



# Creating a hub for ELSI/TA education, research, and implementation in Japan

Tatsuhiro KAMISATO\* [kamisato@cscd.osaka-u.ac.jp](mailto:kamisato@cscd.osaka-u.ac.jp)  
Mitsuaki HOSONO\*\* [hosono@nistep.go.jp](mailto:hosono@nistep.go.jp)  
Go YOSHIZAWA\*\*\* [go@eth.med.osaka-u.ac.jp](mailto:go@eth.med.osaka-u.ac.jp)

Center for the Study of Communication-Design (CSCD), Osaka University\*  
National Institute of Science & Technology Policy (NISTEP), MEXT\*\*  
Graduate School of Medicine, Osaka University\*\*\*



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**Background**



# About “SciREX”

- STI policy
  - Science, technology, and innovation (STI) policy need to foster and obtain public understanding, trust, and participation.
- SciREX
  - The Ministry of Education, Culture, Sports, Science and Technology (MEXT) in Japan has promoted the “Science for RE-designing Science, Technology and Innovation Policy (SciREX)” program since fiscal 2011 year
- The aim of SciREX is
  - to prepare a system and foundation for the realization of "evidence-based policy formation":
    1. proposal of policies effective in addressing different challenges,
    2. based on multifaceted analyses and
    3. assessments of social and economic impacts from the Science & Technology Innovation Policy.



# Overall Structure of SciREX

## SciREX

Science for RE-designing Science,  
Technology and Innovation Policy

[About SciREX](#)[Programs](#)[Steering Committee](#)[News](#)[Events](#)[Topics](#)[Learning Opportunities](#)[Resources](#)[Links](#)

The Science for RE-designing Science, Technology and Innovation Policy (SciREX) program aims to promote STI policy making based on a rational process using objective evidence by reforming the policy-making process and developing related interdisciplinary academic fields.



**Mission-Oriented Research**

Investigation and research that will meet policy needs (esp. concerning economic and social impacts of R&D expenditure)



**Research Funding**

Promotion of a variety of R&D projects on tools, methods, indicators and others which are intended for use in mid/long term policy making



**Fundamental Research and Human Resource Development**

Foundation of international-level hub institutions for fundamental researches and development of diverse human resources



**Data / Information Infrastructure**

Systematic and continuous compilation of data and provision of information systems which contribute to evidence-based policy making as well as investigation, analysis and research

Source: <http://scirex.mext.go.jp>



# Structure of the Hub Institutions for the “Fundamental Research and Human Resource Development Program” in SciREX

“STiPS”

## Osaka University (Jointly with Kyoto University)

- Focused area: Ethical, legal and social issues (ELSI) in science and technology
- Establish a minor specialization as a part of existing master's programs

## The University of Tokyo

- Focused area: Public policy and engineering
- Establish an interdepartmental education program within existing postgraduate program

## National Graduate Institute for Policy Studies (GRIPS)

- Establish a master's and doctoral program in the “Science of STI policy”
- Guide inter-hub collaboration and promote the development of the academic discipline and community

## Hitotsubashi University

- Focused area: Interdisciplinary innovation research with a foundation in social sciences including management and economics
- Establish a doctoral-level certificate course

## Kyushu University

- Focused area: East Asian and regional innovation,
- Establish a specialized course comprising interdisciplinary postgraduate subjects



