

# **Global Environmental Systems Leader Program**

**Global Environmental Research and Education for  
KEIO SFC & Science–Technology Master and Ph.D  
course with Science/Technology and Governance:**

**<http://gesl.sfc.keio.ac.jp/>**

**Yasushi Kiyoki  
KEIO University, SFC**

**GESL**

# GESL Visions and Missions

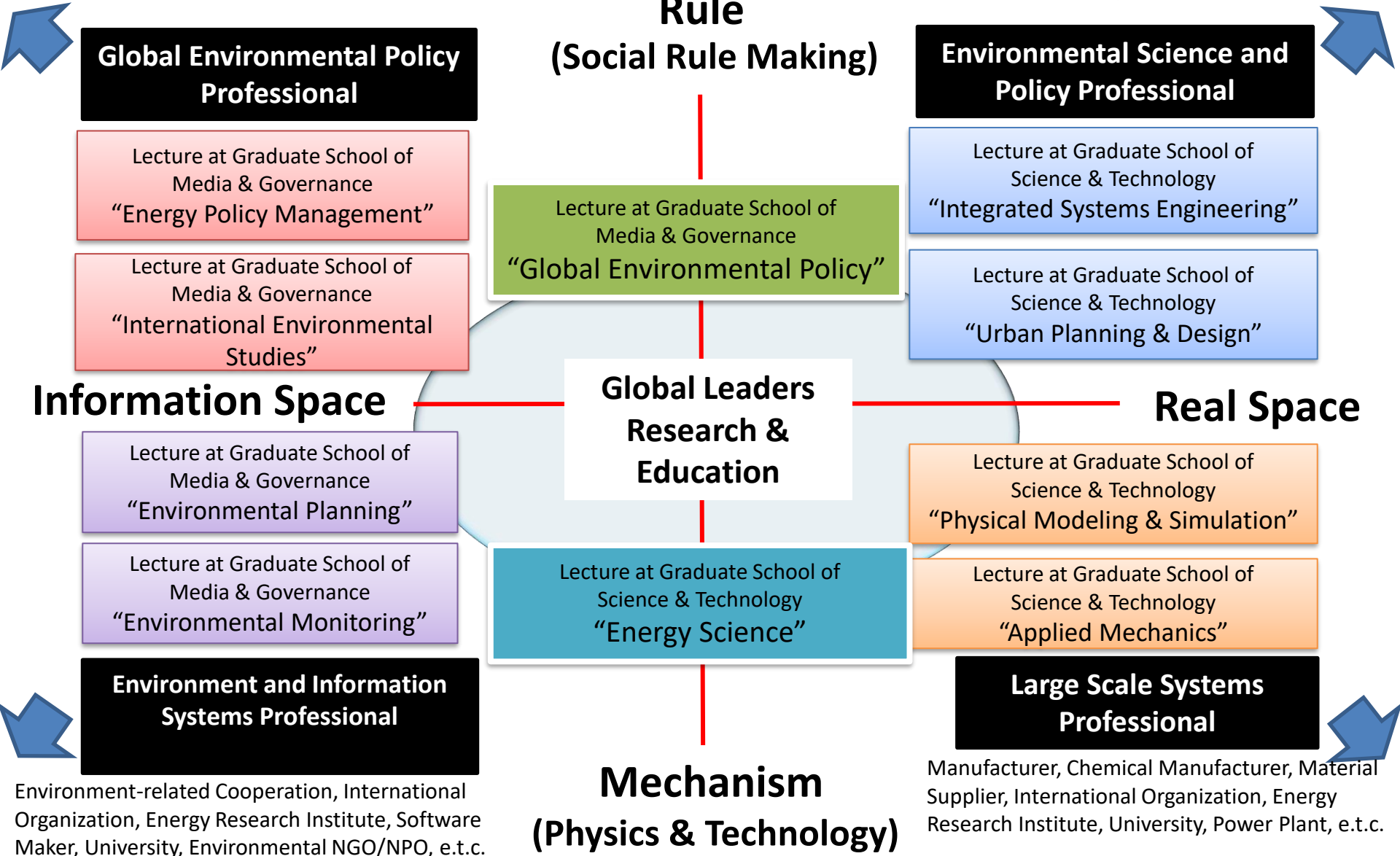
- GESL aims to realize world-class master's and doctoral courses by combining **a team of professionals, graduate students and international collaborative institutes** in academic, industrial, and governmental sectors from all over the world.
- The important mission of GESL is to educate and bring up PhD students to be Global Environment System Leaders, with **interdisciplinary and international aspects** including social rule making and science and engineering to achieve the recovery, continued improvement and safekeeping of the global environment, and the initiative to drive the design and creation of technological and social environmental systems.



# Outline of GESL Program and Career Path (Major / Minor)

International Organization, Energy Research Institute, Governmental Agency, International University, Local Government, Environmental NGO/NPO, e.t.c.

Energy Research Institute, Governmental Agency, Local Government, Environmental NGO/NPO, International University, International Organization, e.t.c.



## 2. 3 Pillars in GESL International Training System

### A. International Supervising Group

Each PhD student is supervised by three members: Professors in KEIO graduate schools of “Media and Governance and Science and Technology” and an International Institute.

### B. International Training

3 months in master course and total 6 months in PhD course at international organizations and research institutes.

### C. Distant Collaboration System

Multiple access distant collaboration system for educating and studying environmental systems, mechanisms and governance.

# A. International Supervising Group

## B. International Training

Each PhD student is supervised by three members: Professors in KEIO graduate schools of “Media and Governance and Science and Technology” and an International Institute.

3 months in master course and total 6 months in PhD course at international organizations and research institutes.



Continuous International Collaborative Research and Education

# GESL International Research/Education Collaboration

**Univ. of Jyväskylä**  
(Finland)



**VNU-UET**  
(Vietnam)



**Beijing Normal Univ.**  
(China)



**UCSD (U.S.)**



**Princeton Univ.**  
(U.S.)



**Tampere Univ. of Tech.**  
(Finland)



**Univ. of Cambridge**  
(U.K.)



**Keio Univ.**



**University of Hawaii**  
(U.S.)



**Charles Univ.**  
(Czech Rep.)



**CAU at Kiel**  
(Germany)



**EPPIS-ITS** (Indonesia)



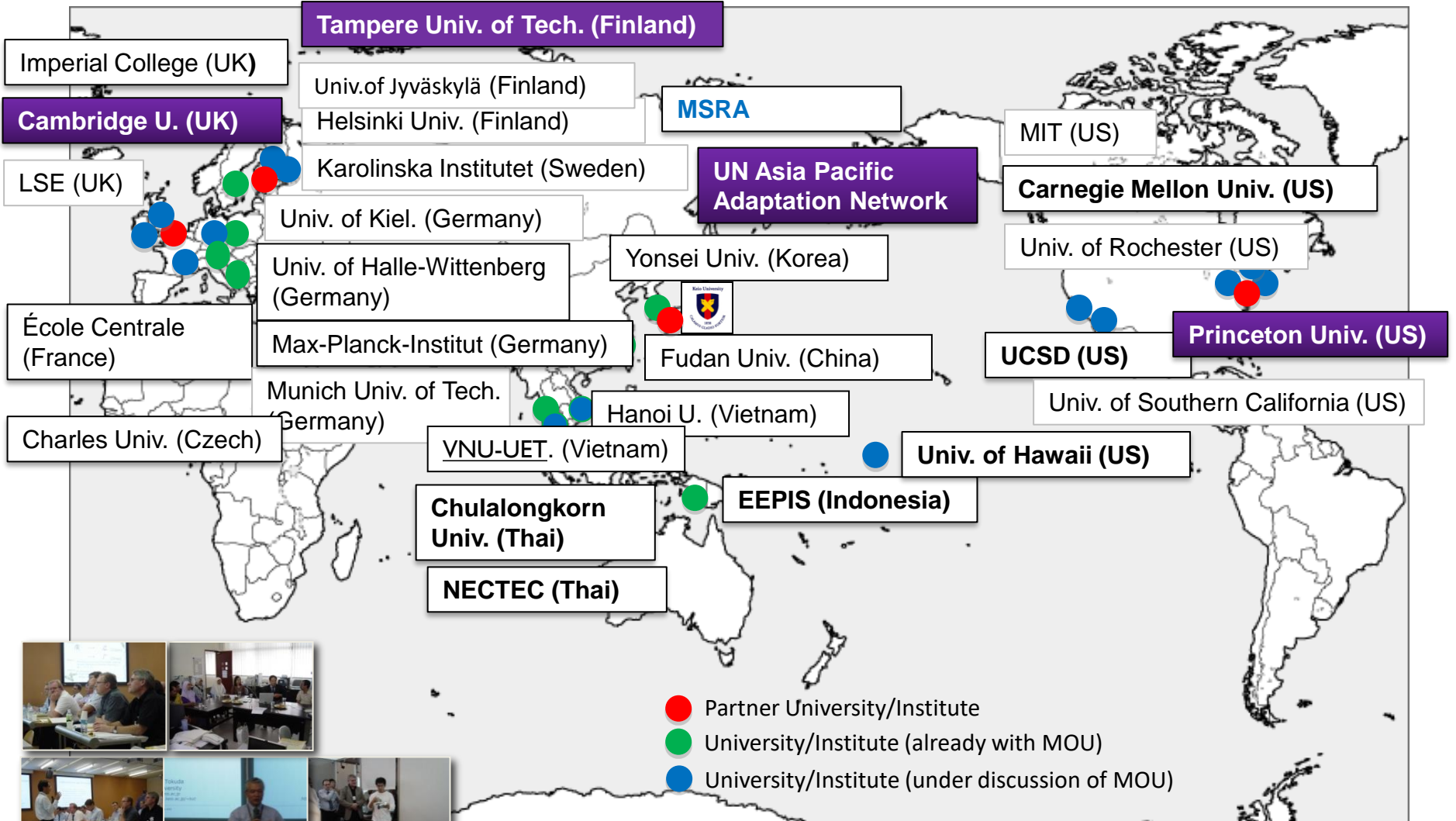
**NECTEC** (Thailand)



