

# **Joint ITU-IEICE-IEEE Workshop on Education about Standardization**

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## **Activities of Academia in Waseda University**

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# Introduction

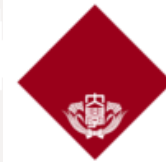
- Waseda University was founded in 1882 by Shigenobu Okuma, later Prime Minister of Japan, with the aim of fostering contemporary Japanese leaders. It has since developed into a comprehensive university with more than 50,000 students and staff.
- Our Goals are
  - ❖ Achieving excellence in education and research as a private Japanese university in Asia/Pacific.
  - ❖ Enhancing and strengthening a global network with partner universities.
  - ❖ Creating a new style of international education and research program.
- In order to promote the above target, we joined the ITU-T as an academia member in early 2011.

# ITU and Academia

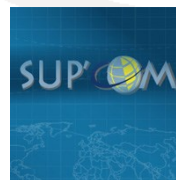
- In the ITU Plenipotentiary Conference in October 2010, ITU has introduced a new category of membership for academia, universities and research institutes.
- Its main objectives is to encourage scientific contributions from academic institutions, to develop the future vision to reflect the latest technology and applications in a timely manner.

# ITU and Academia

- 1st member registration was held in January 2011. 63 universities in the world, including Waseda University have registered.



早稻田大学  
WASEDA University

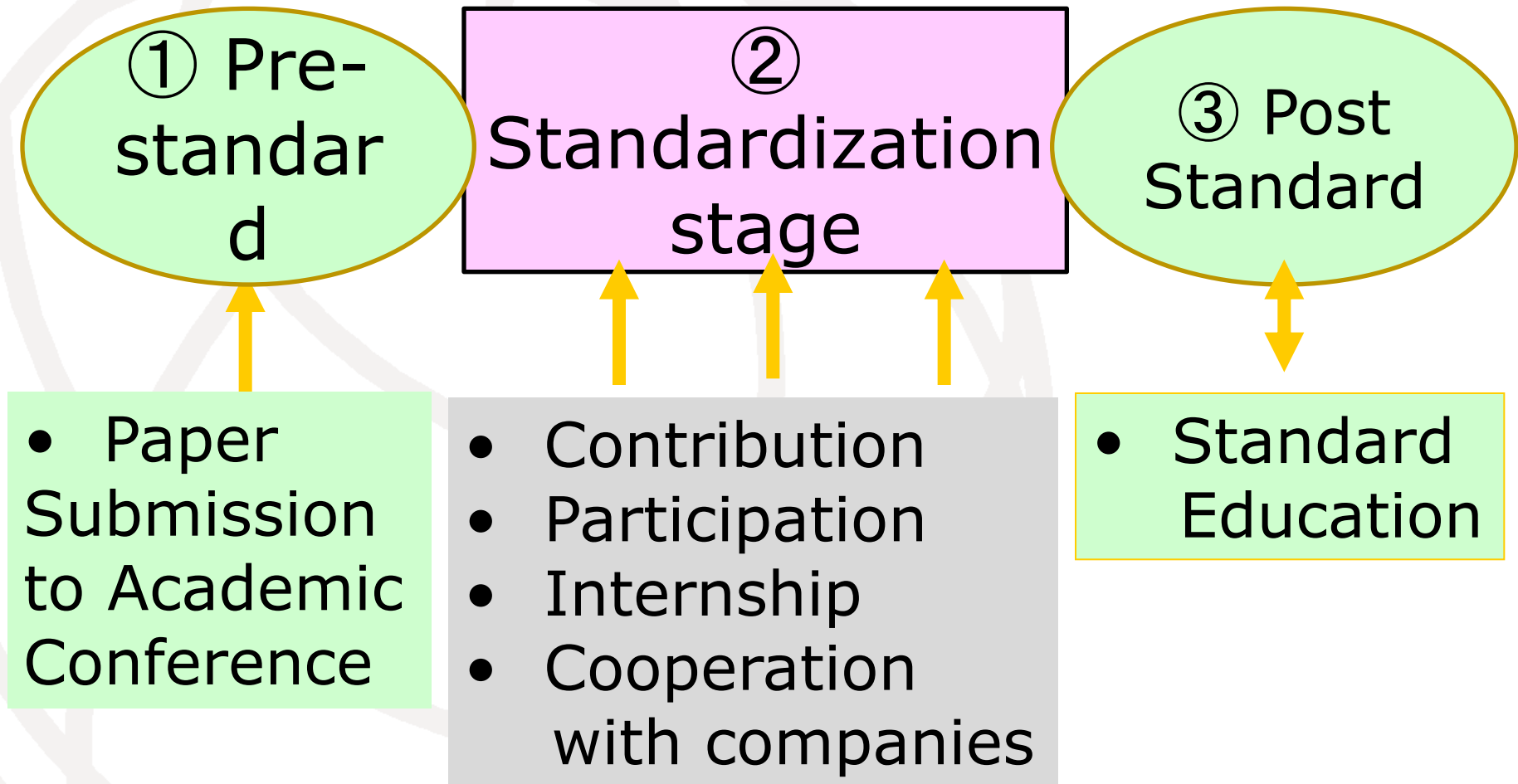


清华大学  
Tsinghua University



Present total:63 (15 ITU-D,14 ITU-R,45 ITU-T;  
Univ:15 ITU-D, 14 ITU-R, 45 ITU-T)@ 14 May 2014

