Key Outcomes of the Renewable Hydrogen Storage and Transport Conference

The 2024 Renewable Hydrogen Storage and Transport Conference included 3 engaging sessions full of leaders in the hydrogen field, both present and future. More than 80 attendees were present for our 22 invited speaker talks, including keynote and plenary speakers. The call for abstracts allowed for the inclusion of 7 submitted talks and 14 posters. The full technical program, as well as speaker biographies and abstracts, can be found here.

This conference delivered on its promise to address the role of storage and advanced transport in the context of developing hydrogen as a low-carbon energy carrier and harnessing renewable energy resources for meeting commodity needs. Attendees learned about case studies and emerging technologies in supply chains, high density hydrogen carriers, and end use applications.

The conference's presentations were kicked off by **Surya Prakash** of USC & the Loker Hydrocarbon Research Institute, the conference chair and first keynote speaker. He discussed his group's research on e-methanol and applicable catalysts, including a demonstration of a small fuel cell.

Siari Sosa, SoCalGas, set the stage for the <u>second session</u> as she went through California's clean fuels and carbon management strategies, including analyses on the current and potential infrastructure, policy recommendations, and the strategic journey of moving to a hydrogen-based pipeline.

The bulk of our program was filled to the brim with presentations on cutting-edge research and industrial applications, highlighting common pitfalls to avoid and key players in the field. Discussion was sparked on the viability and relevance of renewable natural gas (RNG), the hydrogen value chain, and the ability of various systems to scale-up effectively.

We also had fantastic presentations by speakers from our call for abstracts. One standout submitted talk, presented by **Hanna Breunig** of LBNL, touched on being strategic in technology deployment and how to design reliably to match the size and demand of your end user, including safety factors and considerations that are usually overlooked.

Trent Rogers of EPRI gave an engaging keynote presentation, including key e-fuel value chain perspectives and the potential e-fuels have as a medium to indirectly deploy low-carbon hydrogen. He was able to build on the discussions of the previous day, and add his notes on a path to streamlined deployment of green hydrogen.

<u>Session 3</u> switched gears, moving from the intermediate stage of moving and storing hydrogen onto real applications and the purpose of those developments.

All the speakers agreed on clean fuels as an essential element to attaining net-zero affordably and resiliently, and discussed the steps needed to get there while always keeping safety in mind.

During our closing remarks, key points were reiterated and acknowledgements were given to the organizers, sponsors, and presenters. Awards were presented to **Anushan Alagaratnam** (University of Southern California), **Brian Bick** (Stony Brook University), and **Zohaib Suhail** (University of Southern California) for their incredible poster presentations.

If you have any testimonials from your attendance, or interest in being a part of the Renewable Hydrogen Storage and Transport Conference in the future, please reach out to programming@aiche.org.

You can find an album of some photos taken during the conference here: https://www.flickr.com/photos/chenected/albums/72177720315454520/