~40 participants

Introductory notes –

- Meeting hosted from AIAA SciTech 2024
- Few responses to prior email surve RE: in-person meeting at SciTech
- Will revisit in future meetings (Turbo Expo? SciTech 2025?)

Presenter 1 - Jackie Chen, Sandia National Lab

- Large computing resource (exascale) – Pele, open source
- Numerous in-house codes for combustion
- DNS and LES
- Investigating fundamental NH3 processes, turbulence-chemistry-interaction, via DNS sims
- Looking at applied simulations as well
- NH3 swirl burners
- 2-stage RQL, w/ 1st stage equilibrium (focus on secondary air mixing and exit emissions)
- NO formation reaction sensitivity depends on H2 only vs. with NH3 slip
- NO formation dependence on mixing rates
- Utilizing Jiang mechanism (19 species)

Presenter 2 – Oliver Mathieu, Texas A&M University

- Specializing in mechanism development/validation
- Experimental data generation via optical diagnostics
- LAS for species in shock tube
- Of particular note – NH3 adsorption on SS surfaces requires passivation
- NH3 pyrolysis critical – model developed and added to various existing mechs

Concluding notes –

- Upcoming meetings W.R.T. ammonia combustion:
  - CI Eastern States Meeting, March 10-13, 2024, Athens, GA
    - Ext. abstract submissions through Feb. 9
  - CI Western States Meeting, March 4-5, 2024, Salt Lake City, UT
    - Ext. abstract submissions through Feb. 1
  - ASME Turbo Expo June 24-28 2024, London, England, UK
    - Papers were due 1/5/2024
    - In-person gathering similar to 2023? Rob/Vishal?
  - ASME Power September 15-18 2024, Washington DC
    - Abstracts by January 15