

Re³build ICU Seminar

2014AY

Seminar Renewable Energy and Energy Efficient Building at the ICU

Time: October 20th (Monday) 12:40-13:40 Place: Room H-314 (University Hall, 3rd Floor)

Title: Energy Efficient Buildings: Example of a House Renovation in Tokyo Speaker: Dr. Lorenz Granrath (National Institute of Advanced Industrial Science

and Technology, AIST)

The presentation will give an introduction into energy efficient buildings by describing the theoretical background and then give a practical experience of the presenter renovating a house in Tokyo according to primary energy energy efficiency criteria.

Energy Efficient

Building

In order to achieve an energy efficient building, first the primary energy consumption has to be

optimized. This is mainly the energy used for living in the house, i.e. heating, cooling, hot water, etc. Secondly, in a low energy house the

transmission loss of heat and cold (through walls, windows and ventilation) has to be reduced.

How to implement these measures will be shown given the practical example of the presenter renovating a house in Tokyo in 2009.

Finally, as the presenter has been and is working in research institutes, some examples are given of actual developments in German and Japanese research institutes in the field of energy efficient buildings.

electircal equipment

consumption

transmission loss

heating/cooling/ hot water

Wall insulation

Windows

Ventilation







Anybody, especially students, are welcome. *Contact: Eckhard Hitzer (hitzer@icu.ac.jp)

Access: http://www.icu.ac.jp/about/access/

Campus Map (Bldg. No. 1!): http://www.icu.ac.jp/about/campus/

Important note to students: All students are welcome to attend the seminar. But please note that different from the NS Forum or Functional Science seminars, the seminar will not give you any ICU course credits.