World Student Environmental Network 2018 Global Summit



Programme

Hosted by Doshisha University
With the support of Ministry of Foreign Affairs of Japan,
Ministry of the Environment of Japan,
Agency for Cultural Affairs of Japan,
Kyoto Prefecture and Kyoto City,
The Mainichi Newspapers Co., Ltd.



What is WSEN Global Summit?

The World Student Environmental Network 2018 Global Summit (WSEN2018) will be held at Doshisha University, Japan.

The summit has been held annually in different countries, as a summit "by the students" and "for the students". It is our belief that students from around the world exchanging opinions will produce great ideas toward sustainable development of social environment.

ABOUT

Dates	26th (Sun.) - 30th (Thu.) August, 2018	
Organizer	Student Committee of WSEN 2018 Global Summit (Summit, Doshisha University)	
Venues	Doshisha University Imadegawa Campus, Doshisha Biwako Retreat Center	

[&]quot;Consider global sustainability through cultural, traditional sustainability"

The term "environment" covers quite a broad field and the circumstances vary with each participating country. Unique "culture" inherited in countries and regions has a strong connection with its "environment" and they affect each other. What should we do to maintain this good interaction? In today's society, it is necessary to see things from multiple perspectives. Participants are expected to start with the discussion on the sustainability of the invisible but familiar "culture" and consider the sustainability of a larger scale "environment." It is our belief that students from around the world exchanging opinions will produce great toward sustainable development of social environment.

MISSION

Our goal of this summit is to prepare students' proposal concerning different kinds of "environment" and submit it to international organizations, with the hope of returning the results of our discussion to the world and passing them on to the next generation. We hope that the 10th summit will not only be a journey back to the origin but also an opportunity filled with energy for the future.

Overview: Past Host Universities

1st 2008	Doshisha University	Kyoto, Japan
2nd 2009	University of Victoria	Victoria, Canada
3rd 2010	Eberhard Karls University of Tubingen	Tubingen, Germany
4th 2011	Blekinge Institute of Technology	Karlskrona, Sweden
5th 2012	University of Lausanne	Lausanne, Switzerland
6th 2013	Leuphana University Luneburg	Luneburg, Germany
7th 2014	University of Stellenbosch	Stellenbosch, South Africa
8th 2015	Murdoch University	Perth, Australia
9th 2016	Keele University	Keele, United Kingdom
	University of Sussex	Brighton, United Kingdom
10th 2018	Doshisha University	Kyoto, Japan

Message from the president of Doshisha University



Dr. Takashi Matsuoka

President, Doshisha University

Doshisha University will host the World Student Environmental Network 2018 Global Summit in August 2018. It is an international conference "by the students and for the students" where students from around the world discuss the sustainable development of social environment and issue a proposal for improvement to the world. The WSEN Global Summit was initiated by a group of interested students of Doshisha University in 2008. Students from 14 universities in 11 countries around the world gathered in Kyoto for the first WSEN Global Summit with the aim of submitting a student proposal to the 34th G8 Summit in Touyako held in July that year. The conference gained support of the Ministry of Education, Culture, Sports, Science and Technology, Ministry of the Environment, Kyoto Prefecture and other organizations, and was highly praised as an astonishing endeavor of students by the parties concerned, including the press. This year, on its 10th anniversary, the conference will be held once again at Doshisha University. I myself attended the WSEN Global Summit held in the UK in 2016 and was deeply impressed with the enthusiasm shown by outstanding student participants who engaged in passionate discussions and worked really hard to overcome conflict and form a consensus. I became convinced that this conference is the perfect extracurricular program to cultivate global citizens who will take the leadership in global society. Working actively in global society requires leadership in creating new value without relying on precedents, as well as the ability to form a consensus through dialogue and discussion beyond cultural and historical boundaries. These are in fact in a concentric relationship with the idea of education of conscience that Doshisha pursues. For this year's WSEN Global Summit, Doshisha students from different academic disciplines are working together in the collaborative framework of humanities and sciences. Faculty and staff members of the university are also helping them in the preparation process in the ALL DOSHISHA spirit. We greatly appreciate your understanding of our purposes and generous cooperation and support for the event.

