

Reactor and Nuclear Systems Division

SEMINAR ANNOUNCEMENT

Heavy Rare Earths and Thorium: An Energy Future

**Jim Kennedy, President
Wings Enterprises, Inc.**

*January 31, 2011, 10:00 a.m.
4500N, Weinberg Auditorium*



Rare earth elements (REEs) have numerous uses in advanced technologies including energy, electronics, and defense applications such as magnets used in wind turbines, advanced batteries for hybrid and electric vehicles, and in production of plasma displays. Currently the majority of the world's rare earth resources are provided by China, which has recently announced export restrictions resulting in reduced REE availability. Wings has developed a strategy and is supporting Congressional legislation that would create a centralized rare earth refinery specifically for the processing of Thorium-rich rare earth concentrates such as Monazite or Xenotime. This centralized refinery would be created to manage the Thorium waste stream/byproduct in an environmentally responsible manner. The proposed strategy would allow for a new private corporation to collect, stockpile and manage Thorium. This corporation would be sanctioned by Congress to develop markets and uses for Thorium, including energy. With a clear Congressional mandate for the development of Thorium energy this corporation would be able to attract private capital for the development of commercial Thorium fueled reactors, such as Molten Salt Reactors developed at ORNL.