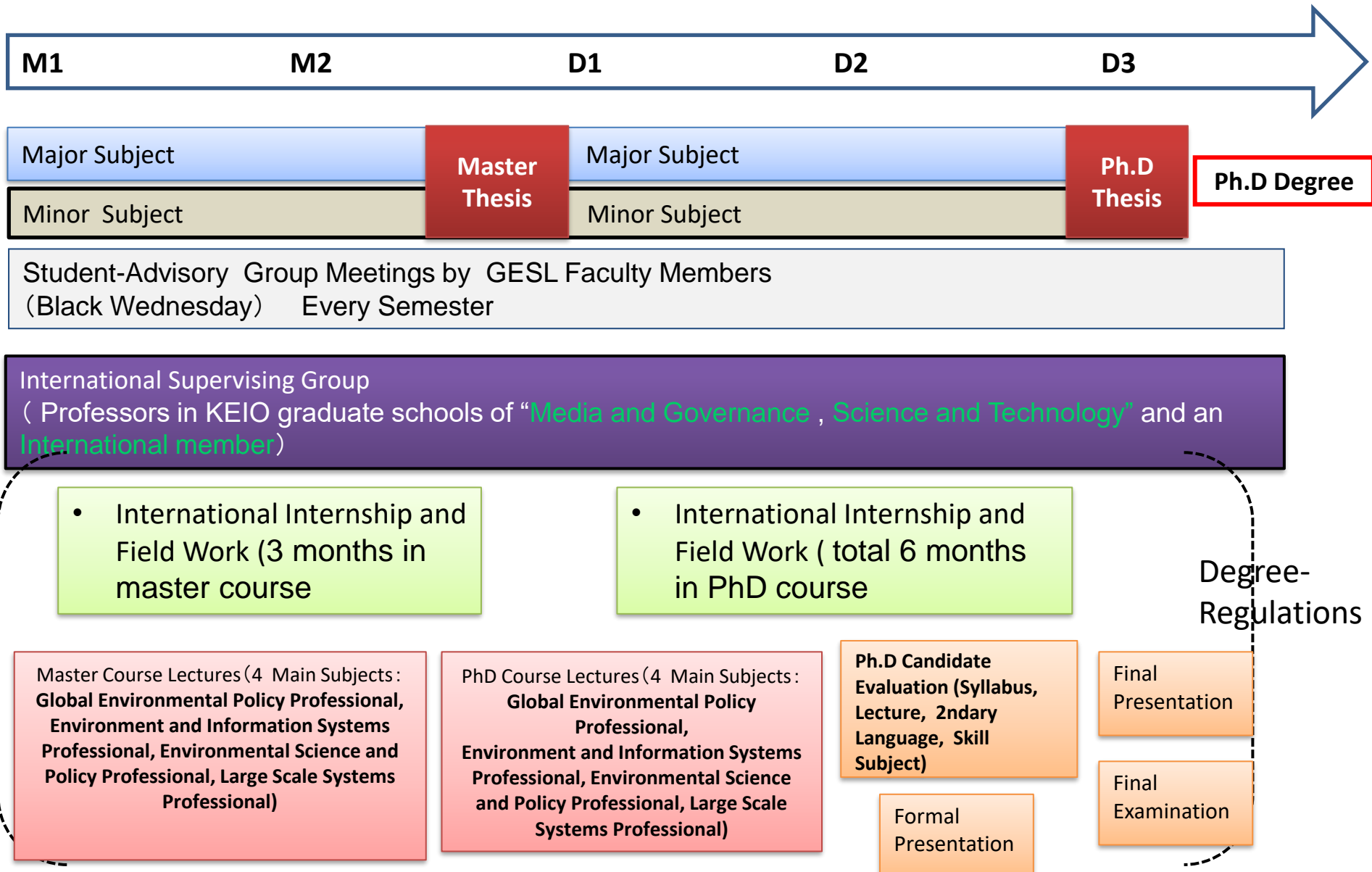
**Chulalongkorn Univ.**  
(Thailand)



# GESL International Research/Education Collaboration and Partnerships



# GESL Program



# New directions to Leadership development for Global Environmental Systems

- (1) **Consciousness** (Vision, Mission, Passion and Inspiration)
- (2) Interpretation of current environmental situations in **society and technology**
- (3) **Regional (Local) Analyses** and Innovative Methods to be applied to **Global** Environmental System and Research

Under GESL



- Design and Implement the Systematic Way to lead to Global Leaders

# Advantages for graduate students in GESL

GESL has the following three advantages:

- Advantage 1 [International Training System](#)
- Advantage 2 [International Advisory Group with Academia-Industry-NPO and Distant Collaboration System](#)
- Advantage 3 [Distant Collaboration System](#)
- Advantage 4 [Application for JST Scholarship \[New\] \(As of Sep. 2021\)](#)

## ● Advantage 1 International Training System :

- GESL students study abroad for total six months during their doctoral work (two three-month periods) - at **international collaboration institutes** (foreign partner institutions), such as **Princeton University (USA)**, **University of Cambridge (UK)**, **Tampere University of Technology (Finland)** and **United Nations APAN**.
- By exposing students to foreign cultures and research environments during the GESL course itself, this program aids in developing human resources with design, implementation and communication skills for global environmental systems.
- **Travel and living expenses are supported by this program. (Because of COVID-19 situation, a remote/online style of International Training with Distant Collaboration System is also accepted after Fall 2019.)**

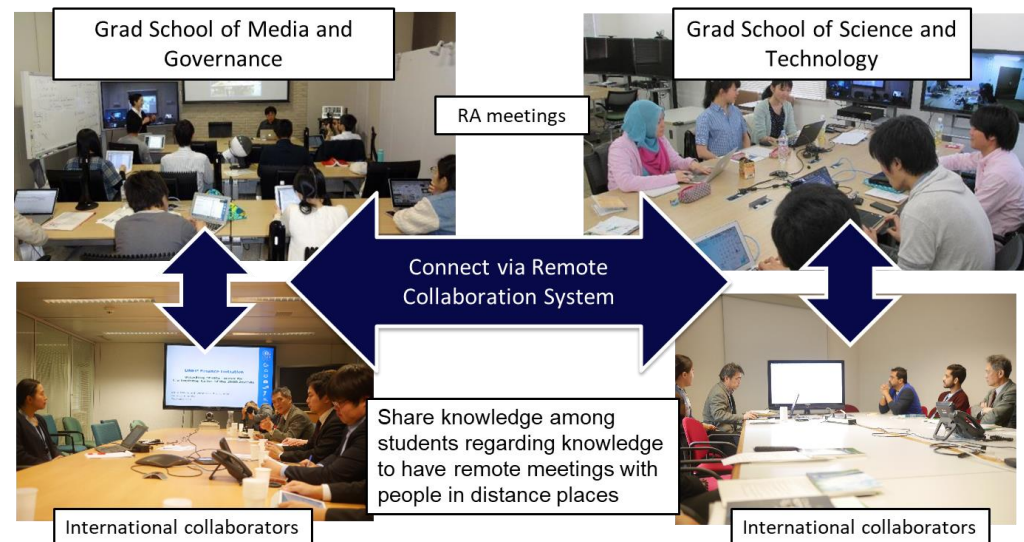
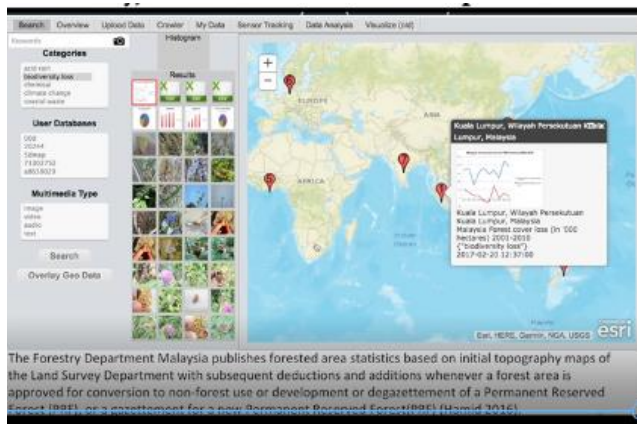
## ● Advantage 2 International Advisory Group

During the whole GESL course, students are advised by the international advisory group:

- one professor in Graduate School of Media and Governance,
- one professor from the Graduate School of Science and Technology, and
- one adviser from GESL's extensive network of foreign partner institutions (international collaboration institutes)

# ● Advantage 3 Distant Collaboration System

- Students are educated by using multiple access distant collaboration system which combines 5D data visualization, and high-definition real-time video communications in order to communicate with their advisory committee.