THEME of WSEN 2018 Global Summit "Revisit it"

Revisit Doshisha The summit is held again at Doshisha University after a decade from 1st WSEN Global Summit.

Revisit Kyoto Experience the real culture of Kyoto through workshops.

Aug.26th(Sun.) (Imadegawa Campus, Biwako Retreat Center)	Aug.27th(Mon.) (Biwako Retreat Center)				
1st day -Meeting	Having conference at each subcommittee				
-Opening -Understanding and Sharing the summit's scheme -Welcome Party	7:30 ∼ 8:30 Breakfast				
	$9:00\sim11:30$ Conference $\textcircled{1}$				
	[Water Environment and Environmental Measures]	[Disaster : Measures and Resilience]	[Technology and Creation of Industry]		
	⟨Water Shortage⟩ 1.9:00 ~ 9:25 Influence of water shortage (15min. for Presentation, 10min. for Q&A)	① 9:30 - 10:30 《Lecture》 "The Importance of Disaster Measures based on the Scientific Understanding of the hazard" (Dr.N.Kato)	(9:00 - 10:30) (① Technology&Environment) presentation:technology concerning environment (5min for presentation 5min. For Q&A) 10min. Break		
Gathering At Imadegawa Campus	2. 9:30 ~ 11:00 Who will control water (20min. for Presentation, 60min. for Discussion) 3.11:10 ~ 11:45 Awareness of water (35min. for Discussion)	② 10:30 - 12:00 《Workshop》 Earthquake generating car	Discussion of usage and opinion among Al $(10\text{:}40\sim11\text{:}30)$		
	12:00 ~ 13:00 Lunch				
Reception		13:30 ~ 17:30 Conference ②			
(Imadegawa Campus) Opening Ceremony		③ 13:30 ~ 14:30 Reflecting workshop activity &	Discussion of usage and opinion among AI $(13:30\sim14:00)$		
(13:00 ~ 14:30)	⟨Water contamination⟩		15min. break (14:00 ~ 14:15)		
13:00 -Opening Address & Student Representative's Speech 13:00 ~ 13:10 -Greeting from the President 13:10 ~ 13:30 -Mayor's greeting (Mayor of Kyoto City:	⟨Water contamination⟩ 1. 13:30 ~ 14:00 Influence of water contamination (20min. for Presentation, 10min. for Q&A⟩ ☆ 14:10 ~ 15:30 Workshop (80min. for Experiment) 2. 15:40 ~ 16:10	Discussions $\textcircled{4}$ 14:30 \sim 15:00 Introduction of the poster session Break Time (15:00 \sim 15:30)	《② Engineering&Information technology》 Lecture(14:15 ~ 15:45)		
Daisaku Kadokawa)	Generation and treatment	Poster Session	15min. break (15:45 ~ 16:00)		
13:30 ~ 14:25 -Keynote Speech (the former UN Ambassador : Prof. Motohide Yoshikawa) 14:25 ~ 14:30 -Closing Address	of wastewater (20min. for Presentation, 10min. for Q&A) 3. 16:20 ~ 17:30 How each country should act to prevent water contamination (20min. for Presentation, 50min. for Discussion)	and summary of Themes Students will choose some themes from A-D and introduce it with their posters. After that, we exchenge opinions about each theme.	Workshop Experience VR $\&$ consider the usage $(16:00\sim17:30)$		
15:00 ~ 17:00 -Moving to Retreat Center (about 2hours by bus)					
17:00 ~ 17:45 Entering Retreat Center		18:00 ~ 19:00 Dinner			
18:00 ~ 20:00 -Dinner&Welcome party	19:30 ~ 23:00				
20:00 ~ 23:00 Bath time	Bath time				

Revisit Summit

Summarize the past summits and think about the environment in the next ten years.

