

# Techniques and Measurements

## Group B

### Vision:

How can basic science help solve the nations / worlds energy crisis. Problems that we have before us.

Modeling accuracy cannot be achieved to meet AFCI needs. Therefore we need a wide range of measurement facilities

We now have opportunities to do things in newer and better ways

We have the opportunity to address needs of the AFC

### Challenges to address

- Data that complement models
- Data not there for model calculations
- Benchmarking models to validate new theory

## **What we need**

- **Sustain and upgrade facilities**
- **Additional funds to support early career scientists**

**To foster and increase collaborations between  
Universities and Labs  
Physicists, Chemists and Engineers**

**Suggestion: Prestigious graduate student  
fellowship program to empower universities and  
educational programs**

## Agenda Topics

1. Advanced fuel cycle data needs
2. Measurement Facility Review
3. Direct Neutron Measurements
4. Surrogate and other charged particle measurements
5. Reaction models
6. Structure and decay properties
7. Wrap Up