



AEA Quarterly Members Meeting New Orleans 2024.11.18.

Company Profile



About Us

Business

Nikki-Universal Co., Ltd. (N-U) is a joint venture company established in 1963 by JGC Corporation, a Japanese corporation, and UOP LLC (UOP), a United States company.

Specializing in Refining & Petrochemical catalysts for UOP processes, as well as environmental catalysts, N-U is committed to driving innovation that supports cleaner energy

production and environmental protection.

Established	September 16, 1963
Employees	245 (As of April 1, 2024)
Paid-up Capital	JPY 1,000,000,000

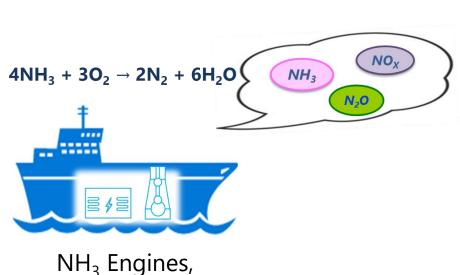
Stockholders



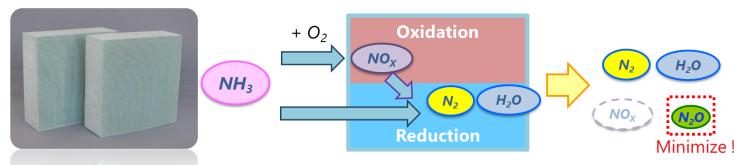
Ammonia Combustion Exhaust Gas Treatment



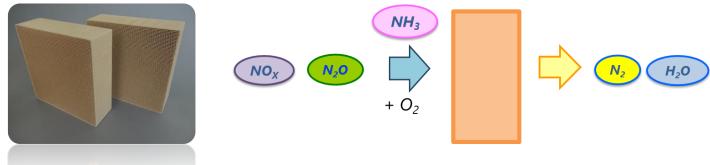
NH₃ Destruction Bi-Functional Catalyst



Burners, etc.



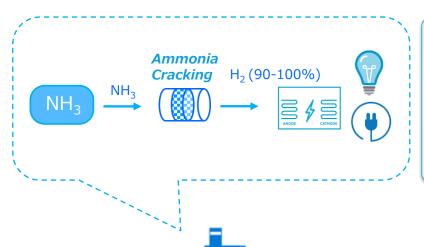
De-NOx and De-N₂O SCR Catalyst



NU offers solutions to eliminate leak NH₃, NOx and N₂O contaminants!

Ammonia Cracking Catalysts for H₂ Production





NH₂

Ammonia

Cracking

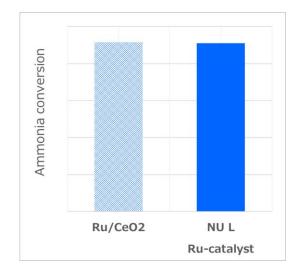
Ammonia

 H_2 (<90%) as

Engine

Low-Loading Ru Catalyst

 Performance of NU low-loading Ru catalyst is comparable to a conventional high-loading Ru/CeO₂.

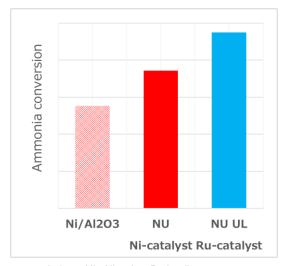


Modified Ni Catalyst

 Demonstrates superior performance compared to a conventional Ni/Al₂O₃ catalysts.

Ultra-Low Loading Ru Catalyst

 Exhibits better performance than Ni catalysts, despite having the same cost.



L: Low, UL: Ultra-low Ru loading

Collaborations with NU for Commercial Demonstration



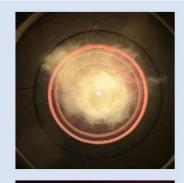


"Photo courtesy of NYK"

NYK & IHI Power Systems completed world's first commercial-use ammonia-fueled vessel using NU' exhaust gas treatment catalysts.











"Photo courtesy of SUNFLAME"

The burner jointly developed by SUNFLAME & KASHIWA TECH, capable of 100% ammonia combustion, is scheduled for market release in 2024. NU's catalysts are being utilized in the demonstration facilities.









NIKKI - UNIVERSAL

https://www.n-u.co.jp/en/

