U.S. DEPARTMENT OF ENERGY

SRNL: A Catalyst for the Future

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Savannah River Site Information Pod

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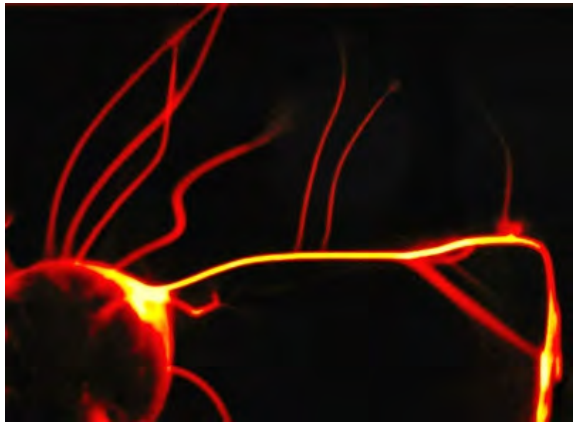
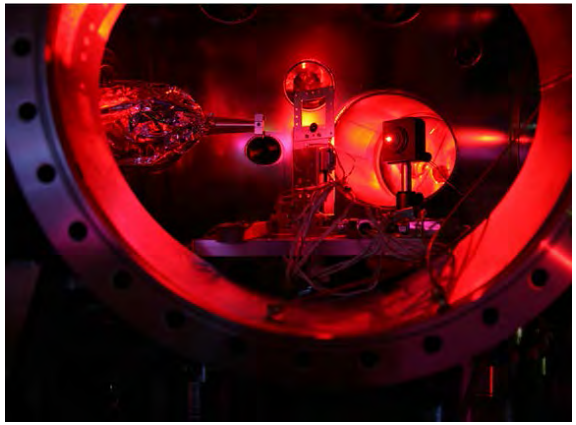
What is a National Lab?

- Single purpose facilities
- Smaller staff size
- Budget range of $30 million and up





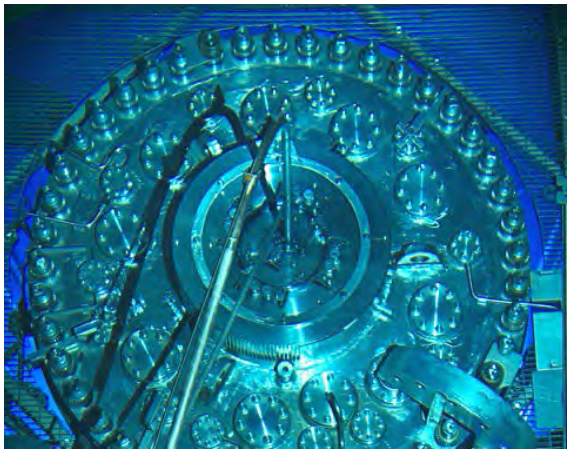
PPPL PRINCETON PLASMA PHYSICS LABORATORY

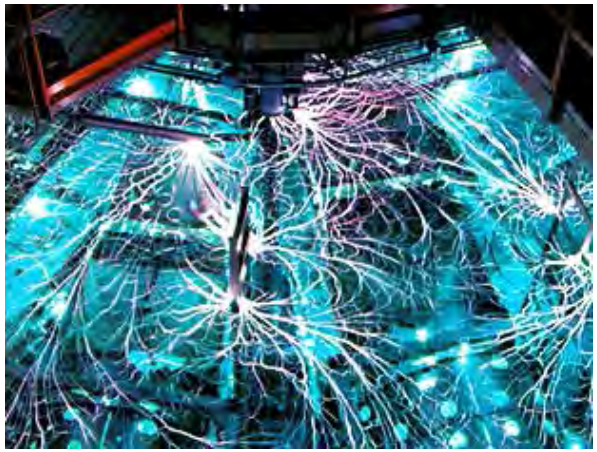
AMES LABORATORY United States Department of Energy

SLAC NATIONAL ACCELERATOR LABORATORY

What is a National Lab?