# STiPS program





# Outline of STiPS program

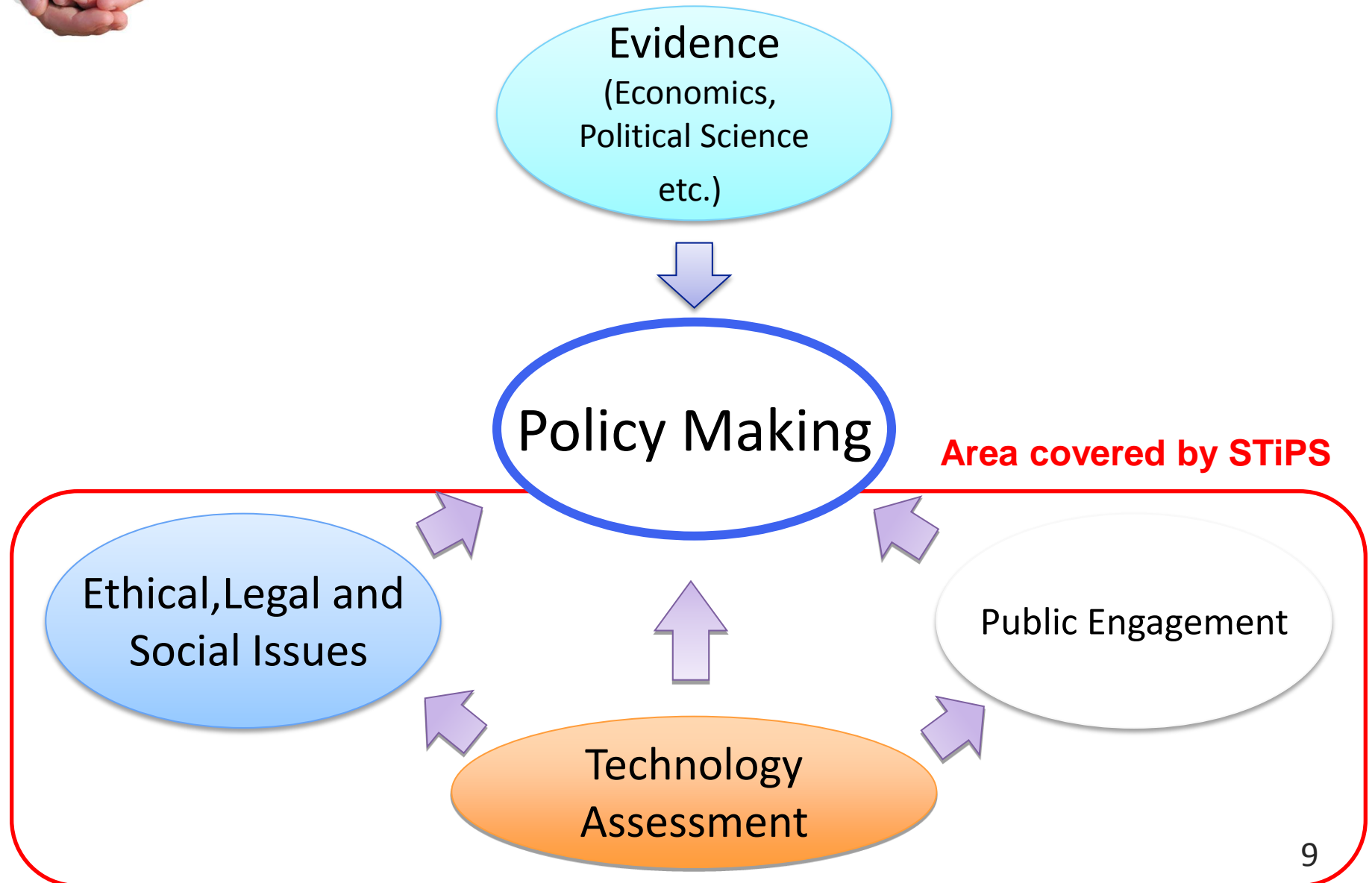
- Name
  - Program for Education and Research on Science and Technology in Public Sphere <STiPS>
- Establishment
  - Established by Osaka University and Kyoto University in November 2011
- Members
  - 15 Core members(10 from Osaka Univ.and 5 Kyoto Univ.), and dozens of supporters in various disciplines.
- URL
  - <http://stips.jp/>







# Role and position of STiPS in the SciREX





# Three functions of STiPS

- **Hub for education**
  - a minor specialization starts in April 2013 as a part of existing master's programs
- **Hub for research**
  - ELSI, TA, PE
- **Hub for practical application**
  - social collaboration between academic and social knowledge

