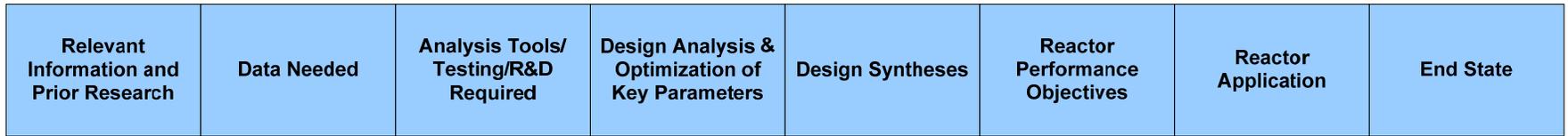


Capabilities Center Around the Integration at Systems Level to Evaluate Design, Operation, Performance, & Safety



TECHNICAL DESIGN APPROACH

- Related materials research
- Related reactor designs
- State of Research/ development of power conversion options
- Materials characterization
- Nuclear data— cross sections
- Fuel performance
- Computer code/ models
- Visualization tools
- Irradiation testing and examination
- Physical testing
- Fuel choice and enrichment
- Core geometry
- Fuel-moderator-coolant “package”
- Operating temperature regime
- Material performance
 - Thermal
 - Irradiation
- Heat rejection
- Integration of
 - Nuclear design
 - Thermal hydraulic design
 - Materials design
- Safety Analysis
- Power level
- Operating temperatures
- Power conversion system
- What is incentive for designing/ deploying the reactor?
- Develop new reactor concept

Areas of Expertise