- Multi-program “MegaLabs”
- Annual budgets $1 billion and up
- Regional economic engines





Pacific Northwest
NATIONAL LABORATORY
Proudly Operated by **Battelle** *Since 1965*

OAK RIDGE
National Laboratory

Sandia
National
Laboratories

SRNL: A Multi-Program Lab Supporting National Needs

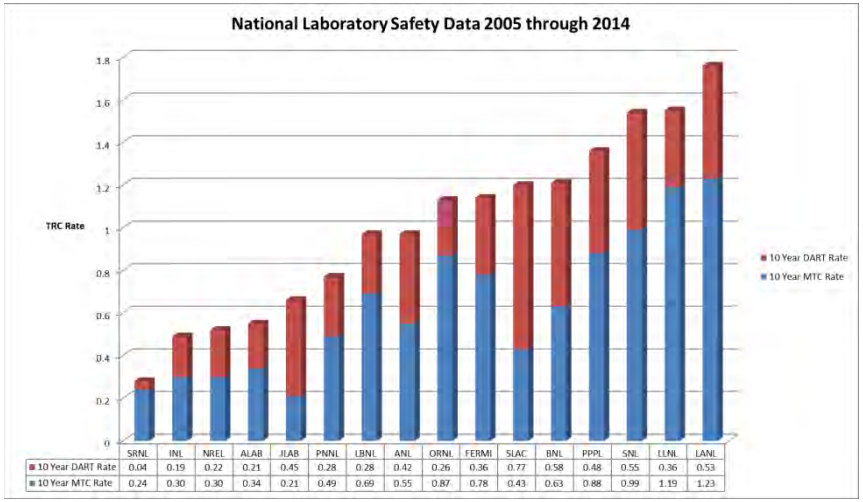
The value of SRNL is measured every day by the investments of its federal clients and private sector partners.

SRNL at a Glance

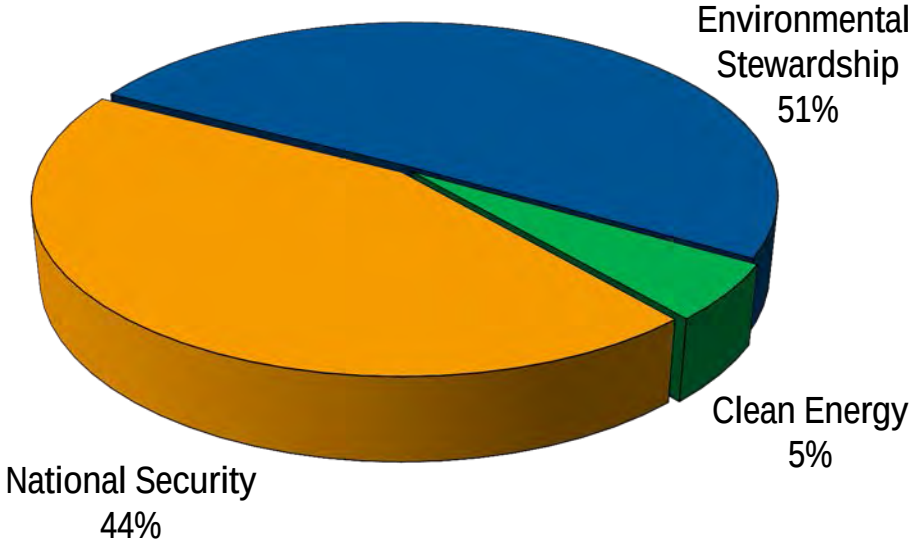
Brief Timeline

1951 – Laboratory established
1992 – Savannah River Laboratory becomes
Savannah River Technology Center
2004 – SRTC named SRNL
2006 – SRNL named DOE Office of
EM National Laboratory

~ 820 Staff
~ $212M (FY15 Executed)
~ 300 Discrete Work Activities
Multi-Program Laboratory
> 65% of funding from non-SRS customers



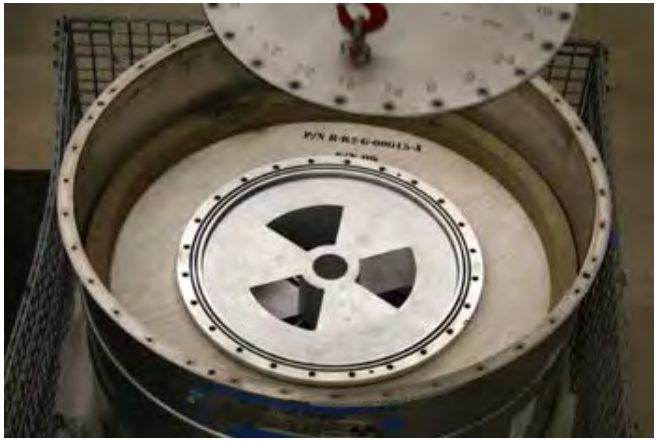
Safest National Lab – 2005-2014



SRNL FY15 Execution

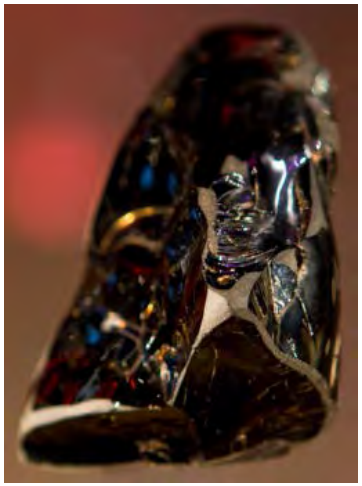
SRNL is Critical to DOE Success and has a Worldwide Reputation