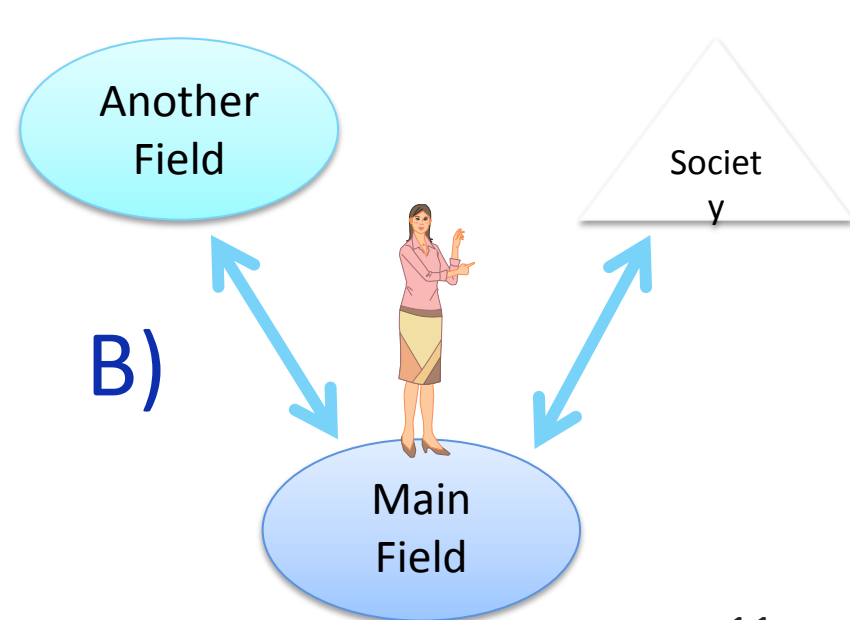
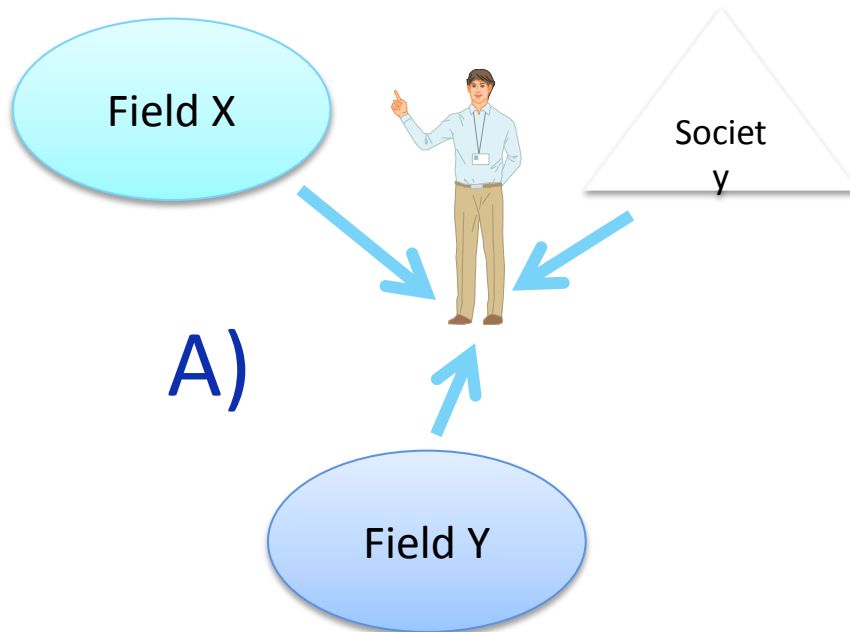


# Educational goal

Two types of personnel  
who can act as links between various fields

Type A) Personnel who can act as a link between various fields, that is, various academic fields, many companies, or the citizens.

Type B) Personnel in their own professional field, and who can act as a link between their own field and another field.





# Envisioned career paths

- Professional researcher in a university, research institute, or laboratory of a private company
  - Personnel who work mainly in a specialized field, who share the viewpoints, or ways of thinking, of ELSI, TA, and PE.
- Government official, policy secretary, staff for management and research policy in a university or institute
  - Personnel who can work directly based on the education provided in the STiPS program.
- Experts for public relation and risk communication
  - Personnel for central government, local government and the industries.