[New]

## Advantage 4 Application for JST Scholarship [1/3]

- GESL参加学生は、国際産学NPO研究指導体制・国際トレーニングを実施するGESLにおける活動を推進するために、下記奨学金へ申請することが推奨される。下記の申請要件を満たす学生は、指導教員の推薦と共に「**JST博士後期課程学生支援プロジェクト**」に補助(生活費相当額・研究費)の申請を行うことができる。
  - 2021年度JST博士後期課程学生支援プロジェクト募集について
  - <https://www.research.keio.ac.jp/news/2021/09/20213jst-1.html>
  - <https://keio.app.box.com/s/e6s216879pvb2s0roeg3e6xug8loxb7h>
  - ※2021年9月入学予定者は2021年10月に募集開始
  - 詳細は<https://www.research.keio.ac.jp/>のニュースを適宜ご確認ください。

- 以下、JST博士後期課程学生支援プロジェクト応募要領より抜粋:

### ■支援内容・支給額

＜支援内容＞資金補助だけではなく、博士後期課程学生が将来にわたって多様なキャリアパスで活躍するためのキャリア開発・育成コンテンツを提供します。

＜支給額＞生活費相当額および研究費を支給します。

- 生活費相当額: 一律年間220万円(2021年度は支援開始月からの月割とします)
- 研究費: 年間30万円を基礎額とします・挑戦的取り組み補助費: 海外交流、フィールドワーク(国内含む)、インターンシップ等のキャリア開発・育成コンテンツでの取り組み、あるいは、新たな発想による研究の展開など、挑戦的な取り組みに対して、申請内容により適切な額(上限100万円)を上記に上乗せで支給する場合があります。こちらは採択決定後も、追加申請の機会を設けます。



[New]

## Advantage 4 Application for JST Scholarship [2/3]

以下、JST博士後期課程学生支援プロジェクト応募要領より抜粋:

<https://keio.app.box.com/s/e6s216879pvb2s0roeg3e6xug8loxb7h>

### <申請要件>

#### 1) 対象学年

・博士後期課程1 学年当初から対象とする(医学・薬学研究科の博士課程(4 年制)を含む)。在学期間延長した学生は対象とならない。

※2021 年9 月入学予定者は、2021 年10 月募集開始。詳細は  
<https://www.research.keio.ac.jp/>のニュースを適宜ご確認ください。

#### 2) 他事業との重複

・JSPS 特別研究員DC、JSPS 博士課程教育リーディングプログラム参加学生、国費留学生は対象とならない。(私費留学生は対象だが、3) 収入制限に該当する場合は対象にならない。申請時および採択決定までに必要書類を提出でき、補助開始時に日本にいることを原則とする)

#### 3) 収入制限

・所属する企業、大学等から原則として年間240 万円以上の安定的な収入を得ていない。  
・所属する企業等に原則として年間240 万円以上の生活費相当額が受給できる制度がある学生は対象とならない。

[New]

# ● Advantage 4 Application for JST Scholarship [3/3]

<https://keio.app.box.com/s/e6s216879pvb2s0roeg3e6xug8loxb7h>

詳細は<https://www.research.keio.ac.jp/>のニュースを適宜ご確認ください。

## ■ 申請案内・注意事項

- 申請には申請者本人が作成する申請書①②の他、指導教員の推薦書が必要です。・申請書①は所定の書式に入力してください。・申請書②は本フォームの回答を完了し、完了画面の画像を保存してください。・推薦書は速やかに指導教員に作成を依頼してください。
- 申請書①の作成、申請書②の回答が完了したら指導教員にデータ（申請書①はExcel）で提出してください。指導教員が推薦書を添えて各研究科の担当部署に提出し、申請完了となります。各研究科の提出期限を事前に確認の上、指導教員と相談し余裕を持って提出準備を行ってください。

### 申請書①(4ページExcel)

2021年度 JST博士後期課程学生支援プロジェクト申請書①				
◆申請者情報				
学階番号	氏名	電話番号		
研究科	入学年月	年	月	
指導教員	2021年4月1日現在の在学年数			学年
◆研究について				
研究課題 (40字以内で入力してください。)				
キーワード (研究の内容を表すキーワードも3-5つ福楽欄に入力してください。)				
研究計画(目的・内容含む) ※全体計画および年度別の事業計画等を別紙に入力してください。				

1 ページ

### 申請書②(Google Form)

- メールアドレス\*  
\_\_\_\_\_

申請者基本情報 / Basic applicant details

- 学籍番号 / Student ID number\*  
\_\_\_\_\_
- 氏名 / Full name\*  
\_\_\_\_\_
- メールアドレス (keio.jp 以外) の修了後も使用する個人アドレス / E-mail address (personal address which you will continue to use after completing application [other than keio.jp address])\*  
\_\_\_\_\_

採択された場合、受給終了後のキャリア・状況について10年間のアンケートに追跡調査に協力していただきます。その際、keio.jpアドレスおよびご自身のアドレスにご連絡いたします。\*If your candidacy is approved you will be required to participate in a ten-year follow-up survey regarding your career and circumstances subsequent to receiving this assistance. At such time, you will be contacted via your keio.jp e-mail address and the address you provide here.

- 電話番号 (携帯電話) / Telephone number (mobile phone)\*  
携帯電話を所持していない場合は、自宅または実家の電話番号をこの欄に入力してください。
- 電話番号 (自宅または実家) / Telephone number (home or parents' home)  
\_\_\_\_\_

### 推薦書(教員が作成)

JST博士後期課程学生支援プロジェクト  
候補者推薦書

フリガナ	氏名	学階番号
所属研究科	専攻	
入学年月	年	月
学年	年	

上記の事は、以下の申請要件を満たし、採択を認める本プログラム候補者として  
相応しい学生であることを保証し、〇〇研究科として推薦いたします。  
推薦理由の詳細については、随く別紙をご確認ください。

【申請要件】  
 日本学術振興会特別研究員 (DC)、JSPS 博士課程教育リーディングプログラム参加学生  
 ではない (申請中の者は重複申請可)  
 国費留学生ではない  
 大学・企業等から生活費として使用可能な年額 240 万円以上の学費的な収入を得ていない  
 上記の他、募集要項等に規定の申請資格、応募要件を満たしている

推薦人  
〇〇研究科委員長



[New]

## Advantage 4 Application for JST Scholarship [1/3]

- GESL students are highly recommended to apply to “**JST Doctoral Program Student Support Project**” with Academic Advisor’s recommendation letter, to make international research progress in GESL activities and GESL International Training.
  - Recruitment call for the AY 2021 JST Doctoral Program Student Support Project <https://keio.app.box.com/s/e6s216879pvb2s0roeg3e6xug8loxb7h>  
✘ GESL students (Sep. 2021 Entry) can apply to the support of AY2021. Application period will start from Oct. 2021. Please check NEWS on <https://www.research.keio.ac.jp/> for more information.

Excerpted from JST Doctoral Program Student Support Project Recruitment call above:

<Assistance details>

- In addition to financial assistance we will provide ongoing career and professional development support for active engagement with the diverse career paths of doctoral students.

<Assistance amount>

- We will pay an amount to cover living expenses in addition to subsidizing research expenses.
- **Amount to cover living expenses:** 2.2 million yen per academic year (to be paid per month from the month in which support begins in AY 2021)
- **Research funding:** Base payment of 300,000 yen per academic year
- **Assistance subsidies for pioneering initiatives:** An appropriate amount (up to 1 million yen) in addition to the above amount may be paid towards initiatives for career and professional development including overseas exchange, fieldwork (including domestic fieldwork), internships, or pioneering initiatives such as those involving the development of research based on new ideas. We will provide an additional opportunity



[New]

## Advantage 4 Application for JST Scholarship [2/3]

Excerpted from JST Doctoral Program Student Support Project Recruitment call

<https://keio.app.box.com/s/e6s216879pvb2s0roeg3e6xug8loxb7h>

Please check NEWS on <https://www.research.keio.ac.jp/> for more information.

### ■ Application criteria

- 1) Eligible Year Levels: Eligibility will be from the start of the first year level of doctoral programs (including Graduate Schools of Medicine/Pharmaceutical Sciences [four-year courses]). Students who have extended their period of enrollment are not eligible to apply.\* Students planning to enroll in September 2021 will be eligible to apply from the 2022 academic year (recruitment beginning around October 2021)
- 2) Overlap with other initiatives: Students participating in the Program for Leading Graduate Schools and are paid are not eligible. • Students participating in the JSPS Research Fellowship for Young Scientists DC; or in receipt of Japanese Government (Monbukagakusho) Scholarships are not eligible. (self-financed international students are eligible but will not be eligible if 3) income limits apply.) In principle, applicants will be in a position to submit the required documentation when completing an application and before candidates are approved, and be in Japan when the assistance begins.
- 3) Income limit: In principle, applicants will not be in receipt of a stable income source of 2.4 million yen or more per year from affiliated corporation, university, etc. • In principle, there is no system for receipt of assistance to cover living expenses of 2.4 million yen or more per year available at the applicant's affiliated corporation, university, etc. • If your candidacy is approved, you must submit a Certificate of Annual Income for 2020

[New]

Excerpted from JST Doctoral Program Student Support Project Recruitment call

<https://keio.app.box.com/s/e6s216879pvb2s0roeg3e6xug8loxb7h>

Please check NEWS on <https://www.research.keio.ac.jp/> for more information.

# ● Advantage 4 Application for JST Scholarship [3/3]

## ■ Guidelines/Important notes

- In addition to Application Form①/②, to be drafted by the applicant themselves when applying, a letter of recommendation from the applicant's academic advisor is required.
- Fill in Application Form ① using the designated form. • For Application Form ② please save the completion screen after completing this form. • Promptly ask your academic advisor to prepare a letter of recommendation.
- When you have finished drafting Application Form ① and responding to Application Form ②, please submit the data (Excel file for Application Form ①) to your academic advisor. Your academic advisor will then submit this to the relevant section at respective graduate schools. You are requested to consult with your academic advisor and initiate preparations for submission while leaving plenty of time to complete these, after first confirming the deadline for submission at respective graduate schools.