- Strategic partner at other DOE Sites



- Nuclear Packaging

- Fukushima support

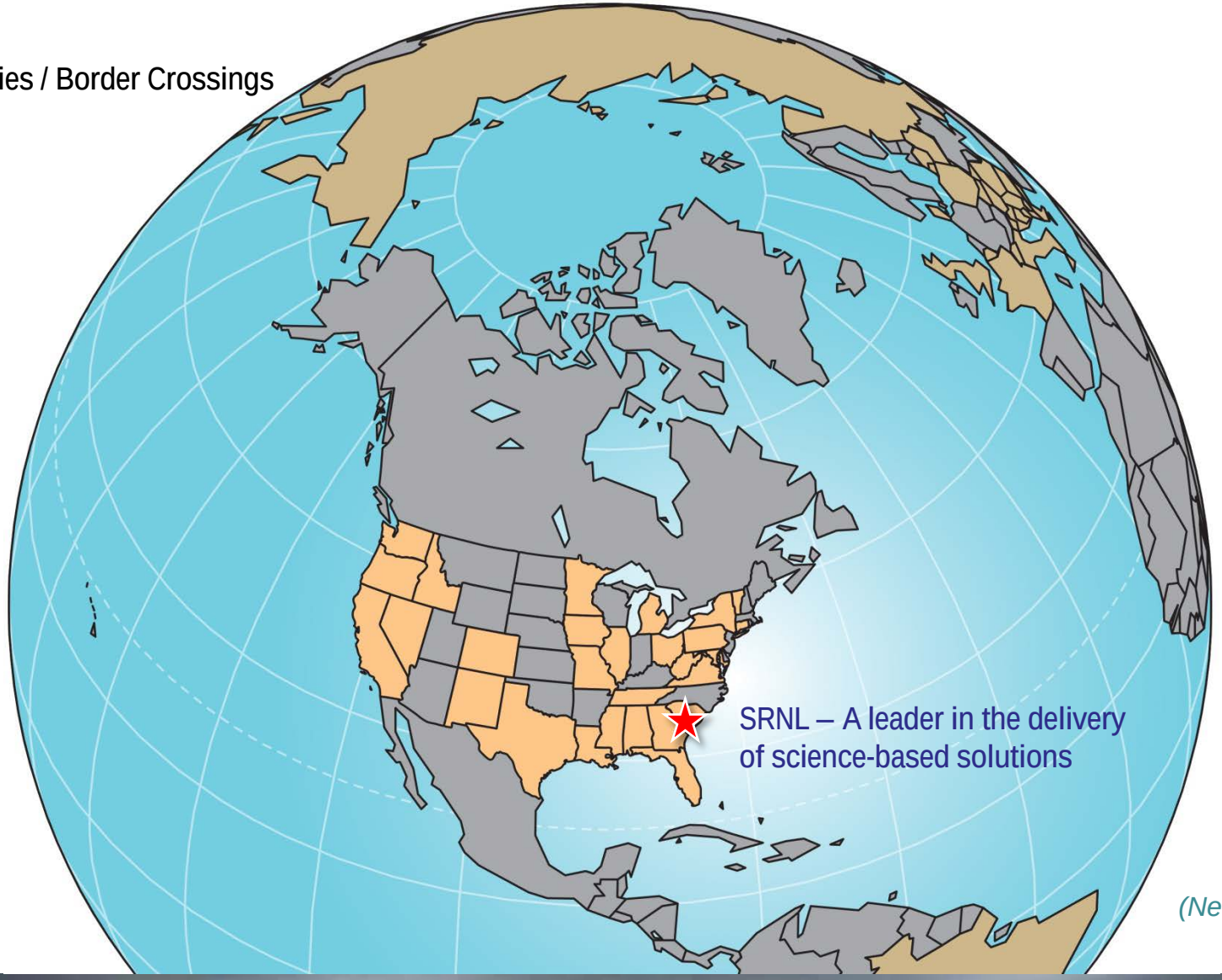


- Technical underpinning for SRS missions

SRNL : Where We Work

- 25 States
- 27 Countries / Border Crossings
- 4 Planets

Argentina
Austria
Azerbaijan
Belarus
Belgium
Brazil
Bulgaria
Dagestan
Denmark
England
France
Georgia
Greece
Iran
Iraq



