

November 13, 2023

Awarded BEST PAPER AWARD at the 10th PAAMES AMEC

The following paper submission and presentation lecture were given at the 10th PAAMES AMEC 2023 held at Kyoto Terrsa on October 18-20, and received the BEST PAPER AWARD.

Paper title: "First evaluation of an ammonia reforming system in NH₃-diesel dual fuel small engine

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This paper is the result of joint research by Hitachi Zosen Corporation, National Institute of Maritime, Port and Aviation Technology, , and DAIHATSU DIESEL MFG. CO., LTD.

In this research, ammonia was reformed to hydrogen using an ammonia reforming catalyst, and a single-cylinder diesel engine was tested and studied using this as fuel. The ammonia-to-hydrogen conversion efficiency, engine exhaust gas evaluation, and GHG reduction effects were evaluated.

Ammonia is also attracting attention as a hydrogen carrier among future alternative fuels, and we are aiming to solve issues such as low energy density, ultra-low temperature storage, and transportation difficulties in hydrogen through reforming catalyst technology.

With the aim of researching and developing new technologies and creating new businesses, our group will actively engage in joint research in industry-government-academia collaboration and contribute to the realization of a sustainable society in harmony with the natural environment through high-quality and reliable products and services.

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