# Curriculum of a new minor specialization in STiPS

Category	Faculty	Subject Name	Unit	Semester
Core subject	CSCD	Introduction to Science, Technology and Innovation Policy	2	1
	CSCD	Workshop on Science, Technology and Innovation Policy	2	Intensive course
	CSCD	Research Project	2	All year
Elective subject (At least 4 subjects should be selected)	CSCD	Science, Technology and Communication	2	1-2
	CSCD	Science, Technology and Society (STS)	2	1
	CSCD	Advanced Seminar on Science, Technology and Innovation Policy	2	Intensive course
	CSCD	Hot Issues in Science, Technology and Society	2	2
	Medicine	Ethics in Life Science and Public Policy	2	Intensive course
	Engineering Science	Social Engagement on Nanotechnology A	1	Intensive course
	Engineering	Environmental Management for Sustainable Industrial Systems	2	1
	International Public Policy	Development and Environment(L)	2	2
	International Public Policy	Development and Environment(S)	2	2
	International Public Policy	Environmental Law(L)	2	1
	International Public Policy	Environmental Law(S)	2	1
	International Public Policy	Personnel Micro-data Analysis(L)	2	All year
	International Public Policy	Personnel Micro-data Analysis(S)	2	All year
	International Public Policy	Public Policy I	2	2
	Human Sciences	Science and Technology in Society	2	2
	Human Sciences	Methods in Fieldwork	2	1
	Law	Bioethics and Law 1	2	2
	Law	Bioethics and Law 2	2	2



# E.g., Research on PE



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In-depth ► **Energy Policy: Japan at the Crossroads**

## How to Formulate a Strategy for Energy Supply

Kamisato Tatsuhiro [\[Profile\]](#)

[2012.09.11]

[Culture](#) [Economy](#) [Politics](#) [Sci-tech](#) [Society](#)

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In the wake of the nuclear crisis in Fukushima, public interest in Japan's energy policy is fixed on one thing alone: nuclear energy, and how to live without it. Kamisato Tatsuhiro of Osaka University argues that a broader perspective is necessary at this crucial turning point in modern Japanese history.

### Also in this series

- Examining Japan's Energy Choices
- How to Formulate a Strategy for Energy Supply
- The Potential of Marine Energy

### Related articles

- Nuclear Power and the Emptiness of Political Promises
- Nobel Selection, Noda Rejection
- The Promise of Kinetic Power Generation
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- Six-Month Timeline Since the Great East Japan Earthquake
- Trade Pact Progress, Nuclear Plant Faultfinding
- A US Strategist Speaks on Japan's Leadership and Energy Policy Needs
- Japan and the Geopolitics of the Shale Revolution

### Other reports

Source: <http://www.nippon.com/en/in-depth/a01201/>



## E.g., Practical activity “Labo Café” on STI



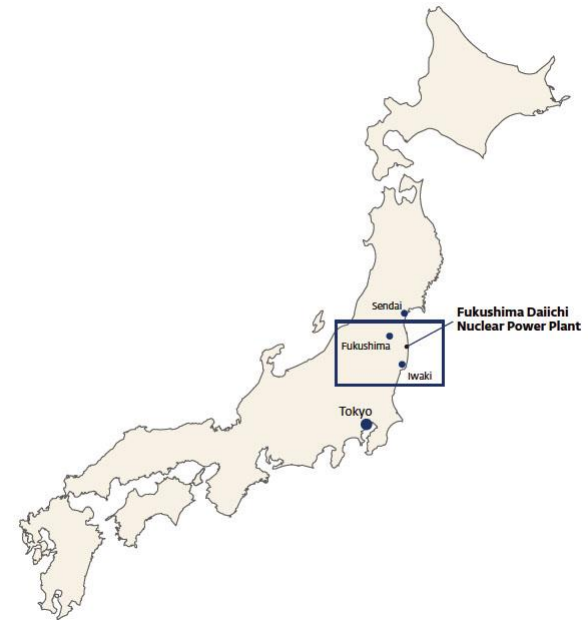
- Aim
  - To deliberate about science & technology in the public sphere with the citizens.
  - To make networks among researchers, practitioners, and the citizens in the “Kansai” region.
- Venue
  - Public space in the concourse of the subway station in the City of Osaka.
- Past program
  - July 12, Dr. M.Kishimoto (AIST) “Regulatory Science”
  - July 19, Prof. Y.Miyata (Kwansei Gakuin University) “Innovation and the role of the university”
  - August 2, Prof. K.Gemba (Ritsumeikan University) “Environmental Innovation”
  - September 13, Prof. C Sekine (Doshisha University) “Universal design”
  - ...Ongoing





# Addendum

- The impact of the accident of Fukushima Daiichi NPP
  - Most Japanese have not been familiar with ELSI, PE nor TA for a long time.
  - Now some people pay attention than ever to ELSI, PE and TA.
- “National Diet of Japan Fukushima Nuclear Accident Independent Investigation Commission” was formed in 2011 fall.
  - Whether we can make this an occasion to establish the TA organization in the Diet of Japan, or not...





**Thank you for your attention!**