Italy
Japan
Korean Peninsula
Latvia
Lithuania
Moldova
Poland
Romania
Russia
Switzerland
Turkey
Ukraine
Saturn *(Cassini)*
Jupiter *(Juno)*
Pluto *(New Horizons)*

Facilities for All Types of Materials

Full Range of Capabilities Supporting Varied Missions – 600K sq. ft. total

Shielded Cells

Gloveboxes

Highly Radioactive
Large Quantity SNM
High Sensitivity
Gaseous Tritium
Analytical/Metallurgical Labs
Instruments/Mock-up Labs

Radiological Hoods

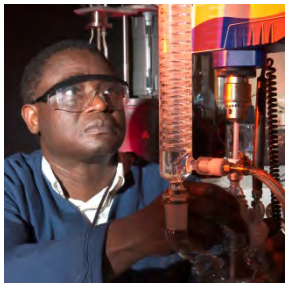
Off-campus
Nonradioactive Labs

Nonradioactive
Laboratories

DOE/EM National Laboratory

•Unique technical capabilities applied to reduce technical uncertainties in order to assist sites in meeting cleanup requirements by providing applied research and development in the areas of:

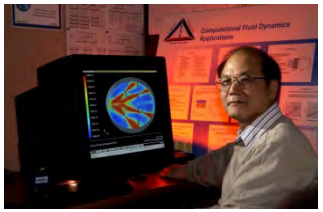
- **Characterizing processing, and stabilizing high-level radioactive waste**



- **Characterizing and cleaning up groundwater and soil**

- **Managing surveillance and packaging of nuclear material**

- **Modeling and flowsheet development for waste stabilization**



- **Closing high-level radioactive waste storage tanks**

- **Managing, storing, and processing spent nuclear fuel**

- **Processing, packaging and transporting, and disposing of legacy nuclear materials**

