# Special Issue

# Synthesis and Utilization of Clean Ammonia as Fuel

## Message from the Guest Editors

Ammonia is the second largest produced chemical in the world, widely used as a fertilizer, cleaning agent, and chemical feedstock. Blended ammonia and cracked ammonia are upcoming fuels for several applications, including the shipping industry, steel industry, and power generation.

To unlock the true potential of ammonia as a fuel, two parts of the value chain need to be thoroughly understood: (i) clean ammonia production and (ii) ammonia utilization. In recent years, there have been several advances in the methods for ammonia production. For ammonia utilization, the key is to understand the combustion/conversion kinetics and its effect on the system.

This Special Issue aims to highlight the role of clean ammonia synthesis and utilization in advancing a green future, with a focus on (but not limited to) the following topics:

- -- Thermocatalytic ammonia synthesis;
- -- Haber-Bosch process alternatives for clean ammonia synthesis;
- -- Ammonia decomposition (with application);
- -- Ammonia and ammonia-blended fuel combustion;
- -- Ammonia valorization pathways and systems.

### **Guest Editors**

Dr. Rajavasanth Rajasegar

Mechanical Engineering, Colorado School of Mines, Golden, CO 80401, USA  $\,$ 

Dr. Javishk R. Shah

- 1. Chemical Engineering Department, University of Tulsa, 800 South Tucker Drive, Tulsa, OK 74104-9700, USA
- 2. HyET NoCarbon USA Inc., Golden, CO 80401, USA

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Processes
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
processes@mdpi.com

mdpi.com/journal/ processes





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Prof. Dr. Giancarlo Cravotto

Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

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