3rd UAV Icing Workshop,

Dec 1-3, Vienna

Version 1.1 (12 Nov 2026)

Tue, 01-Dec-26, Rail Tec Arsenal, Paukerwerkstraße 3

From 12:45	*Arrival at RTA*	
13:00-16:00	**Guided RTA Facility Tours & Exhibition**	RTA
16:00-21:30	*Icebreaker*	

Wed, 02-Dec-26, Arcotel Kaiserwasser, Wagramer Str. 8

08:30-09:00	*Registration & Speaker Check-in*	
09:00-09:40	**Opening Session Day 1**	
09:40-10:10	**Keynote:** Forecasting Icing For Certification – Approaches, Challenges and UAV Applications	Ben Bernstein, Leading Edge Atmospherics
10:10-10:40	**Technical Session: Ice Protection Systems**	Chair:
	Enabling UAV Operations in Icing Conditions: Operational Experience and Ice Protection	Amihay Gornik, Aero Ice Free
10:40-11:20	*Break*	
11:20-12:40	**Technical Session: The icing environment: forecasting and onboard sensing**	Chair:
	A New Method for Mapping Icing Conditions Near the Surface	Scott Landolt, NCAR
	Exploring the Current Icing Product - Forecast Icing Product (CIP-FIP) and the Terminal Area Icing Weather Information (TAIWIN) Capability	Stephanie DiVito, FAA
	Investigating Icing Conditions in Norway - Evaluating the Harmonie-Arome Model using Helicopter Campaign Data	Eirik Mikal Samuelsen, MET Norway
	Icing Sentry - Real-Time Onboard Icing Warning and Severity Assessment	Ville A. Kaikkonen, University of Oulu
12:40-14:00	*Lunch*	
14:00-15:20	**Technical session: Ice detection**	Chair:
	Ice Accretion Detection on a Propeller using NRC Ultrasound Ice Accretion Sensors (UIAS)	Dan Fuleki, NRC
	Measuring Ice Thickness and Ice Type using Electromechanical Impedance Measurement	Julia Feder, TU Braunschweig
	Real-Time Icing Risk Classification for UAVs - Using Machine Learning to Extract Appendix C Cloud Properties from Optical Sensors	Lars-Stephan Klein, NTNU
	UAV Icing - Analysis of Threshold and Certification Criteria for Performance-Based Ice Detection on Small Fixed-Wing Drones	Bogdan Løw-Hansen, NTNU
15:20-16:20	*Break+Poster session*	
16:20-17:05	**Technical Session: Icing Effects on Propellers and Aerodynamics**	Chair:
	From Roughness to Ice Shapes - Aerodynamic Effects on a UAV at Low Reynolds Numbers	Mariachiara Gallia , Politecnico di Milano
	Impact of Glaze and Rime Ice on UAV Propeller Performance under Constant-RPM Operation	Matteo Mirafiori, Eurac Research
	Experimental Investigation of a Ducted Fan in DLR's Whirl Tower Icing Test Facility	Cedric Obatolu, DLR
17:05-17:10	**Closing Remarks**	
17:30-19:00	*Free time / Christmas market, Rathausplatz*	
19:00-22:00	*Dinner, Rathauskeller*	