Revisit culture

Think about cultural sustainability.

Aug.28th (Tue.) (Biwako Retreat Center)			Aug.29th (Wed.) (Excursion)			Aug.30th (Thu.) (Biwako Retreat center, Imadegawa Campus)
Holding Conference at each subcommittee Sharing ideas at the general assembly			Excursion			Summarize -Submit position Document -Closing the summit
7:30 ∼ 8:30 Breakfast			7:30 ~ 8:30 Breakfast			7:30 ~ 8:30 Breakfast
9:00	$0\sim 11:30$ conference	e ③		Depature (9:00)		Depature (9:00)
⟨Water Culture⟩ 1. 9:00 ~ 9:45 Introduction of water culture (45min. Presentation)	⑥ 9:00 ∼ 11:30	《③ energy utilization》 Discuss sustainable energy utilization				Moving to imadegawa campus
☆ 9:50 ~ 10:30 Study and Observation of Exhibition 2. 10:40 ~ 11:30 Symbiosis of culture	Discussions with all the members of subcommittee	(9:00 ~ 10:30) Break (10:30 ~ 10:40) Looking back the Conference	Arashiyama Area Course	a Fushimi Area Course	City Center Course	Closing ceremony $(11:00\sim12:30)$ $11:00\sim11:10$
and nature (50min. Discussion)	ation for general ass	(Continuance of Energy Utilization)	10:45 ~ 12:30 Kanshundou Sagano shop	$10:30\sim11:15$ GekkeikanOkura museum (Tour)	10:00 ~ 11:45 Kinnkaku-ji (Tour)	-Opening Address & Student Representative's Speech
			(Japanese Traditional Confectionery Shop)	11:30 ~ 12:45 Kizakura Kappa	12:00 ~ 13:00 Restaurant	11:10 ∼ 11:20 -President's Speech
1	2:00 ~ 13:00 Lunc	h 	12:45 \sim 14:00 Restaurant	Country (lunch)	(Oshokujidokoro Kinkaku)	$11:20\sim11:45$ -Guest introduction
Preparation for general assembly $(13:30\sim14:30)$		$(Lunch)$ Fushin Taisha 14:15 \sim 15:30 Tennryu-ji Temple $(Experience \cdot Tour)$ Back to	13:30 \sim 15:15 Fushimi Inari Taisha (tour)	(Lunch) 13:30 ~ 15:30 Nishijin Textile Center (Workshop) 17:30 Back to Retreat Center	-Speech of Director-General for Environmental Policy, Ministry of the Environment (of Japan) -Video Message from Prof. Yoshinori Ohsumi	
$15:00\sim16:00$ Lecture from Mr.M Hosoo			17:00 Back to Retreat Center		$11:45 \sim 11:55$ -Declaration of Students's Opinions $11:55 \sim 12:00$ -Closing Address $12:00 \sim$ -Photo session	
$16:30\sim18:00$ Whole meeting Sharing 8 messages Presentation of each session Panel disscussion of representatives of each session keyword:Symbiosis of culture and nature			All gro	\sim 17:30 ups back to Retreat	Center	
10.00 10.00 Pi						
18:00 ~ 19:00 Dinner			$18:00 \sim 20:00$ Dinner Farewell party			
19:30 \sim 23:00 Bath time			20:00 ~ 23:00 Bath time			

pening Ceremony & Closing Ceremony

Opening Ceremony

Venue: Room No.1 at Meitokukan

Time: 13:00 \sim 14:30 Sunday, 26th August

$13:00 \sim 13:10$	Opening Address
	Student Representative's Speech
	Greeting from the President
$13:10 \sim 13:30$	Mayor's greetings (Mayor of Kyoto City: Daisaku Kadokawa)
$13:30 \sim 14:25$	Keynote Speech (the former UN Ambassador: Prof. Motohide Yoshikawa)
$14:25 \sim 14:30$	Closing Address

