

**5. Saturday, February 16, 2008, 10:30 AM to 12:00 PM**

*Nuclear Reactor Systems of the Future: Costly Illusion or Promising breakthrough?*

**Session Number:** 090-159

**Session Title:** Nuclear Reactor Systems of the Future: Costly Illusion or Promising Breakthrough?

**Session Type:** 90-Minute Symposium

**Primary Category:** Energy and Renewable Resources

**Session Start:** 2/16/2008 10:30:00 AM

**Session End:** 2/16/2008 12:00:00 PM

**Location:** Room 207

**Description:** Concerns over energy resource availability, climate change, air quality, and energy security suggest an important role for nuclear power in future energy supplies. Although the current generation II and III nuclear power plant designs provide a secure and low-cost electricity supply in many markets, further advances in nuclear energy system design can broaden the opportunities for the use of nuclear energy. Governments, industry, and the research community worldwide have launched a wide-ranging discussion on the development of next-generation nuclear energy systems known as generation IV. Because the next generation of nuclear energy systems will address needed areas of improvement and offer great potential, many countries share a common interest in advanced research and development. Such development will benefit from the identification of promising research areas and collaborative efforts that should be explored by the international research committee.

**Organized by:**

Aidan Gilligan, Symposium Organizer European Commission, Joint Research Centre, Brussels, Belgium

Massimo Salvatores -- Symposium Co-Organizer, CEA

**Presentations:**

Moderator—**Vaughan Turekian**, American Association for the Advancement of Science (AAAS)

Evolution Versus Revolution in Innovative Nuclear Systems: Toward Sustainability?--

**Jacques Bouchard**, CEA, Generation IV International Forum, Gif-sur-Yvette, France

Waste Management: In Nobody's Backyard--**Yuichi Hayase**, Japanese Atomic Energy Agency, Ibaraki-Ken, Japan

Safety: Fighting the Ghosts of the Past and Building a New Relation of Trust--**David Hill**, Idaho National Laboratory, Idaho Falls, ID

Risks of Proliferation: International Context and the Role of Science--**Roland Schenkel**, European Commission, Joint Research Centre, Brussels, Belgium