



## NIMS Selects Ansys' Materials Solution to Advance More Sustainable Next-Gen Jet Engines

June 15, 2023

***Japan's sole public research organization adopts Ansys' materials data management solution to develop an eco-friendly materials catalog for efficient aircraft engine development***

### / Key Highlights

- NIMS is using Ansys' materials solution, Granta MI, to analyze and select heat-resistant materials to improve both energy and thermal efficiency in aircraft engines and reduce CO<sub>2</sub> emissions
- Ansys' materials data management software is the fundamental infrastructure of NIMS' database for new materials development, information, and applications

PITTSBURGH, June 15, 2023 /PRNewswire/ -- National Institute for Materials Science (NIMS), Japan, is using [Ansys'](#) (NASDAQ: ANSS) materials data management software, [Ansys@ Granta MI™](#) to develop a database of sustainable materials for Japanese aircraft manufacturers. The database, a catalog of eco-friendly materials intelligence, will make it easier for Japanese engineers and designers to select cleaner, smarter resources when developing next-generation jet engines.



As climate concerns continue to increase globally, many leaders in the aviation industry have vowed to reach net-zero carbon dioxide (CO<sub>2</sub>) emissions by 2050. To support this initiative, NIMS uses Ansys' materials solution to research heat-resistant materials that improve energy and thermal efficiency, and reduce CO<sub>2</sub> emissions. Using this data, NIMS will create a catalog in collaboration with the Gas Turbine Society of Japan to provide local aircraft manufacturers with a one-stop, domestic database for sustainable materials. The database will also reduce the time and cost of international compliance and clearance for new materials usage.

"With the ability to obtain and verify critical materials data using Ansys' solution, NIMS has started to develop a valuable database for Japanese manufacturers to integrate more sustainability components in local aircraft engine development," said Dr. Kyoko Kawagishi, group leader of the High Temperature Materials Group at NIMS. "This initiative is based on results obtained from a national project, 'Development of Materials for Aircraft Engines and Bases for Material Evaluation Systems,' commissioned by the New Energy and Industrial Technology Development Organization (NEDO). We will support the manufacturing of highly reliable, purely domestic engine components and strengthen our position in the international market for aircraft engine production."

The NIMS' database will be built upon insights from Granta MI, which also provides comprehensive and comparable data for more than 4,000 commercially available engineering materials. Materials data includes detailed information on metals, polymers, composites, and coatings as well as electromagnetic, medical, and aerospace materials.

"As the aviation industry accelerates toward net-zero, companies are exploring new solutions to meet sustainability goals," said Walt Hearn, senior vice president of worldwide sales and customer excellence at Ansys. "With the support of Ansys' materials solution, NIMS is streamlining the process of materials selection for Japanese aircraft manufacturers, while facilitating access to smarter and cleaner materials. These positive strides bring us all closer to a more sustainable future."

Visit [Ansys at the 2023 Paris Air Show](#) in France from June 19-25 to learn more about simulation's impact in the aviation industry.

### / About Ansys

When visionary companies need to know how their world-changing ideas will perform, they close the gap between design and reality with Ansys simulation. For more than 50 years, Ansys software has enabled innovators across industries to push boundaries by using the predictive power of simulation. From sustainable transportation to advanced semiconductors, from satellite systems to life-saving medical devices, the next great leaps in human advancement will be powered by Ansys.

Take a leap of certainty ... withAnsys.

Ansys and any and all ANSYS, Inc. brand, product, service and feature names, logos and slogans are registered trademarks or trademarks of ANSYS, Inc. or its subsidiaries in the United States or other countries. All other brand, product, service and feature names or trademarks are the property of their respective owners.

ANSS-C

**/ Contacts**

Media      Mary Kate Joyce  
              724.820.4368  
              [marykate.joyce@ansys.com](mailto:marykate.joyce@ansys.com)

Investors    Kelsey DeBriyn  
              724.820.3927  
              [kelsey.debriyn@ansys.com](mailto:kelsey.debriyn@ansys.com)



POWERING INNOVATION THAT DRIVES HUMAN ADVANCEMENT™

 View original content to download multimedia:<https://www.pnewswire.com/news-releases/nims-selects-ansys-materials-solution-to-advance-more-sustainable-next-gen-jet-engines-301851919.html>

SOURCE Ansys