



U.S.–JAPAN INDUSTRY–ACADEMIA COLLABORATION

First U.S.–Japan Workshop on Advanced Composites Manufacturing

A two-day exchange between Japanese research delegations, the University of Washington, and Boeing, connecting composites research to next-generation manufacturing.

DATES

October 5-6

CO-HOSTS

University of Washington & Tohoku University

VENUE

Day 1

Advanced Composite Center (ACC), 7561 63rd Ave NE, Seattle, WA 98115

Day 2

Boeing Advanced Research Collaboration (BARC) Lab, Box 352600, E Stevens Way NE, Seattle, WA 98195

ABOUT THE WORKSHOP

Bridging research
and production

Composite Manufacturing

Process modeling

Structural testing

Automation

Industry-academia partnership

Composites are reshaping aerospace manufacturing, but moving from discovery to certified, high-rate production remains a shared challenge. This workshop brings together Japanese research delegations, University of Washington faculty, and Boeing engineers to advance that transition through shared research, hands-on collaboration, and open technical dialogue.

Program — Day 1

October 5th · ACC

9:00-9:20	Welcome and Round Introductions	11:30-12:05	Building the Future of Advanced Composites: AMTAS, UW's Advanced Composites Center, and the Power of Computational Modeling — 30 min + 5 min Q&A PRESENTER: Marco Salviato AFFILIATION: University of Washington
9:20-9:35	Welcome to UW Engineering: Forging the Future through BARC, Q-DREAM, and Beyond — 10 min + 5 min Q&A PRESENTER: Jihui Yang AFFILIATION: University of Washington	12:05-1:00	Boxed Lunch
9:35-9:55	Toward High-Rate Composite Manufacturing: Development of an Integrated Simulation and Material Evaluation Platform for Future Aircraft — 15 min + 5 min Q&A PRESENTER: Tomonaga Okabe, Kazuki Ryuzono, Kohei Tanida AFFILIATION: Tohoku University / NEDO*	1:00-1:45	Why Composites Matter to Boeing? — 40 min + 5 min Q&A PRESENTED BY: The Boeing Company
9:55-10:15	MHI's Challenge to High-Rate Composite Manufacturing for Next-Generation Aircraft Structure — 15 min + 5 min Q&A PRESENTED BY: Mitsubishi Heavy Industries, Ltd.	1:45-2:05	Physics-Informed AI for Composites: From Characterization and Process Modeling to Optimization and Qualification — 15 min + 5 min Q&A PRESENTER: Navid Zobeiry AFFILIATION: University of Washington
10:15-10:35	Innovative Process for CFRTP Stiffened Panel — 15 min + 5 min Q&A PRESENTED BY: Kawasaki Heavy Industries, Ltd.	2:05-2:25	From Data to Discovery: Exploring AI-Enabled Innovation and New Opportunities for Industry-University Education Partnerships — 15 min + 5 min Q&A PRESENTER: Luna Huang AFFILIATION: University of Washington
10:35-10:50	Coffee Break	2:25-2:45	The Boeing Advanced Research Collaboration (BARC) at UW: Elevating the Future of Flight — 15 min + 5 min Q&A PRESENTER: Xu Chen AFFILIATION: University of Washington
10:50-11:10	Development of Multiscale Analysis Technology for Composite Manufacturing Processes of Aircraft Components — 15 min + 5 min Q&A PRESENTED BY: SUBARU Corporation	2:45-3:00	Coffee Break
11:10-11:30	Advanced Process Simulation for Composite Manufacturing: Integrated Optimization of Prepreg Systems and Processing Parameters — 15 min + 5 min Q&A PRESENTED BY: Toray Industries, Inc.	3:00-3:45	Roundtable: Summary, Next Steps, and Closing

* NEDO: New Energy and Industrial Technology Development Organization. This workshop is held in connection with a NEDO-funded research project.

Program — Day 2

October 6th · BARC

CO-HOSTED BY

University of Washington & Tohoku University

LOCATION

Seattle, Washington