

### Joint Department of Nuclear Energy

(Department of Nuclear Engineering)
Graduate School of Advanced Science and
Enginering
Faculty of Science and Engineering
Waseda University

## Faculty of Science and Engineering Waseda University

#### 3 Schools with total of 17 departments

Schools of Garduate Schools of

Fundamental Science and Engineering,

Creative Science and Engineering,

Advanced Science and Engineering

Aprrox. 7500 undergraduate, 2600 graduate students 600 full time professors/assistants

#### 5 graduate programs established in April 2010

Major in Business Design and Management Major in Electronic and Photonic Systems

Cooperative Major in Advanced Biomedical Science (Waseda-Tokyo Womens Medical Univ.)
Cooperative Major in Advanced Health Science (Waseda-Tokyo University of Agriculture and Technologies)

Cooperative Major in Nuclear Energy (Waseda-Tokyo City Univ.)
(Now called Joint Department of Nuclear Energy)

#### Joint Department of Nuclear Energy

(Department of Nuclear Engineering)

Capacity of graduate students

Master 30/year (15 each university), total 60 students

Doctor 8/year (4 each university), total 24 students

Students belong to either Waseda university or Tokyo City University,

being admitted by the entrance examination

(Examination is held separately.)

Students have to take 10 units of the partner university classes

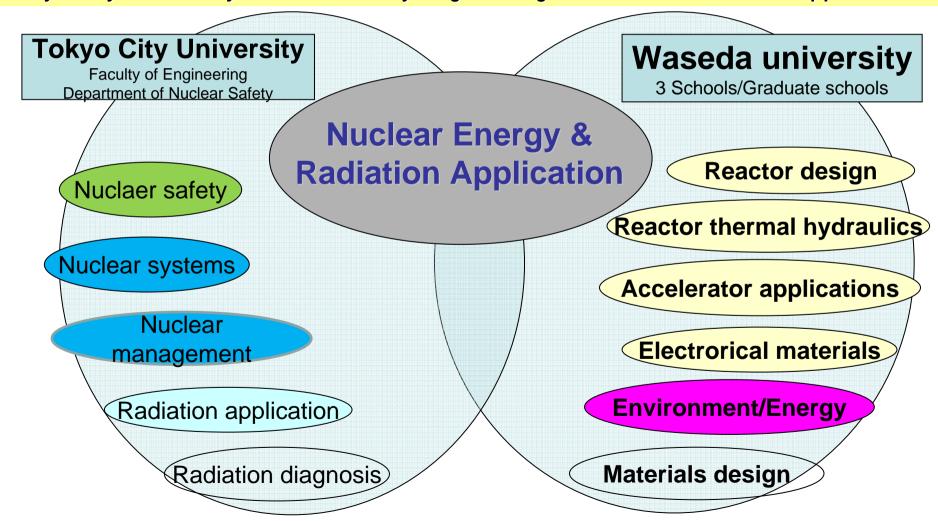


Collaboration agreement singed by both presidents, April 27, 2009

#### Joint Department of Nuclear Energy

Waseda University; popular in fundamental science and engineering as well as accelerator/radiation applications

Tokyo city University; Nuclear safety engineering and research reactor applications



#### **Lectures and experiments**

- ·Reactor physics
- ·Nuclear engineering
- ·Reactor design
- · Nuclaer safety
- Nuclear power plants & control
- Nuclear structural mechanics and nuclear powerplant mainmenance
- ·Reactor thermal hydraulics
- ·Nuclear materials/Nuclear fuel
- ·Radiation information processing
- Accelerator applications
- ·Nuclear law/ crisis management
- Nuclear experiments
- ·Reactor operation experiments
- Acccelerator experiments

**Nuclear anti-seismic engineering Nuclear fusion reactor** 

**Nuclear fuel cycle** 

**Radiation detection** 

**Reactor detection** 

Radio chemistry

**Non-linear/complex systems** 

Radiation control & applications

**Human factors** 

**Energy policy** 

**Electrical grids & management** 

**Specal excercises of research labolatories** 

#### **Professors of Waseda University, JDNE**

#### Yoshiaki Oka



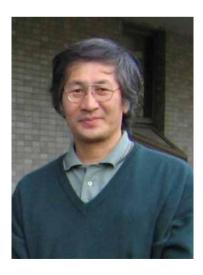
http://www.f.waseda .jp/okay/ advanced reactor design, core physics, nuclear safety, computational physics, radiation transport/shielding Dep.of Applied Physics

Shinichi Morooka



http://www.f.waseda.j p/morooka/ reactor thermal hydraulics, heat transfer, reactor safety,next generation reactors, measurements of heat transfer

Masakazu Washio



http://www.f.waseda .jp/washiom/ accelerator science, radiation physics, radiation chemistry, radiation engineering; Dept. of Applied Physics

Yoshimichi Ohki



Major in Modern

Mechanical Engineering

p/yohki/
plectrical insulating
materials,
dielectrics,
ion engineering;
Dept. of Electrical
Engineering and
Bioscience

# Comprehensive collaboration agreement signed between JAEA, Waseda University and Tokyo City University



Reactor and fuel cycle experiments will be held at JAEA facilities

## Study of Nuclear Engineering at Waseda university (Admission information)

International admission office; <a href="http://www.waseda-iao.jp/waseda/e/index.html">http://www.waseda-iao.jp/waseda/e/index.html</a>, The number of international students of Waseda University is the largest in Japan.

JDNE has not yet opened the English course, but the professors will accept graduate students of Department Applied physics (prof. Oka and prof. Washio), Department of Modern Mechanical Engineering (prof. Morooka) and Department of Electrical Engineering and Bioscience (prof. Ohki) of Faculty of Science and Engineering. Please refer to International Program AO admission; <a href="http://www.sci.waseda.ac.jp/abroad/english/index.html">http://www.sci.waseda.ac.jp/abroad/english/index.html</a>

Instructions for thesis study will be given in English. You will find foreign post docs and assistants in their labs.

Reactor studies and accelerator (radiation) applications will be major subjects.