Closing Ceremony

Venue: Hardy Hall at Kambaikan

Time: $11:00 \sim 12:00$ Thursday, 30th August

$11:00 \sim 11:05$	Opening Address		
$11:05 \sim 11:10$	Student Representative's Speech		
$11:10 \sim 11:20$	President's Speech		
$11:20 \sim 11:35$	Introduction of Guests		
	Speech of Director-General for Environmental Policy, Ministry of the Environment (of Japan)		
11:35 ~ 11:45	a Video Message from Prof. Yoshinori Ohsumi		
11:45 ~ 11:55	Declaration of Student's Opinions		
$11:55 \sim 12:00$	Closing Address		
12:00 ~	a Photo Session (optional)		

About speakers of the opening ceremony or the closing ceremony



"Sustainable Development Goals: What can WE do?" by Motohide Yoshikawa. Distinguished Professor of International Christian University, Former Ambassador of Japan to the United Nations



Prof. Yoshinori Ohsumi is a Japanese cell biologist specializing in autophagy, a process by which cells degrade and recycle proteins and other cellular components. He is a professor at Institute of Innovative Research, Tokyo Institute of Technology. He received the 2016 Nobel Prize in Physiology or Medicine for his discoveries of mechanisms for autophagy.

Breakout Session

Venue: Doshisha Biwako Retreat Center

Time: 9:30-18:00 Monday, 27th and Tuesday 28th August

Breakout Sessions

Sectional meetings will be held on 3 topics such as "Water Environment and Environmental Measures", "Disaster: Measures and Resilience" and "Technology and Creation of Industry". Also, "Symbiosis of culture and nature" will be given as a common topic. So all participants are demanded to discuss each topics keeping the topic "Symbiosis of culture and nature". Each sectional meetings will be held on the same time in mind. Participants should choose 1 meeting to attend throughout this

Water Environment
and Environmental
Measures

Symbiosis of
culture and
nature

Disaster:
Measures and
Resilience

Technology and
Creation of Industry

summit. If you are interested, it is allowed to attend the lectures of other topics.

Water Environment and Environmental Measures

Water Shortage

1. Consequences of water shortage (15min. for presentation 10min. for Q&A)

In this section, delegates are to share the cause and effect of water shortage. Through the presentations, we will share awareness about the seriousness of water shortage and the importance of learning about this theme.

We introduce the issue of Transboundary River as one of the causes of water shortage.

We also mention the disparity of awareness between upstream country and downstream country which leads to the topic of 'Awareness of water'.

2. Who will control water? (20min. for presentation, 60min. for discussion)

Discuss whether or not to privatize water supply.

This section starts with the presentation introducing the advantages and disadvantages brought by water barons to society.

Afterwards, we will consider what support is really needed in society regarding water supply.

Finally, we aim to conclude whether water supply should be government-managed or privatized.

3. Awareness of water (35min. for discussion)

As we explore in the section 'Consequences of water shortage', the amount of water resources available naturally differs in each country, depending on its geographic or climatic conditions.

This disparity in water abundance corresponds to the gap of awareness about water resources between countries.

In this section, we will review our usage of water and call attention to how we should use water for water sustainability.

We will focus on "how water resources should be distributed".

We will approach the issue examining both the government/corporate efforts and awareness of individuals from the perspective of human mutual cooperation.

Water Contamination

1. Influence of water contamination (20min. for presentation, 10min. for Q&A)

In this section, we will share the cause and effect of water contamination. As in the section for water shortage, we will recognize the significance of this issue in advance of the subsequent presentations.

2. Generation and Treatment of Wastewater (20min. for presentation, 10min for Q&A)

We will introduce how wastewater is generated and how to treat it.

Water contamination is mainly caused by domestic and industrial wastewater.

