



The supervisory board of the Kestcells Project announces the Seminar FUB-02:

**Dates:** 25.11. 2013

**Place:** Helmholtz-Centre Berlin for Materials and Energy, Department Crystallography, Germany

## Safety Assessment and Comparing Safety Records and Public Recognition of Various Energy Supplies

### Program

#### **Part 1: Energy Efficiency: Comparing the Systems of Various Energy Sources**

13:00 – 14:00 Presentation

*It is not possible to produce energy, rather transform energy from one source to another that had previously been stored in either a dedicated energy storage or in fuel. Undoubtedly, all energy transformations are subject to natural laws of physics, such as energy conservation law or the 2<sup>nd</sup> law of thermodynamics, the constraint of growing entropy. The energy transformation efficiency depends on the energy density stored in the fuel or storage device as well as reliable availability and transformation rate in each individual power station, whatever energy source and technical distribution systems are being employed. Moreover, socio-economic implications impose significant efficiency limitations beyond any technical scope. Within this talk a systematic comparison of various energy systems will be presented and discussed on a scientific and technical basis.*

14:00 – 14:30 Discussion

#### **Part 2: Safety Assessment of Various Energy Systems**

15:00 – 16:00 Presentation

*Highly distinctive degrees of technical complexity hallmark the various energy systems, and they all utilize fuels or primary sources of quite different energy densities. The technical marketing through their individually adapted distribution networks of fuels and towards the customers bear significant and characteristic properties upon which a safety assessment and evaluation of the various energy systems will be presented and discussed.*

16:00 – 16:30 Discussion

### Speaker:

Dr. Holger Tietze-Jaentsch, Head of Product Quality Control Office for Radioactive Waste at the Forschungszentrum Jülich, Institute of Energy and Climate Research, Nuclear Safety Research and Waste Management (IEK-6).