- **D&D of Nuclear Plants**

In National Security, Our Reach Extends Far Beyond SRS

Tritium Expertise

Port Authority

FBI Laboratory

Mobile Plutonium Facility

SRNL Contributes to Clean Energy Initiatives

Hydrogen Research

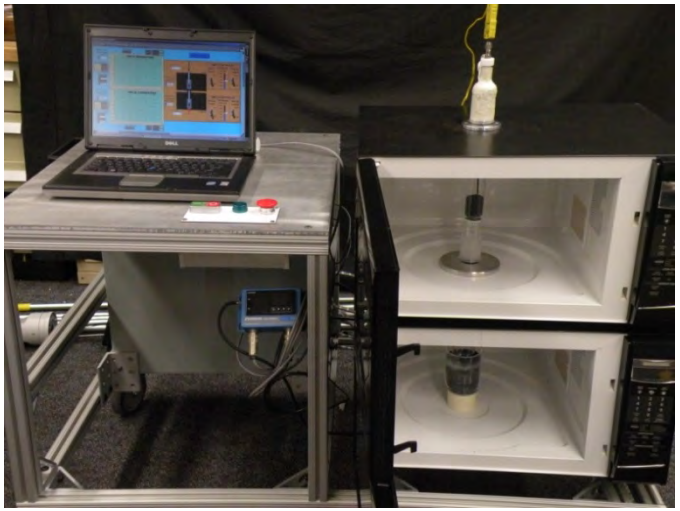
Safe Nuclear Fuel

Wind Energy

Natural Gas

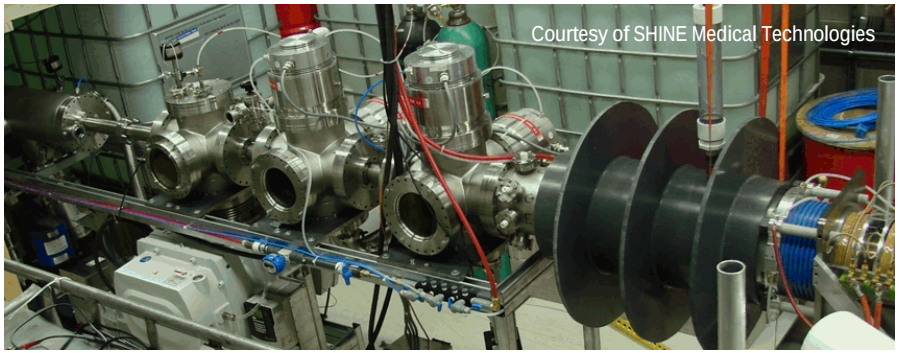
Solar Research

SRNL Innovation Can Be an Economic Engine for Region

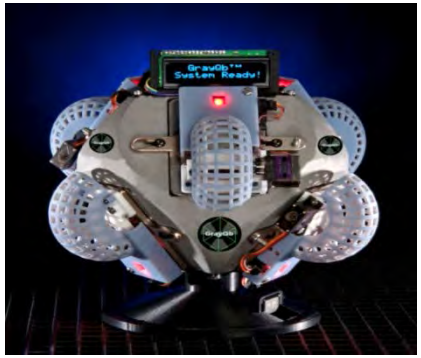


Hybrid Microwave System

SoundAnchor™



Medical Isotope Production

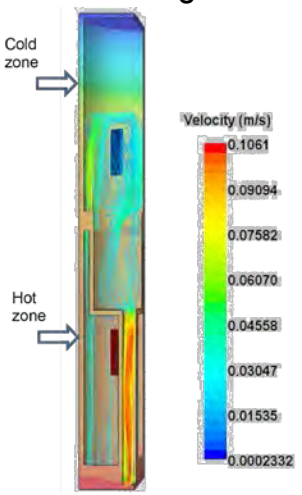


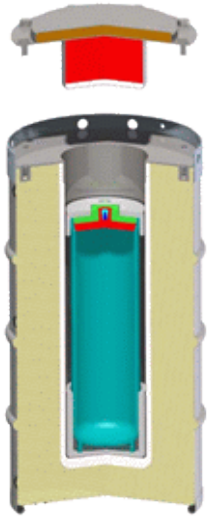
GrayQb™

SRNL's Broad Science & Engineering Proficiencies

- Integrated Chemical & Radiochemical Process Development
- Materials Development & Analyses
- Process & Engineering Modeling
- Plant Support
- Nuclear Engineering
- Mechanical Engineering
- Remote Systems & Robotics
- NDE & NDI
- Environmental Science
- Biotechnology
- Atmospheric Sciences
- Nuclear Nonproliferation

Modeling

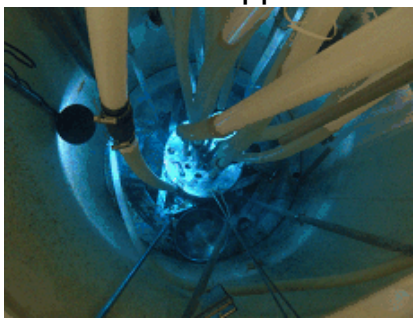


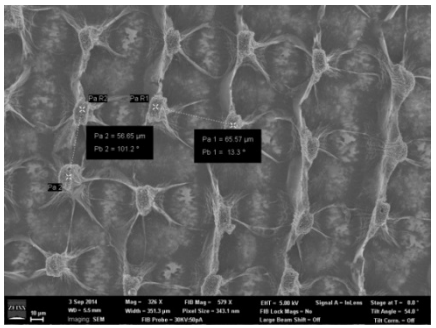


Packaging

Robotics

Plant Support





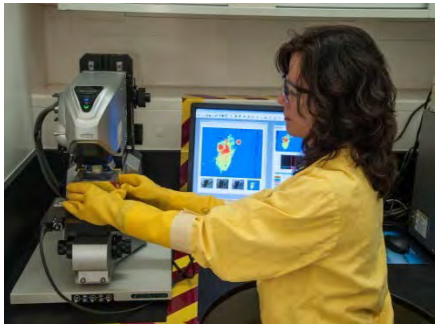
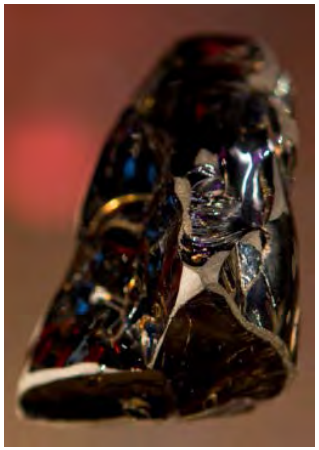
Materials Development & Analyses

SRNL's Need for Broad Disciplines

- Scientists
  - *Physicists, Chemists, Biotech, Environmental, Ceramists*
- Engineers
  - *Mechanical, Nuclear, Civil, Crit Safety, Process*
- Operators
- Technicians
- NDE inspectors
- Industrial hygienists
- Statisticians
- Machinists
- Glass Blowers
- RadCon Inspectors






SRNL is a Catalyst for Future SRS Missions

- National priorities will evolve and change.
- Fixed-purpose plants lack the flexibility to adapt to changing priorities.
- National Laboratories lead change.

SRNL can expand the aperture of SRS and South Carolina.

Cold War Production

Environmental Restoration

Nuclear Security

The Future