Following the previous section 'Influence of water contamination', we will examine why such wastewater is generated and how we treat it. We also share the causes of wastewater generation and treatment methods in developed, developing and newly industrialized countries respectively.

3. How should each country act to prevent water contamination? (20min. for presentation, 50min. for discussion)

We will propose how we should act for preventing global water contamination.

Based on the content explored in the previous section 'Generation and Treatment of Wastewater', we will discuss how each country should act for reducing environmental burden.

Starting with the presentation about ongoing efforts to prevent water contamination, we will conclude by suggesting how each country (developed, developing and newly industrialized countries) should act.

At first, we will focus on the negative effect that comes from water contamination and suggest a new solution against water contamination. Knowing that the cause of contamination varies depending on the economic level of the country, we will propose different solutions for each country.

During this section, we will have a filtration workshop.

We will make our own device resembling purification plant. Through this workshop, we will learn the necessary time for purification and the limits of filtration, and aim to appeal that we should not pollute water.

Water Culture

1. Introducing water cultures (45min. for presentation)

Delegates will introduce the water culture in their respective countries.

It is an opportunity for participants to learn what kind of water culture exists in the world, and to understand how water is important for our lives.

2. Symbiosis of culture and nature (50min for Discussion)

Propose the way for symbiosis of culture and nature

We will sort out which part of the water culture introduced in the previous section has negative influence on nature and which part is co-existing with nature.

We will then discuss the solution for the former, and the way to sustain for the latter.

Making the most of the opportunity where we have delegates from all over the world, we will learn about various water cultures as well as discuss how those cultures should be treated for the future sustainable society.

Between section1 and 2, we would like to take some period of time to visit exhibition of "Symbiosis of Culture and Nature" as they also deal with same problems (The solution for cultural sustainability)

Time Schedule

	•		
(Water Shortag	e August 27, 9:00~11:45		
9:00~9:25	1.Influence of water shortage (15min.presentation, 10min. Q&A)		
9:30~11:00 2. Who will control water? (20min. for presentation, 60min. for discussion)			
11:10~11:45 3.Awareness of water (35min. for discussion)			
(Water Contam	ination August 27, 13:30~17:30		
13:30~14:00	1.Influence of water contamination(20min. for Presentation,10min. for Q&A)		
14:10~15:30	Workshop(80min. for Experiment)		
15:40~16:10	2.Generation and treatment of wastewater(20min. for Presentation, 10min. for Q&A)		
16:20~17:30	3. How should each country should act to prevent water contamination		
	(20min. for Presentation, 50min. for Discussion)		
(Water Culture)	>		
9:00~9:45	1.Introduction of water culture (45min. for presentation)		
9:50~10:30	Study and Observation of Exhibition		
10:40~11:30	2. Symbiosis of culture and nature (50min, for Discussion)		

Breakout Session

Disaster: Measures and Resilience

1. Definition of Disaster

Disaster damage refers to "hazard and social vulnerability".

"Hazard" means threat to strike: an earthquake, a volcanic eruption, drought, and "social vulnerability" means social factor: a government system, a local community, education / instruction of disaster prevention; therefore, a disaster damage is a social phenomenon.

Vulnerability here has two meanings: internal vulnerability and external vulnerability. We will focus on "internal (social)" vulnerability in this summit. We will not deal with external vulnerability: the weather conditions, the nature of the soil, because it includes the kind of problems that we cannot solve.

2. Focus

"Disaster prevention" is an approach to weaken hazard, in factors of deciding disaster damage scale.

Antiseismic reinforcement and tide embankment control damages in a perspective of "disaster prevention". "Disaster prevention" is an important perspective, but it is helpless against the unexpected hazard because "disaster prevention" is only a structural mitigation.

Therefore, a perspective of "disaster mitigation" is regarded as important.

This is called "non-structural mitigation" and aims to reduce disaster damage by reducing the social vulnerability to balance among three factors; Recovery, Preparedness and Response.