### Application Form ① (Excel, 4 pages)

2021年度 JST博士後期課程学生支援プロジェクト申請書①					
◆Applicant information					
Student ID number	Name				
e-mail	Tel No.				
Graduate school	Timing of admission	Year	Month		
Academic advisor	Full age as of April 1, 2021	Grade			
◆About your research					
Research subject (Please enter a brief description.)					
Keywords(Write 3 to 5 keywords that best express the research content.)					
Research plan (including purpose and contents) ※Overall plan and annual plan, etc.					

1 ページ

### Application Form ② (Google Form)

- メールアドレス\*
- 申請者基本情報 / Basic applicant details
- 学籍番号 / Student ID number\*
- 氏名 / Full name\*
- メールアドレス (keio.ac.jp以外) の終了後も使用する個人アドレス / E-mail address (personal address which you will continue to use after completing application [other than keio.ac.jp address])  
採択された場合、支援終了後のキャリア・状況について10年間アンケートに回答義務に協力していただきます。その際、keio.ac.jpおよびご自身のアドレスに通知いたします。\* If your candidacy is approved you will be required to participate in a ten year follow-up survey regarding your career and circumstances subsequent to receiving this assistance. At such time, you will be contacted via your keio.ac.jp e-mail address and the address you provide here.
- 電話番号 (携帯電話) / Telephone number (mobile phone)\*  
携帯電話を所持していない場合は、自宅または実家の電話番号をこの欄に入力してください。
- 電話番号 (自宅または実家) / Telephone number (home or parents' home)

### Recommendation Letter (from Academic Advisor)

JST博士後期課程学生支援プロジェクト  
候補者推薦書

フリガナ	氏名	学籍番号
所属研究科	専攻	
入学年月	年	月
	学年	年

上記の者は、以下の申請要件を満たし、採択性を認める本プログラム候補者として、  
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推薦理由の詳細については、紙く別紙をご確認ください。

【申請要件】  
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 国費留学生ではない  
 大学・企業等から生活費として使用可能な年間 240 万円以上の学費的な収入を得ていない  
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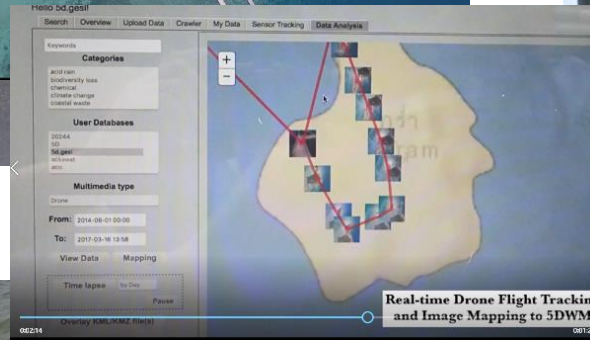
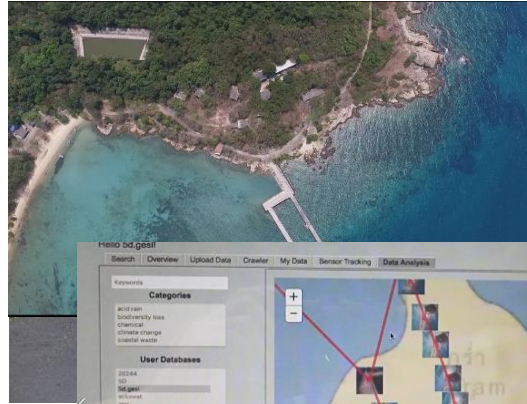
推薦人  
〇〇研究科委員長

# International Collaborative Research via Distant Collaboration System (5D World Map System) 1/3

インドネシア・国際会議KCIC (2012-)

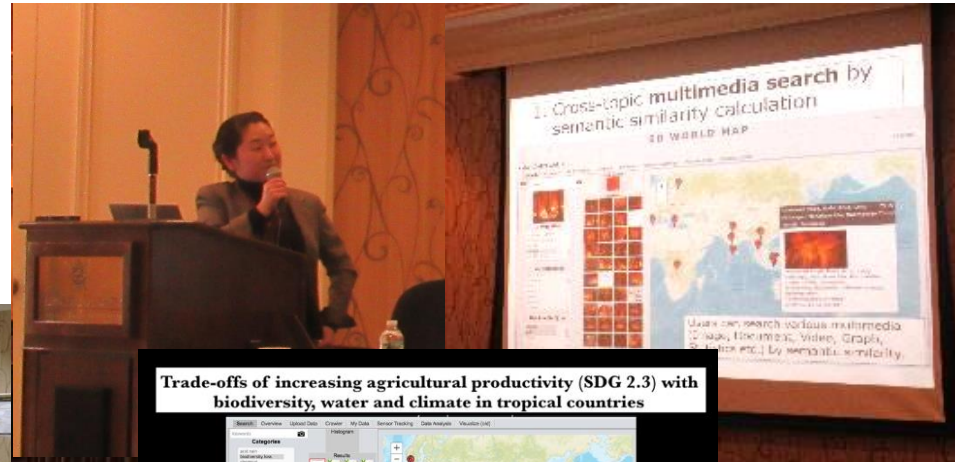


タイ・環境センシングフィールドワーク



協働研究者 : Dr. Ali Ridho Barakbah, Dr. Sritsta Sukaridhoto, Dr. Dadet Pramadiyanto, Dr. Wahjo Sesulihatien, Dr. Tri Harsono他, EEPIS, インドネシア (ワイヤレスセンサネットワーク, IoT, ロボティクス)、Prof. Chawan Koopipat, Prof. Aran Hansuebsai, チュラロンコーン大学, タイ (画像処理・リモートセンシング), Hazard and Disaster Research Center, インドネシア(環境・災害分析)、Prof. Virach sornlertlamvanich, タマサート大学, タイ (ビッグデータ分析), Prof. Petchporn Chawakitchareon, チュラロンコーン大学, タイ (環境工学), Prof. Hannu Jaakolla, タンペレ工科大学、フィンランド(ソフトウェア工学、モバイル・コンピューティング), Prof. Bernhard Thalheim, Christian-Albrechts University, ドイツ(データモデリング)等

# International Collaborative Research via Distant Collaboration System (5D World Map System) 2/3



NY国連SDGsワークショップ (2017年7月)



NY国連SDGsワークショップ (2017年3月)



国連大学との国際模擬交渉・合同ワークショップ (2014 - 2017)

