## References discussing HTGR accident conditions:

- 1. Preliminary Safety Information Document for the Standard MHTGR, Vol. 1, HTGR-86-024 (1986).
- Oh, C.H., et. al., "Final Report on Experimental Validation of Stratified flow Phenomena, Graphite Oxidation, and Mitigation Strategies of Air Ingress Accidents," INL/EXT-10-20759, Idaho National Laboratory (2011).
- 3. Liu, R., et. al., "High temperature oxidation behavior of SiC coating in TRISO coated particles," Journal of Nuclear Materials, **453**, 107-114 (2014).
- 4. Huang, W., et. al, "The relationship between microstructure and oxidation of selected IG- and NBG-grade nuclear graphites," Journal of Nuclear Materials, **454**, 149-158 (2014).
- 5. "Fuel performance and fission product behaviour in gas cooled reactors," IAEA-TECDOC-978, International Atomic Energy Agency (1997).
- Petti, D.A., et. al., "Modular Pebble-Bed Reactor Project Laboratory-Directed Research and Development Program FY2002 Annual Report," INEEL/EXT-02-01545, Idaho National Engineering and Environmental Laboratory (2002).
- 7. Montgomery, F.C., "Evaluation of Need for Integral Fuel Oxidation Tests," DOE-HTGR-86-002, GA Technologies, Inc. (1987).
- 8. Yanhua, Z., Lei, S., and Yan, W., "Water-ingress analysis for the 200 MWe pebble-bed modular high temperature gas-cooled reactor," Nuclear Engineering and Design, **240**, 3095-3107 (2010).
- 9. Richards, M., "REACT\_COMPACT: A Computer code for Modeling Graphite Corrosion and Fuel Hydrolysis," Proceedings of the HTR 2016, Las Vegas, NV,November 7-10 (2016).
- Iniotakis, N. and C.B. von der Decken, "Radiological consequences of a depressurized accident combined with water ingress in an HTR Module-200," Nuclear Engineering and Design, **109**, 299-305 (1988).
- 11. Lohnert, G.H., "The consequences of water ingress into the primary circuit of an HTR-Module— From design basis accident to hypothetical postulates," Nuclear Engineering and Design, **134**, 159-176 (1992).
- 12. Wolters, J., Bongartz, R., Jahn, W., and Morroman, R., "The Significance of Water Ingress Accidents in Small HTRs," Nuclear Engineering and Design, **109**, 289-294 (1988).

## References on air oxidation:

- 1. GA Graphite Design Handbook, DOE-HTGR-88111
- 2. Jensen, D., M. Tagam, and C Velasquez, "Alr/H-327 Graphite Reaction Rate as a Function of Temperature and Irradiation," GA Report Gulf-GA-A12647, September 24, 1973.
- 3. Lee, Ghosh, and Loyalka, "Oxidation rate of graphitic matrix material in the kinetic regime for VHTR air ingress accident scenarios," J. Nucl. Mater. 451, 48-54 (2014).
- 4. Se-Hwan Chi, Journal of Nuclear Materials, 381 (2008) 9-14.
- 5. Lee et al., Journal of Nuclear Materials, 438 (2013) 77-87.
- 6. Lee et al., Journal of Nuclear Materials, 446 (2014) 38-48.
- 7. Kane et al., Journal of Nuclear Materials 493 (2017) 343-367.

## Oxidation in water vapor:

- 1. Contescu and Burchell, "Water Vapor Transport in Nuclear Graphite", ORNL/TM-2015/88, Oak Ridge National Laboratory, March 2015.
- 2. Terrani and Silva, Journal of Nuclear Materials, 460 (2015) 160-165.
- 3. Contescu et al., Journal of Nuclear Materials 453 (2014) 225-232.

## General:

1. Windes et al. "Role of Nuclear Grade Graphite in Controlling Oxidation in Modular HTGRs", INL/EXT-14-31720, Idaho National Laboratory