism Sustainability and Competitiveness

Session chair: Dr. Thu Huong Nguyen, Victoria University, Australia



412. Circular Economy and Tourism Development: International Experience and Policy Recommendations for Vietnam

Phan Thao Nguyen, Nha Trang University

431. Study on the Relationship between Destination Image, Memorable Tourist Experiences, Tourist Satisfaction, and Revisit Intention of MICE Tourists in Sports Events in Ho Chi Minh City

Hanh Phuc Nguyen Pham, University of Finance – Marketing; Khanh Giao Ha Nam, VietNam Aviation Academy

405. Factors Influencing Tourism Competitiveness: Evidence from the Dong Thap Muoi Region, Vietnam

Le Thanh Sang, HUTECH University

15:30-17:00

Room 3

Session: Aviation Safety and Risk Strategy

Session chair: Dr. Huyen Vuong, University of Technology Sydney, Australia

451. How Safety Climate Shapes Aviation Staff's Safety Citizenship and Compliance: The Role of Affective Commitment

Do Uyen Tam, Vietnam Aviation Academy; Mukesh Dangol, Civil Aviation Division, Ministry of Culture, Tourism and Civil Aviation, Nepal; Nguyen The hoang; Nguyen Thi Hai Hang, Vietnam Aviation Academy

433. Vehicle Digital Twin (VDT) Platform for Safe and Reliable Flight Operations in Urban Air Mobility

LV Thang Nguyen, Min Ji Kim, Gu Moon Jeong, Myat Toe and Jae-Woo Lee, Konkuk University, Republic of Korea

533. Implementing a Behavior-based Risk Management Framework to Strengthen Safety Culture in Aviation Operations

Hoang Anh Le, SAGS

15:30-17:00

Room 4

Session: AI, Work, and Service Innovation

Session chair: Prof. Dr. Christoph Klingenber, Worms University of Applied Sciences, Germany

295. AI and GIS for public service innovation near Tan Son Nhat Airport

Nguyen Van Giang; Hoang Lam, HUTECH University

289. The impact of artificial intelligence-induced technostress on personal resources and work engagement of Vietnamese aviation employees

Dao Duy Tung, Malaysia University of Science and Technology; Vijayan Ramasamy, Malaysia University of Science and Technology; Do Thi Thanh Truc, Vietnam Aviation Academy



422. *AI Service Quality and Brand Loyalty in Airlines Industry: The Mediating Role of Trust, Perceived Social Presence and Perceived Emotional Appeal*
Hung Thai Vo, International University; Hien Thi Thao Bui, Vietnam National University