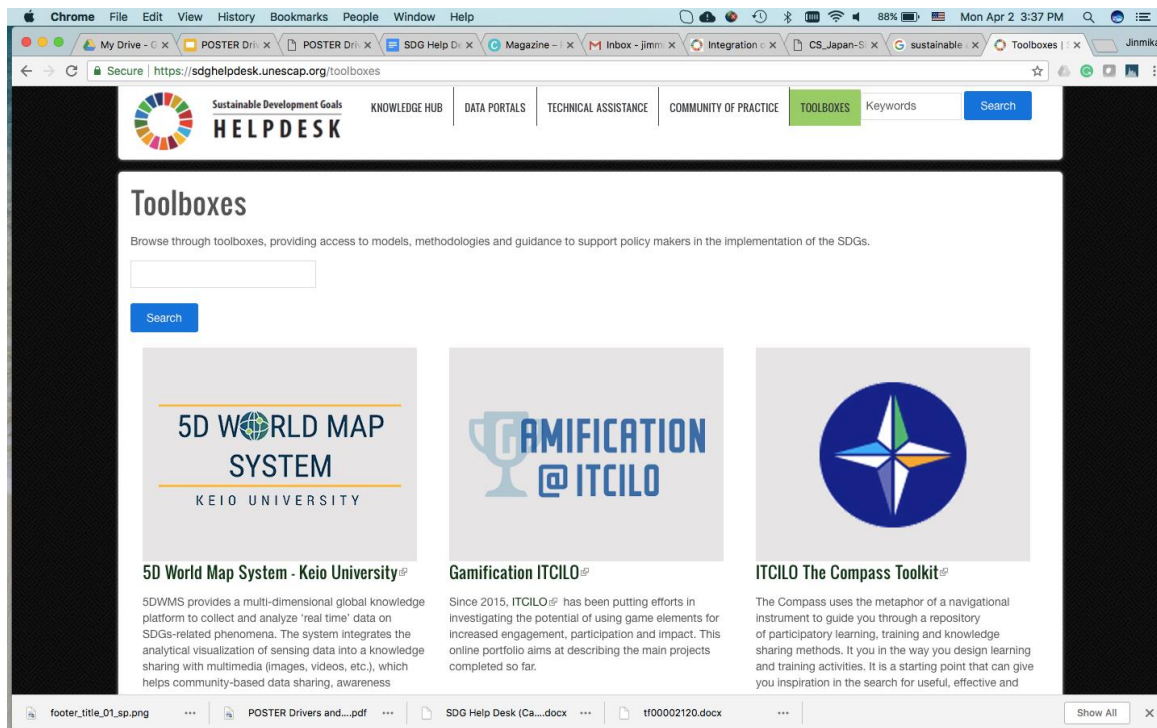


Asia Pacific Ministerial Summit (2017年9月) より、  
国連SDGs Help Desk Teamとの共同研究教育開始



# International Collaborative Research via Distant Collaboration System (5D World Map System) 3/3

## Collaboration with UN ESCAP SDG HELPDESK



<http://sdghelpdesk.unescap.org/toolboxes>

# GESL International Research/Education Collaboration and Internship Activities

US • CMU



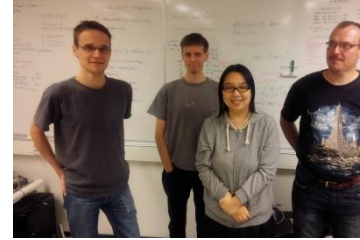
US • UCSD



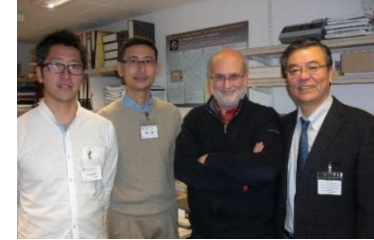
US • UCSB



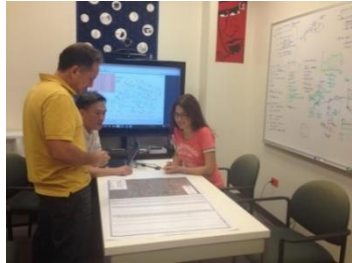
Finland TUT



UK • Cambridge



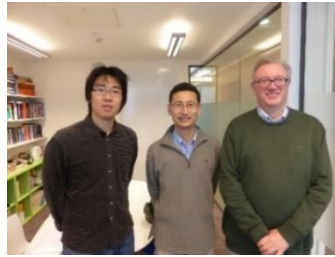
US • HAWAII



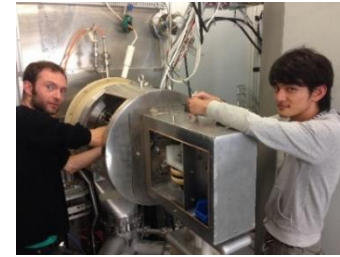
Surabayam ITS/EEPIS



UK • Oxford



Swiss • CERN



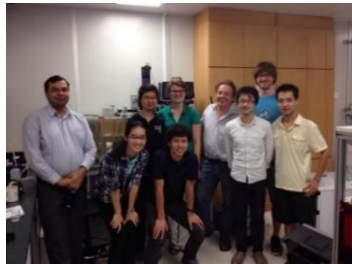
Finland Jyväskylä



Fiji (UNDP)



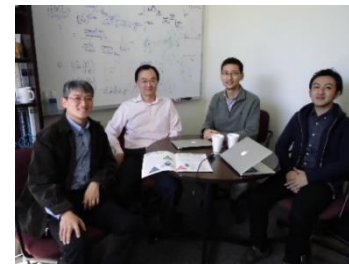
Singapore



Germany



US • Colorado



Thai Chulalongkorn



Fiji USP



Malaysia



US • Nebraska



Thai • NECTEC



USA: Kakehashi



# International Training Network

GESL has a strong and wide network with 111 international institute/universities.

GESL students conducted their international training 114 times.



# International Activities of GESL program

GESL has international collaborative network with 111 international institutions. GESL provides several opportunities to conduct international activities (workshop, seminar, conference, paper co-writing, etc.) based on this network.

The GESL method for fostering global leaders is becoming popular among the international institutions in the network.



# Workshop for Career-Path Development in US University of Washington(UW), Microsoft Research, Gates Foundation, Boeing



University of Washington



Microsoft Research



Gates Foundation, Boeing

GESL students have made a plan to hold a workshop for career-path development by them selves at University of Washington(UW), Microsoft Research, Gates Foundation, Boeing etc.

They have created young-researcher's network and promote the collaborative researches.

# Workshop for Career-Path Development in Paris and Geneva [1/2]

GESL offers a opportunity to hold a workshop for career-path development.

In 2017, we visited several UN-related international organizations in Paris and Geneva.

- 国際エネルギー機関(IEA),
- 経済協力開発機構環境局(OECD),
- 国際連合教育科学文化機関環境セクション(UNESCO),
- 国連環境計画産業技術経済局(UNEP)

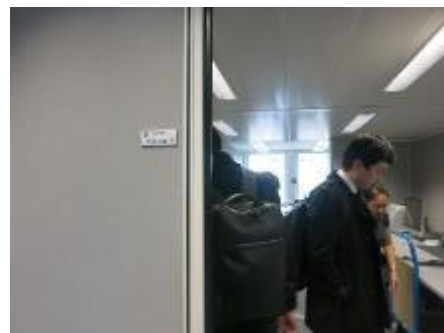


IEA



OECD

# Workshop for Career-Path Development in Paris and Geneva [2/2]



UNEP Chemicals



UNESCO



UNEP

# International Negotiation Role-play with United Nations University [1/2]



Ms. Jimena Leiva Roesch (Policy Analyst,  
the International Peace Institute, Austria,  
元グアテマラ国 外交官)

Ms. Ye - Min Wu (Directorate, Ministry of  
Foreign Affairs, Singapore, 現職シンガ  
ポール国 外交官)



In one of GESL 4 lecture courses, “Global Environmental Policy Management”, we offers a joint workshop on International Negotiation Role-play (simulation) with UN University and 2 guest lecturers (active diplomats).

# International Negotiation Role-play with United Nations University [2/2]



GESL students discuss on UNFCCC or other international negotiation on water-resources for example at the role-play (simulation) as a representative of each developing or developed county.

# C. RA Activities with Remote Collaboration System

## Public Relations Team: Information transmission of GESL activities for outside



RAによるWebページの公開、Newsletterの編集・発行

- Newsletterとホームページを利用して情報発信し、新たなコラボレーション、活動エリアの拡大、キャリアパスの構築を促進
- メンバー(12名):花野井俊介(リーダー)、今西智哉、野澤拓磨、小松万里子、湯原大輔、徳島泰、野村昴太郎、林侑江、矢本昌平、Goumehei Elham、Shaheen Maisoon、梁俊晗

## Research & Education Team: Effective Management of GESL equipment and contents



- RA同士の知識共有 データベースである”5D World Map”や、遠隔コラボレーションシステム”3D collaboration system”を始め、3Dスキャナ&プリンタ、大規模並列計算マシン、電子走査型顕微鏡、フライス盤等、他分野に渡る10種以上の物品を管理
- メンバー(13名): Haitham Alkhalaf(リーダー)、Tatiana Endrjukaite、友部勝文、山下達也、Iza Husna Mohamad Hashim、Siti Nor Khuzaimah Amit、Ahmad Muzaffar bin Baharudin、近藤智貴、Chalisa Veessommai、今城哉裕、巽瞭子、山口雅己、Marco Capitanio

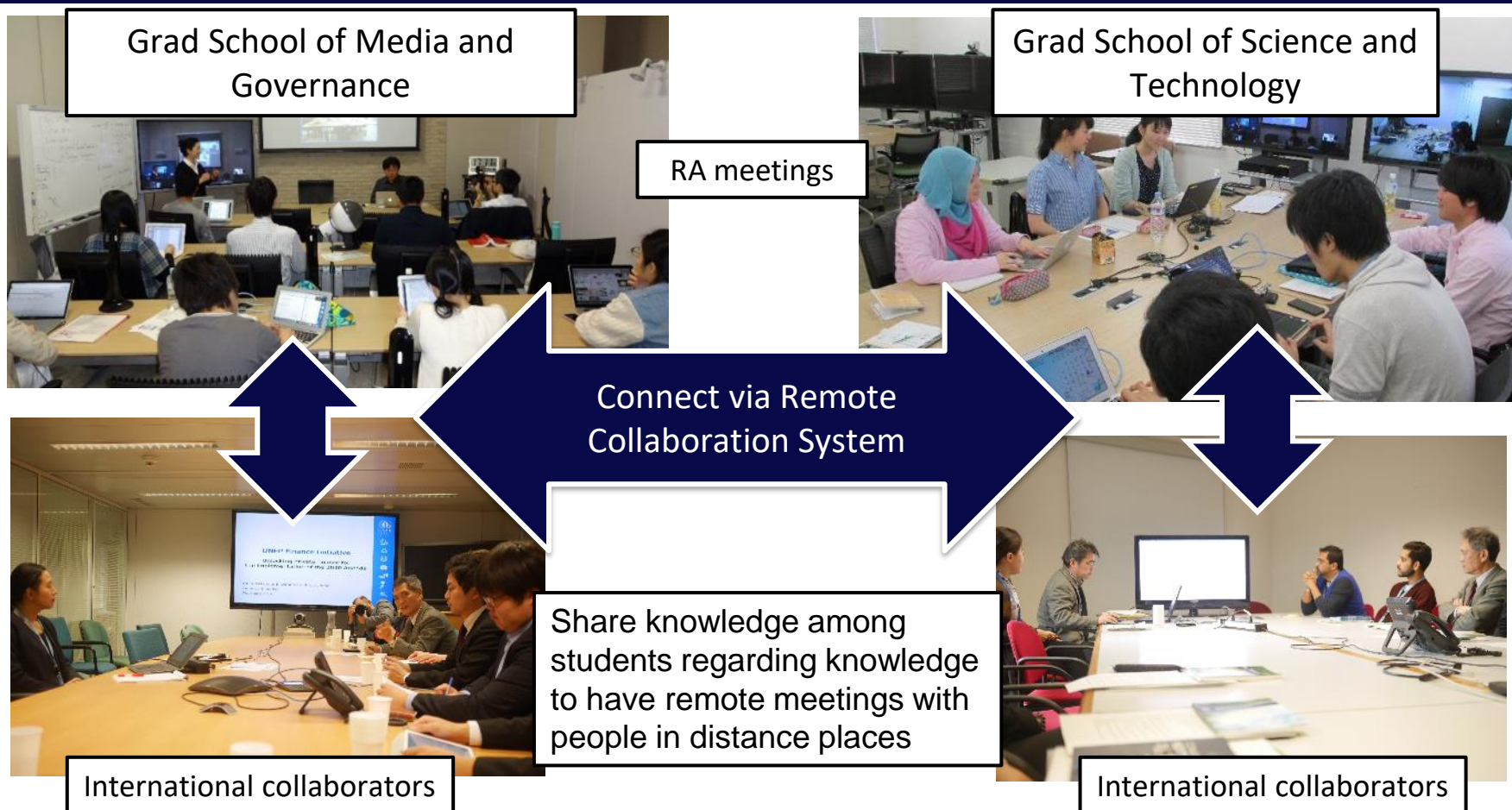
## Capacity Building Team: Support for RA activities & Communication among RA-Faculty-Secretariat Office