# Range of ITU related activities in University



# Past Kaleidoscope Conferences



1<sup>st</sup> Kaleidoscope 2008, Geneva, Switzerland (4 PhD students presented)

*Innovations in NGN*

2<sup>nd</sup> Kaleidoscope 2009, Mar del Plata, Argentina (1 PhD student presented)

*Innovations for Digital Inclusion*

3<sup>rd</sup> Kaleidoscope 2010, Pune, India (1 PhD student presented)

*Beyond the Internet? - Innovations for future networks and services*

4<sup>th</sup> Kaleidoscope 2011, Cape Town, South Africa (2 PhD students presented)

*The fully networked human?-Innovations for future networks and services*

5<sup>th</sup> Kaleidoscope 2013, Kyoto, Japan (1 PhD student presented)

*Building Sustainable Communities*

# Train your students : Internships



A PhD student of Waseda University, who received an award at a Kaleidoscope Conference, applied to this program to study the international Standardization activities at ITU, Geneva.

# Standardization stage



(14-25  
March 2011)

- Participation to ITU SG16 meeting as a Academia membership.
- In Academia membership, faculty and students can participate in any meeting as ITU Academia members.

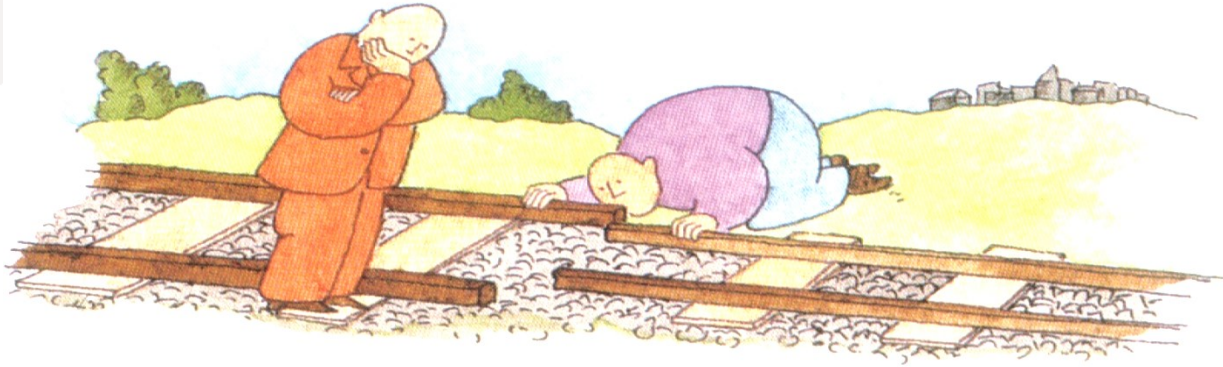


# Practical education



To learn Rules and Procedure of Conferences, Assemblies and Meetings, Intellectual fighting Technology and business strategy, etc.

# Post Standardization



- Students learn the need for standardization through case studies of some standards.
- It is included in the curriculum, and a syllabus is created.
- The education on standardization is carried out in cooperation with other universities
- People follow a PhD degree in themes related to standardization.

# Education about Standards in Waseda University (from 2008)

- Course on "Education about Standard"

- (a) Business and Global standardization (by Ministry of Economy, Trade and Industry)

- (b) Information Communication and standard (by Ministry of Internal Affairs and Communication)

- Purpose

- (a) Acquisition of a wide range of knowledge

- (b) Human resource development

Both lectures are directed at master course students.

2 credits are given by 15 90 minute courses in a semester.

The lecture was presented by English and/or Japanese lecturers. The lecturers are professors of Waseda University, Kougakuin University, JAIST ,TTC, NTT, Toyota, InfoTechnology Center, ARIB and OKI.

