

DOE R&D Accomplishments

Significant Outcomes from
DOE Research and Development

From the historical Manhattan Project era (beginning in the 1940s) through more recent accomplishments, including the latest Nobel Laureates associated with DOE

Featured Topic Pages

- Renowned scientists, with information about the scientists' R&D results
- Significant DOE research disciplines, with R&D results
- Manhattan Project, including scientists and key events

Laureates

- Nobel Prize winners associated with DOE and predecessor agencies
- Winners of the Enrico Fermi Award, a U.S. Presidential award

Database

- Selected documents about noteworthy R&D results
- Documents and individual pages searchable by word or phrase
- Tag cloud

www.osti.gov/accomplishments

DOE R&D Accomplishments

The outcomes featured in DOE R&D Accomplishments have had significant economic impact, have improved people's lives, or have been widely recognized as remarkable advances in science.

As detailed in DOE R&D Accomplishments, DOE scientists have:

- discovered over eight elements on the Periodic Table
- decoded three DNA chromosomes
- developed the battery that powered the lunar lander module and other spacecraft
- charted the path of carbon in photosynthesis
- created pre-Pong video game
- contributed to nuclear medicine
- discovered the tau lepton
- discovered asymptotic freedom in the theory of strong interaction
- discovered the fullerenes molecule (Buckyball)
- used supernovae to measure the accelerating expansion of the universe
- invented the cyclotron (an early accelerator)
- invented the calutron (an isotope separator)
- invented the bubble chamber
- developed the Eightfold Way, a theory of Strong Interaction Symmetry
- first detected solar neutrinos
- first detected the neutrino
- first observed the top quark
- provided evidence as to why dinosaurs are extinct
- created the first self-sustaining nuclear chain reaction
- confirmed the third branch of life (the microbe Archaea)



Developed and maintained by the
Office of Scientific and Technical Information
Office of Science
U.S. Department of Energy