

### Toshiko Yuasa Laboratory Ceremony

2009 05 21 in KEK

# Ochanomizu University I and I and I and I and I and I are a second to the second to t

## Dr. Toshiko Yuasa

Thanks to KEK and CNRS

Ochanomizu University
President
Sawako Hanyu



- Established in 1875 as Tokyo Women's Normal School, the first national higher educational institute for women.
- Fostered many pioneering women scientists
- Produced prominent women scientists including Dr.
   Toshiko Yuasa
- Long-standing Tradition of Pioneering Research Accomplishments by Ochanomizu Alumnae



### The First Female Doctor of Science in Japan

### **Kono YASUI** (1880-1971)



(in 1927)

**Born in Kagawa Prefecture** 

- 1898 Entered Women's Higher Normal School (Science Course).
- 1911 Delivered a thesis in "Annals of Botany" (England). It was the first thesis on science that a Japanese female researcher delivered abroad.
- 1919 Became Professor of Tokyo Women's Higher Normal School
- 1927 Received Doctorate of Science, becoming the first woman doctor in Japan.

#### Quote

"I am satisfied as long as my works last through history."



### The First Woman to Enter an Imperial University

### Chica KURODA (1884-1968)



At the laboratory (around 1942)

**Born in Saga Prefecture** 

1902 - Entered Women's Higher Normal School (Science Course).

1913 - Entered Tohoku Imperial University (Faculty of Science). She was the first woman that entered an Imperial University.

1918 - Became Professor of Tokyo Women's Higher Normal School.

1929 - Awarded Doctorate of Science degree.

1953 – Granted a patent by research in quercetin.

#### Quote

"Natural objects are honest. If you work hard on it, results always come back to you."

### The First Female Doctor of Agriculture ( ) お茶の水女子大学 in Japan: "Doctor of Tea"



### Michiyo TSUJIMURA (1888-1969)



(in 1951)

**Born in Saitama Prefecture** 

1909 – Entered Tokyo Women's Higher Normal School (Science Course) and was taught by Professor Kono YASUL

1913 - Graduated Tokyo Women's Higher Normal School and became a teacher of Yokohama Women's Higher School.

1922 - Started research on vitamins at Tokyo Imperial University, Faculty of Medicine

1923 - Entered Rikagaku Institute. Discovered that green tea contains vitamin C.

1932 - Received Doctorate of Agriculture degree, becoming the first Doctor of Agriculture as a woman

1949 - Became Professor of Ochanomizu University

1950 - Became the first Dean of the Faculty of Home Economics of Ochanomizu University



### The First International Female Physicist

### *Toshiko YUASA* (1909-1980)



Professor Yuasa and students at a lunch meeting (in 1948)

### **Born in Tokyo**

1927 – Entered Tokyo Women's Higher Normal School (Science Course).

1940 - Studied in France with French government scholarship.

1943 - Awarded French Doctorate of Science degree.

1945 - Became Professor of Tokyo Women's Higher Normal School.

#### Quote

"The roots of the sciences come from the broad, abundant feeling of love."

# 2) Toshiko YUASA "The roots of the sciences come from the broad, abundant feeling of love."

- Dr. Yuasa's family background
   Mother Talented in Japanese traditional arts
   Father A scientist and an inventor
- Dr. Yuasa's childhood
   Enrolled in the girls' high school affiliated
   with Tokyo Women's Normal School.
   Good at Japanese literature and essay
   writing.
- Enrolled in Tokyo Women's Normal School and majored in science.



Passport photo in 1939

## "Being a physicist is my calling" School Studying at Tokyo Women's Normal School

- Enrolled in Tokyo Women's Normal School In 1927.
- Majored in science
- Studied math, physics and biology
- Fascinated with the profound order of nature
- Decided to be a physicist as her vocation



Measuring atomic spectrum of antimony at Tokyo University of Literature and science In 1933

# Encounter with Julio- Curie's research paper on artificial radioactivity Studying at Tokyo University of Literature and Science

- Enrolled in Tokyo University of Literature and Science as the first female student majoring in physics
- Wrote a graduation thesis entitled " atomic and molecular spectroscopy" In 1931
- Started to work as a lecturer at Tokyo Woman's Christian University.
- Continued to work on her research at Tokyo University of Literature and Science.
- Encountered Dr. Juliot-Curie's research paper about artificial radioactivity
- Decided to go to France.

### 3) Living in France Freedom of Soul



- Headed to France on January 26, 1940
- Interested in issues of war and peace
- Faced difficulties, but felt a freedom
- Made a great deal of effort to foster women researchers in Japan.



At the roof of College de France (Around 1941)



- **Teach at Tokyo "École Normale** Supérieure" for women (Ochanomizu Univ.)
- Research at Nishina Laboratory of RIKEN
- Aimed at founding an advanced women's university
- **Established Ochanomizu University**



around 1948

## 4) Ochanomizu University Update



Ochanomizu University is located in the central part of Tokyo.

- Student Body Undergraduate: 2,166 Graduate: 1,073
- <u>3 Faculties</u> Letters and Education, Science, Human Life and Environmental Sciences
- 1 Graduate School Humanities and Sciences
- Ratio of Women in Staff (as of May 2009)
   President, Trustee, Vice-presidents
   Professors, Associate Professors, Lecturers
   All faculty members(including Assistant Professors) 48%
   Administrative staff
- Ratio of Experienced Workers in Doctoral Program

   (in 2009)
   Master Course
   13%
   Doctoral Course
   519



### Philosophy of Education & Research

To exist as "a place where the earnest dreams will come true" for all women motivated to study

### Objective of Education & Research

As a women's university, to nurture women to be "leaders" in the global community





- International perspectives in responding to the rapid globalization (and to the accelerated progresses to an information-oriented society)
- Interdisciplinary approach for flexible research skills compatible in a wide scope of fields and themes
- Gender equality through realizing "work-life balance"



### **Fostering female leaders**

**Gender equality** 

High-quality education as opinion leaders

Realization of "work-life balance"



### Ochanomizu Model for the 21st Century



- Offering advanced liberal arts education integrated with both the humanities and sciences
- Fostering female leaders
- ·Fostering initiative female researchers
- ·Aid for girls' education in developing countries





Dealing with rapid globalization and development of highly information-oriented society

International perspective

Flexible research skills for studies in various fields and themes

Interdisciplinary approach



Publicizing the "Model of fostering female leaders" to the world

## Dr. Yuasa's ever-lasting philosophy Liberal arts Education and Advanced Professional Education

"A genuine scientific mind leads to nature of the universe including art, literature and religion."



Tombeau de Mme Curie à Sceaux Dr. Yuasa prayed for her soul laying white roses and carnations on her grave. (November 1, 1940)





## Charactaristics of Ochanomizu University

- \* Liberal Arts Education for the 21 century
- \* Constructing a base of support for female researchers
- \* Fostering young researchers



### Reference

- Ochanomizu University http://ocha.ac.jp/
- Ochanomizu University Digital Archives http://archives.cf.ocha.ac.jp/index.html
- Hommage à Toshiko Yuasa (CNRS)
   http://www.th.u-psud.fr/YUASA150/Yuasa\_event/intro-en/profile.html



## Thank you for your attention.

Sawako Hanyu
President
Ochanomizu University
2009.5.21