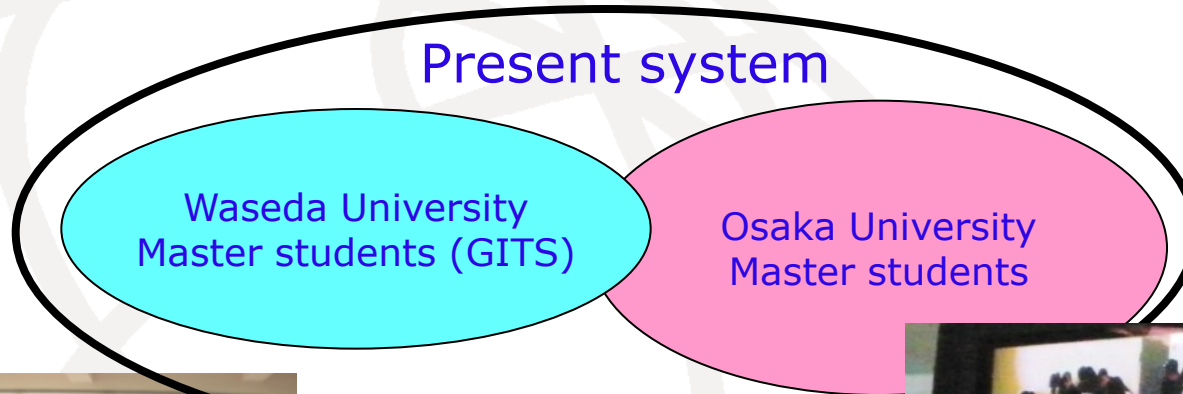
# Class Planning on Business and Global standardization

N	Lecture title	Outline
1	Importance of standardization in the society	Understanding importance of standardization the organization and study.
2	Principle of standardization	Understanding the standardization activities as well as the role of standardization and the fundamental knowledge .
3	Standardization and Certification rule	Understanding the outline, role and application of certification system for the activity of standardization.
4	Standardization and IPR	Proposing the example of relation between IPR and standardization
5	Business strategy and Standardization	Understanding of standard utilization in business society.
6	(Cellular system)	Understanding examples of study for business strategies supported by standardization activities.
7	(iPS)	
8	(IPTV)	
9	Standardization in new study items(CSR,BCP etc.)	Presentation of CSR, BCP (Security) as new study items in ISO
10	Outline of Consortium•Forum standard	Understanding relation of ISO IEC and JIS in De jure and forum standards (info. communication technology)
11	Standardization organization in foreign countries	Understanding standardization activities in Europe and USA and allocation of standardization given by administration
12	Certification rule(ISO9000, ISO14000,etc)	Understanding current status of ISO9000, ISO14000 etc. and standard application by private sector
13	Application of standardization by administration	Understanding the examples of administration and importance to use private self-management.
14-15	Group discussion and presentation	Presentation of specific standard subjects

# Class Planning on Information Communication and standard

N	Lecture title	Outline
1	General remarks of standardization	Understanding importance of ITU standardization organization and Standardization strategy in Japan.
2	Introduction of Each Standard Organizations	Understanding the organizations and standard activates of standardization committees as example IEEE/TIA/IETF/ISO/IEC etc..
3	Standardizations on NGN	Understanding the Next Generation Networks and their standardizations.
4	TTC New Activities in a New Paradigm The Telecommunication Technology Committee	For Public Happiness and for members benefit through Inter/Intra-Regional collaborations.
5	Information Communication and Global Standard Example SG16 & MPEG	Understanding of Information Communication and Global Standard of example SG16 & MPEG
6	Telecommunication and International Standardization: IPTV	Understanding the standardization of IPTV includes the explanation of IPTV technology, and IPTV standard.
7	Research & Development and Standardization activities —NICT	Introducing Research & Development and Standardization activities —NICT
8	Overview of HATS	Understanding the activates to assume interoperability and between info-communication equipment's of different manufactures.
9	Progress in home-network standards	Understanding the standardization of home bus, home shopping, home reservation, home banking and home security.
10	Present and Future Mobile Communications Systems	Understanding present and future Mobile Communications Systems from the Perspective of Standardization.
11	How to engage in International Conferences	Understanding international conference comprising a long process, including the pre-conference and post-conference phases.
12	How to engage in International Conferences	Understanding international conference comprising a long process, including the pre-conference and post-conference phases.
13	Examination	Examination for understanding ITU/IEEE/ETSI/Japan and other std. activities.
14	Group discussion and presentation	Presentation of specific standard subjects.
15		

# Course Connection



Lecture scene



Distance learning :  
The lecture has been transmitted through internet video teleconference system

MJIIT (Malaysia)

The Info. Comm. and standard lecture will provided for MJIIT (Malaysia Japan International Institute of Technology) in Malaysia by off-line network as web. education

# Joint International and National Education on Standardization activities

- Join ITU-T Ad-hoc meeting and Academic Societies. Such as IEICE study committee and IEEEJ International Standardization Education committee.
- Develop ITU repository of education-related material to cooperate with the ITU ad-hoc Group.

# Conclusions

- “Education about standards” and the “Kaleidoscope conference”, which correspond to the “pre-” and “post-” standardization are very important for Academia research and education.
- Through discussions in these communities, the ITU standards become more prominent. Academia needs to participate more closely in the challenges faced by the ITU and help solve the current global challenges.
- At present discussion is limited, but in the future it could develop into a discussion of Academia camaraderie. There is a need to continue and expand the above mentioned activities.