Thr, 03-Dec-26, Arcotel Kaiserwasser, Wagramer Str. 8

08:45-09:00	*Registration & Speaker Check-in*	
09:00-09:10	**Opening Session Day 2**	
09:10-09:40	**Keynote:** UAV Icing from the FAA perspective	Cris Bosetti & Dennis Regnier, FAA
09:40-10:10	**Keynote:** European Drone Regulations in Context of Icing	Joy Winrich Ancheta, Austro Control
10:10-10:50	**Technical Session: Propeller Icing**	Chair:
	Ice Shedding Mechanisms from UAV Propeller Blades	Oleksandr Maslov, Carleton University
	Numerical Investigation of Ice Accretion on a Wing Behind Multiple Propeller Wakes Using an Actuator Disk Model	Younghyo Kim, Seoul National University
10:50-11:20		
11:20-12:40	**Technical Session: Ice Protection Systems**	Chair:
	Investigation of Piezoelectric Resonance De-Icing on a Ducted Fan Propulsion System	Sebastian Neveling, DLR
	Sequential Modal Excitation for Piezoelectric De-Icing - Experimental Insights for Lightweight UAV Ice Protection	Francesco Mancini, VKI
	Taking UAV Ice Protection to the Next Level - Flight Testing of a Commercial Multirotor UAV with an Ice Protection System in a Climatic Wind Tunnel	David Kozomara, AIIS
	A Holistic UAV Ice Protection System for VTOL UAVs	Maja Solum, Ubiq Aerospace
12:40-14:00	*Lunch*	
14:00-15:20	**Technical session: Icing Simulations**	Chair:
	Progress on Validating FENSAP-ICE for Low-Reynolds-Number Applications	Markus Lindner, NTNU
	Assessment of ONERA Numerical Approach for UAV Icing Using NRC Wind Tunnel Data	Quentin Duchayne, ONERA
	Sequential Prediction of Airfoil Ice Accretion using Physics-Informed Surface Features	Szerkan Özgen, METU
	Multi-Step Simulation of Three-Dimensional Ice Accretion on Propellers in Axial Flight	Alessandro Donizetti, Politecnico di Milano
15:20-16:00	*Break*	
16:00-17:00	**Technical Session: Icephobic Materials and Coatings**	Chair:
	Low-Energy Ice Protection for UAVs - From Icephobic Coatings to Hybrid Active-Passive Systems	Nadine Rehfeld, Fraunhofer IFAM
	Woven Meshes as Passive Ice-Management Surfaces - From Drop Impact to Ice Accretion and Shedding	Anne-Marie Kietzig, McGill University
	Advanced Polymer Coatings for Hydrophobic and Anti-Icing Applications	Bartłomiej Przybyszewski, Technology Partners Foundation
17:00-17:10	**Closing Remarks**	

Posters

01	Ice Delay - Case Study	Monika Pilz, SINTEF
02	Complementary Icing Test Facilities for UAVs - Status and Outlook at AIIS	Thomas Neubauer, AIIS
03	Latent Heat and Heating Pulses for Ice Detection on UAV Wings	Samir Charif, TU Braunschweig
04	UAV Testing Capabilities of Rail Tec Arsenal	Johannes Lucke, RTA
05	The AGIROS Open Rotor and Propeller Icing Test Rig for the Rail Tec Arsenal Climatic Wind Tunnel and its Specific Adaptation for Innovative Air Mobility Applications	Jakob R. Amon, PEGASUS R&D
06	On the Use of Dual-Polarimetric Radar Data for Aircraft Icing Diagnoses	Scott Ellis, NCAR
07	Machine Learning for the Acoustic Recognition of Rotor Icing	Cole Gladders, Carleton University
08	Hybrid Experimental-Numerical Approach for Ice Mechanical Properties Characterization	Francesco Mancini, VKI
09	A Simulation-Based Framework for Certification-Relevant Assessment of Aircraft Icing Effects	Henidya Putri Heramarwan, Politecnico di Milano
10	Airfoil Shape Optimization for Icing Mitigation on Small UAVs	Beraat Uzun, METU
11	Hybrid Chemical and Laser Surface Modification of Polyurethane Coatings for Anti-Icing Applications	Anna Łabęda, Warsaw University of Technology
12	Identification and Quantification of Mixed Phase Clouds with the Backscattering Cloudprobe with Polarization Detection	Darrel Baumgardner, Droplet Measurement Technologies
13	Structural Electrothermal Fabrics for Integrated De-Icing function into Composite Structures (D-ICE)	Erik Khranovskyy, GRAFREN