- RA間のコラボレーションを促進するためのミーティング/ワークショップの企画・実施として、新入生RAや留学生RAのサポート、国際トレーニング円滑化のための準備ガイドの作成企画、新入生を支援するためのメンターシステムの構築
- メンバー(17名): 小林周(リーダー)、前田知貴、西山勇毅、鈴木悠、鈴木良、井上岳、西田健治朗、西岡宗、姜ソウウ、中曾爽香、小川愛実、遠藤冬玲、Helena Machin Cavalle, Soyeng Kaku, Xie Jinmika Wijitdechakul, Wahyu Sesulihatien

# C. Daily and continuing international collaboration environment by applying Remote Collaboration System

Daily and continuing international collaboration environment by applying Remote Collaboration System makes it possible to have tight and mutual relationship between Graduate School of Media and Governance, Graduate School of Science and Technology, and international collaborative institutes.

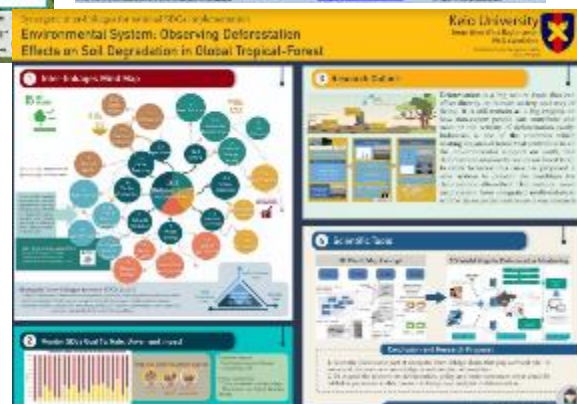
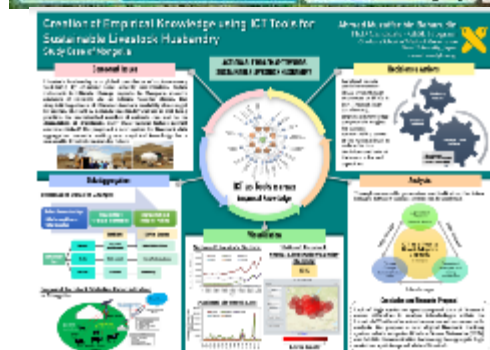
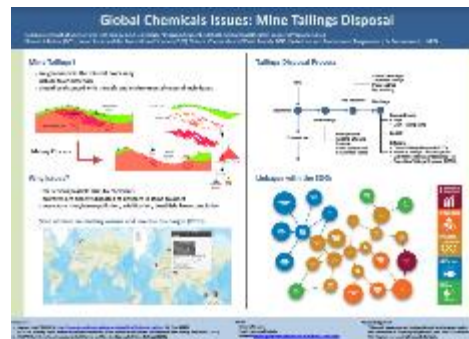


# UN SDGs-GESL Joint Workshop with Remote Collaboration System in NY (March 5-7<sup>th</sup>, 2017)



(1) Group Discussion

(2) Research project presentation

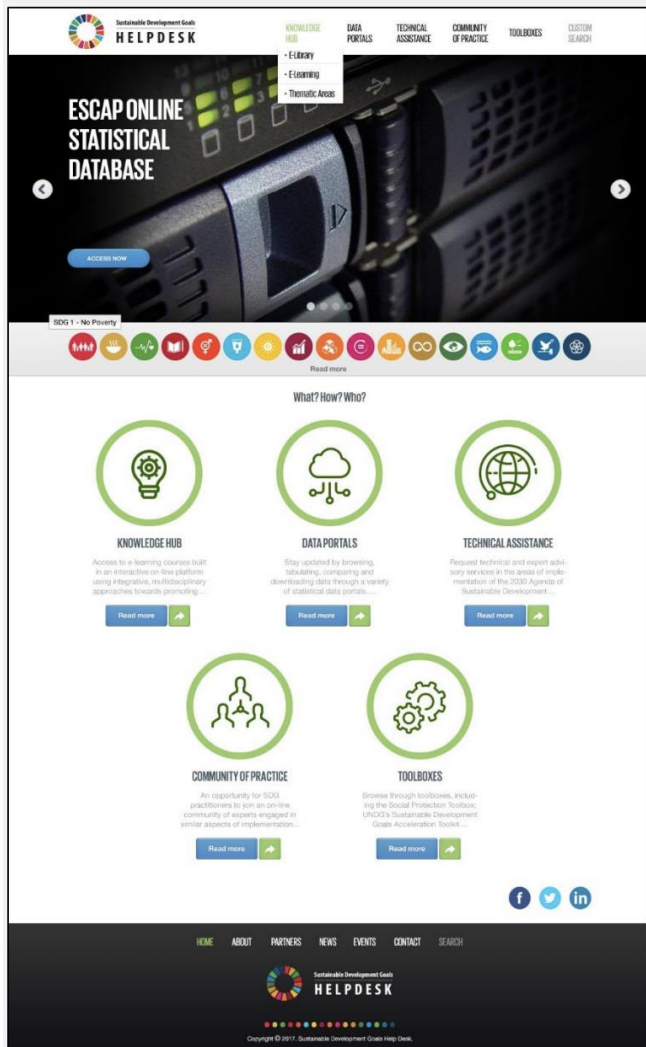


(3) Poster presentation



## A new environmental-semantic computing system for **Ocean Environment-analysis** with 5D

- 5D World Map System provides a platform to collect and analyze '**real time**' information across SDG partnership and **civil societies** members for facilitating **policy making** in the region.
- 5D World Map System, and the applications in the field of Agenda 2030 implementation is to **integrate** the analysis of **sensing data** into a knowledge sharing system with **multimedia**, based on the framework of Sensing-Processing-Actuation of Cyber-Physical Systems that allow to acquire SDG related data and perform **analytical visualizations** from multiple sites around **Asia and Pacific region**.
- By using 5D World Map System integrated with these functions, the users are able to perform a **global analysis** on the environmental **sensing data** along with the related **multimedia** data on a **single view** of time-series maps, based on the spatiotemporal and semantic correlation calculations.



<https://sdghelpdesk.unescap.org/>

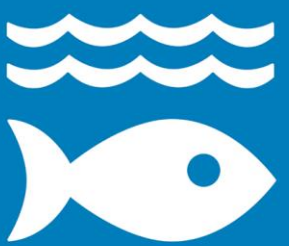


# Knowledge Platform Creation on **SDG 14** with **SDG HELP DESK** in ESCAP



Sustainable Development Goals  
**HELP DESK**

**14 LIFE BELOW WATER**



**SDG 14 TARGETS:**

**14.1** By 2025, prevent and significantly reduce marine pollution of all kinds

**14.2** By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts



**14.3** Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

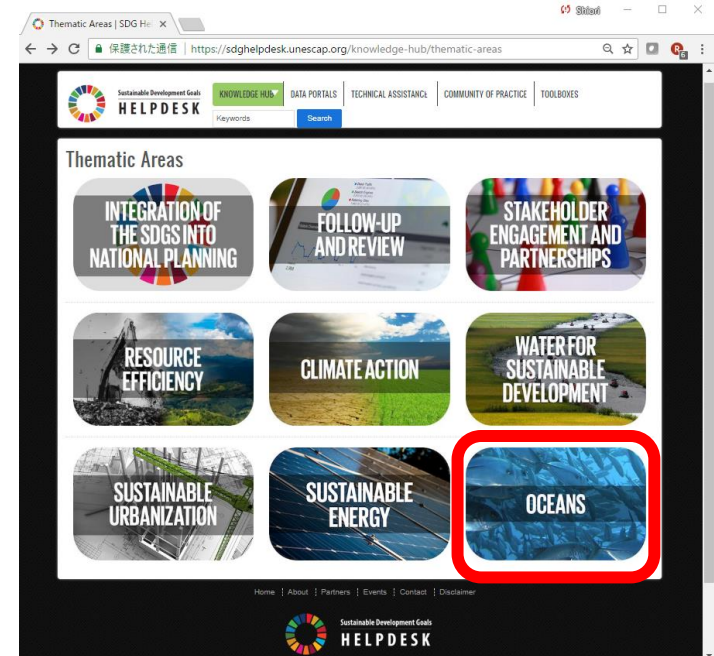
**14.4:** By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices

