

# Breakout Questions: Day 2 - Group C – Testing & Validation

- ▶ What are meaningful demonstrations that can be done in Phase I, at the coupon scale?
- ▶ What level of “technical readiness” are we hoping to achieve for each application (jet engines, power plant hot gas path, nuclear, etc)?
- ▶ In addition to testing mechanical properties according to ASTM standard, what other tests are necessary to qualify and validate ultrahigh temperature materials for IGT and aerospace applications?
- ▶ Would it be advantageous/necessary for ARPA-E to separately facilitate 3<sup>rd</sup> party testing?
- ▶ What are the hurdles for test and validation of new materials for IGT and aerospace applications?
- ▶ What are the hurdles for test and validation of new nuclear structural materials?
- ▶ How does concurrent development of alloys and manufacturing processes help the program?