**14.5:** By 2020, conserve at least 10 per cent of coastal and marine areas

**14.6** By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing

**14.7** By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources



<https://sdghelpdesk.unescap.org/>  
**TOP => KNOWLEDGE HUB => OCEANS**

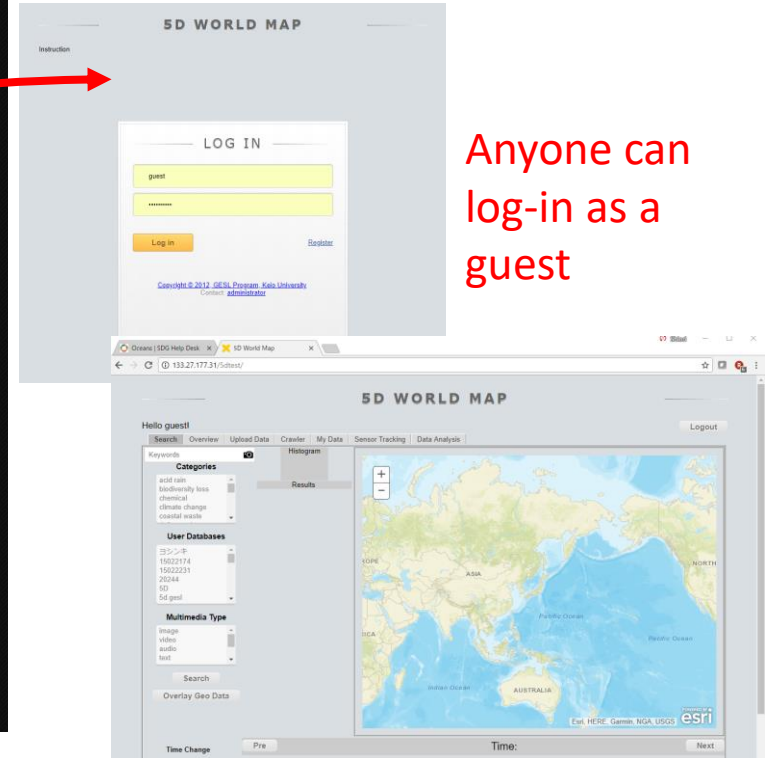
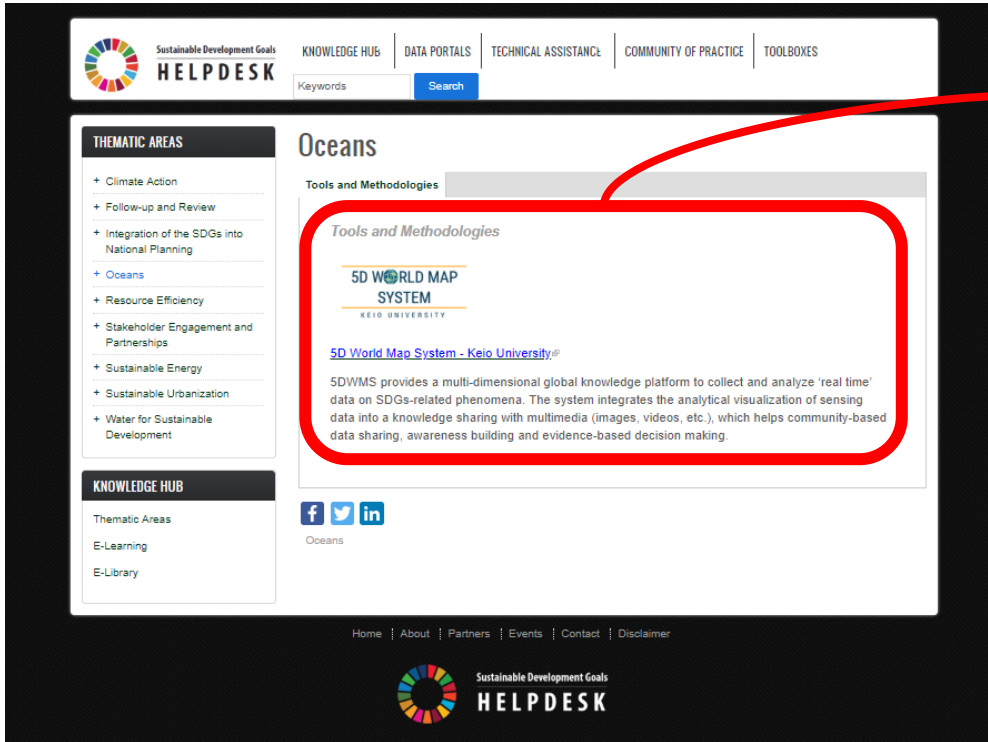
## SDG 14: Life Below Water

Conserve and sustainably use the oceans, seas and marine resources. The increasingly adverse impacts of climate change, overfishing and marine pollution are jeopardizing recent gains in protecting portions of the world's oceans.

Global Environmental System Leaders Program (GESL), Keio University is developing 5D World Map for implementing Goal 14: Life below water (OCEANS)

Source: <http://www.nereusprogram.org/tag/sdg-14/>

# Knowledge Platform Creation on **SDG 14** with **SDG HELP DESK** in ESCAP



<https://sdghelpdesk.unescap.org/>

**TOP => KNOWLEDGE HUB => OCEANS**

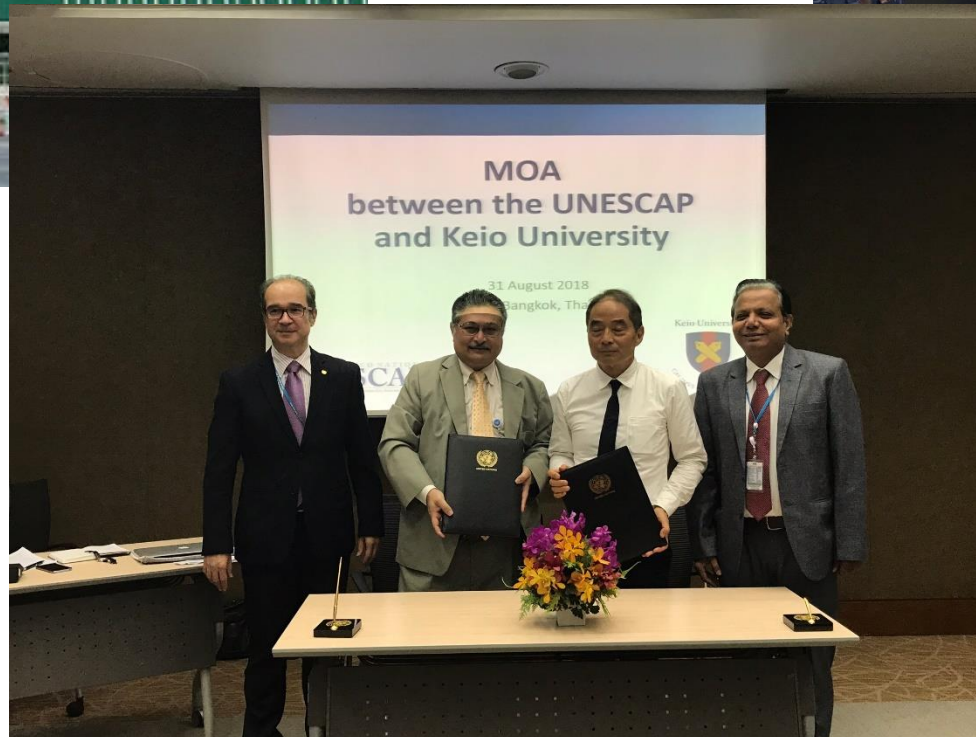
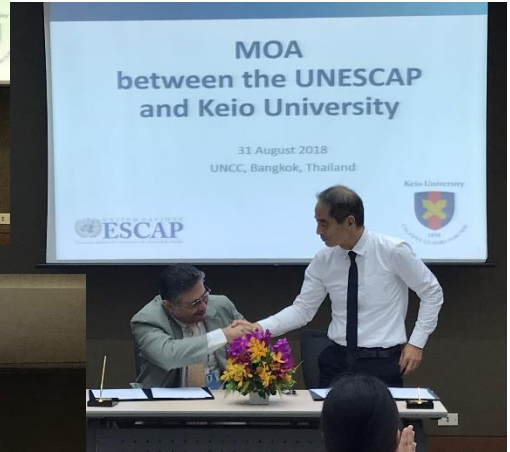
Conserve and sustainably use the oceans, seas and marine resources. The increasingly adverse impacts of climate change, overfishing and marine pollution are jeopardizing recent gains in protecting portions of the world's oceans.

<http://133.27.177.31/5dtest/>  
Global Environmental System

Leaders Program (GESL), Keio University is developing 5D World Map for implementing **Goal 14: Life below water (OCEANS)**

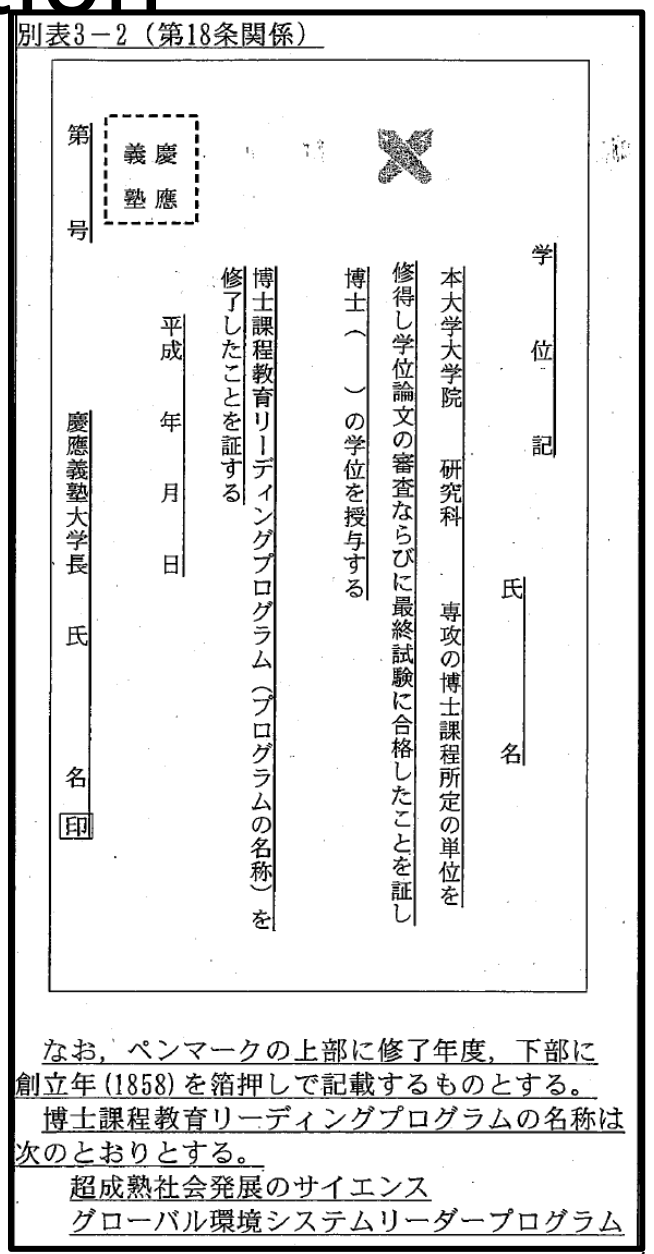


# Knowledge Platform Creation on SDG 14 with SDG HELP DESK & SDG 9, 11 with IDD in ESCAP



# GESL Certification

When a student complete Ph.D. course and receive a Ph.D. degree, the certification of GESL will be indicated onto the diploma.



- 和文：「グローバル環境システムリーダー（博士）」
- English：「Global Environmental System Leader (Ph.D)」

なお、ペンマークの上部に修了年度、下部に創立年(1858)を箔押しで記載するものとする。  
博士課程教育リーディングプログラムの名称は次のとおりとする。  
超成熟社会発展のサイエンス  
グローバル環境システムリーダープログラム

## Call for Application

### "Global Environmental System Leaders Program (GESL)"

# Doctoral students of

Graduate School of Media and Governance who entered in September, 2021.

GESL official website: <http://gesl.sfc.keio.ac.jp/>

#### <Selection schedule>

### October 15 (Fri) 17:00: Deadline of submission

Documents :

Form1 : Application for Enrollment in GESL Program

Form2 : Research Achievement List

Form3 : Resume

Please send the above 3 forms to GESL office ([gesl-office@sfc.keio.ac.jp](mailto:gesl-office@sfc.keio.ac.jp)) in PDF form.

\*Please make sure to input your supervisor's name in Form 1, while we accept it without his/her signature, when he/she is included in CC of the submission mail.

### October 22 (Fri) :Notification of Document Review

\*The date and time of interview will be announced by e-mail later.

### After October 29 (Fri): Interview (by Skype)

Sender: Global Environmental System Leaders Program (GESL) Office

Contact: [gesl-office@sfc.keio.ac.jp](mailto:gesl-office@sfc.keio.ac.jp)

# <http://gesl.sfc.keio.ac.jp/>

## GESL

Keio University  
Graduate School of Media and Governance / Graduate School of Science and Technology  
Global Environmental System Leaders Program  
慶應義塾大学大学院 政策・メディア研究科/理工学研究科 グローバル環境システムリーダープログラム

JP | EN 

[インフォメーション](#) [プログラム](#) [カリキュラム](#) [イベント](#) [ムービー](#) [海外連携機関](#) [担当教員・職員](#) [アクセス](#)



※ENTRY EXAMPLE ●は記入必須項目

【2021年10月15日（金）17時提出締切 / The deadline for submission is October 15th ,2021 (Fri.) 17:00 JST】

# 様式1:GESLプログラム参加申請書

## Form1: Application for Enrollment in GESL Program

(様式 1/Form1)

年 Year	月 Month(3-letters)	日 Date
●	●	●

GESL プログラム参加申請書  
Application Form for Enrollment in GESL Program

---

Academic Year      2021 年度

●氏名 Name					㊞ seal
●学籍番号 Student ID					
●研究科名 Name of Graduate School					
●専攻 Major					
●学年 Grade					
●生年月日 Date of Birth	年 Year	月 Month(3-letters)	日 Date	年齢 Age	
●GESL プログラムにおける研究テーマ Research Theme at GESL Program					

現在行っている研究概要 :

Overview of your current research:

\*枠の大きさは変更しないこと。Please do not change the size of this text field.



## 様式1:2枚目 GESLにおける研究計画

●GESLにおける研究計画（GESLプログラムとの関連性について明確に記述してください）：  
Research plan while at GESL program (please indicate clearly about the relationship between GESL program and your research issues):

\*枠の大きさは変更しないこと。Please do not change the size of this text field.

## 様式1:3枚目 GESLにおける下記活動計画、 【受入担当教員記入欄】

● GESLにおける下記活動計画（実施予定時期や具体的内容を記述してください）:

- 1) 国際トレーニングの計画
- 2) マイナー研究の計画
- 3) キャリアパスの構築計画

Concerning plan of your following GESL activities (Please indicate the term of your plan and concrete idea of each plans):

- 1) International training
- 2) Minor research
- 3) Career path creation

\* 枠の大きさは変更しないこと。Please do not change the size of this text field.

### ● 【受入担当教員記入欄】 ※重要！！

<p><b>本プログラムの主旨を理解し、学生のプログラムへの参加申請を承認します。</b>  <b>Having understood the purpose of the GESL program, I approve this application for the program by the student.</b></p>	
<p>GESL プログラムへの参加申請について Approval for Application for GESL Program</p>	<p><input type="checkbox"/> 承認する Approve to apply for the GESL Program</p>
<p>受入担当教員（主査）氏名 Name of Main Advisor (seal or signature is required)</p>	 seal
<p>受入担当教員 研究科名 Name of Graduate School of Main Advisor</p>	
<p>受入担当教員 専攻またはプログラム名 Major or Name of Program of Main Advisor</p>	

※受入担当教員（主査）の氏名は必ず記入してください。

※受入担当教員（主査）からの承認を得て、申請を行ってください。

※受入担当教員（主査）からの承認を得た上で、やむを得ない事情により、指導教員の押印またはサインを得られなかった場合は、当該書類提出メールのCcリストに受入担当教員（主査）のメールアドレスを追加することにより、受付可能となります。

※Please fill the name and information about your main advisor.

※Please obtain your main advisor's consent to this application.

※After obtained your main advisor's consent to this application, please add your main advisor's email address to the Cc list, if you couldn't get signature or seal from your main advisor by unavoidable circumstances.

# 様式2:Form2 研究業績リスト

## Form2: Research Achievement List

※ENTRY EXAMPLE ●は記入必須項目

[2021年10月15日(金)17時提出締切 / The deadline for submission is October 15th, 2021 (Fri.) 17:00 JST]

(様式2/Form2)

年 Year	月 Month(3-letters)	日 Date
2021	●	●

●研究業績リスト  
Research Achievement List

氏名 Name	
学籍番号 Student ID	

1)論文誌・学術雑誌論文(投稿中を含む) Publications in academic journals (please include the paper under reviewing)
2)国際会議発表論文(投稿中を含む) Presentations at international conference (please include the paper under reviewing)
3)国内会議論文、研究会発表論文(投稿中を含む) Presentations at domestic conference, seminars or workshops (please include the paper under reviewing)
4)その他(著書、特許、開発実績、受賞等) Other achievements (publications, patents, developments, award, etc.)

※申請者にアンダーラインを引いてください

※Please underline the name of the applicant.

※枠の大きさは調整可能です。複数ページ可になってもかまいません。

※Please change the size of each text field as required. Multiple pages are permitted.

# 様式3:履歴書

## Form3: Resume

※ENTRY EXAMPLE ●は記入必須項目

[2021年10月15日(金)17時提出締切 / The deadline for submission is October 15th ,2021 (Fri.) 17:00 JST]

(様式 3/Form 3)

年 Year	月 Month(3-letters)	日 Date
2021	●	●

●履歴書  
Resume

氏名 Name	Family Name	First Name	Middle Initial	写真 Photograph 4cm × 3cm	
	フリガナ Pronunciation in "Kana"				
現住所 Address	〒				
国籍 Nationality					
メールアドレス Email					
生年月日・年齢・性別 Date of Birth・Age・Sex	年 Year	月 Month(3-letters)	日 Date		年齢 Age
					男 Male・女 Female

**学歴 Academic Background**

在学期間 年 Year 月 month	Period of enrollment - 年 Year 月 month	大学名・学部名 (研究科名) Name of University/ Department	卒業・修了・在学中 Graduated/ Completed/ Enrolled
-	-		
学位 Academic Degree	学位取得大学名 Name of University of receive the academic degree		
学位取得年月日 Receiving date of the academic degree	年 Year	月 Month(3-letters)	日 Date

**職歴 Work Experience**

在籍期間 年 Year 月 month	Period of Employment - 年 Year 月 month	企業名・機関名 Name of Company / Institute	役職・業務 Position・Job Description
-	-		

**GESL プログラム志望動機・アピールすべきこと(英語力等を含む)・特技・特記事項等**

Reason for applying GESL program, self-promotion (including English skills), special ability or special notes