We will share the difference of social vulnerability from region to region and the important factor

to reduce it, and want to discuss construction of resilience against natural disaster.

During the discussion in this Summit, we define Resilience as "The ability to quickly recover the total function of a society from disaster".

It is not only the government that can reduce the social vulnerability. There are societies of various sizes in our living environment, and there are many things that an individual or a social community can do. In short, depending on scale and position of the society that we belong to, what we have to do is different. Then, we will focus on the social vulnerability from two viewpoints, follower and leader.

3. Theme

Group 1: Follower

Awareness and Preparedness at Individual Level

When a big hazard strikes our society, it is ourselves that save our lives. In addition, for a certain period of time, we cannot get systematic supports from government. Therefore, At the time of hazards, "Awareness and Preparedness at Individual Level" is one of the biggest factors which determines the number of people killed or injured. For instance, it is said that Japanese citizens' individual awareness toward hazards are severely low and they tend to heavily depend on government which lead to unpreparedness for possible hazards. When the Great East Japan Earthquake hit, the disaster disabled local authority's control. Therefore, the support and the vital information for citizens did not spread thoroughly. Consequently, the disaster-stricken area flooded with victims and refugees. To fix these situations, we, WSEN will exchange opinions about how individuals should be aware and prepare for future hazards. By extracting the common ideas from the discussions, we seek to reach essential guidelines for every citizen against every hazard. Moreover, we will try to find a solution about how people can stay aware that the occurring of a hazard is not only about someone else being damaged but it is about yourself too.

Awareness and Preparedness at Local Community Level

At the time of hazards, it is crucial to not be isolated in order to survive. To do this, we need surrounding people to know us in our daily lives, thus, be recognized in the local communities.

Moreover, most local communities contribute enormously to save people who cannot evacuate on their own during hazards.

By getting the hold of the different styles of communities around the world, we will try to find the most effective state of communities against hazards.

Group2: Leader

Enlightenment of Disaster Education

One factor that affects the size of the disaster damage is the knowledge of people against hazards. It is obligate of the public administration to share necessary knowledge for citizens to act appropriately at the time of hazards.

Therefore, we will look for a better way of disaster education by discussing present disaster educations' strengths and weaknesses or whether they succeeded or failed around the world.

In addition, we will talk about the public administration's enlightenment to deepen the knowledge of citizens against hazards and to promote appropriate actions to citizens at the time of hazards.

Preparation and implementation of support for reconstruction

National as well as local government need to work on various risk management on a daily basis to act immediately when hazards occur. The reason is that as the immediate reaction gets delayed, secondary disaster increases. Also, reconstruction and resilience fall behind schedule accordingly. For this reason, the reaction must be precise and quick wherever the hazard hits. Therefore, government needs to set up distribution network of goods and information beforehand so that it can quickly sends off man power and relief supplies.

In particular, "Development of laws" is one of the key factors to secure the transmission of information during hazards. The government must establish a strong administrative structure that functions even in the catastrophic area. In addition, the support to get victims back on track for normal lives, like building temporary housings or financial support is necessary in the process to recover from hazards.

We must examine what the participating countries learned from past hazards and how they incorporate the hazard experiences to develop legislative counterplan against hazards. Then, we will consider the participating countries success and the problem that it encountered against hazards. At last, we will search for the ideal administrative system against future hazards.

Poster session

- · Day and Time: August 27 15:30-17:30
- · Contents : About theme A -D (one or two theme per person)

You analyze disasters which happen in your country and introduce "Resilience" and "social vulnerability" of your own country. Especially about "social vulnerability", you put them in order and classify them into 4 theme. We have a discussion next day, based on your information in the posters.

Lecture

- · Day and Time: August 27 9:30-10:30
- · Guest speaker: Naoyuki Kato (Earthquake Research Institute, The University of Tokyo)
- · Content of the lecture: "The importance of disaster measures based on Scientific Understanding"

Workshop

- · Day and Time: August 27 10:30-12:00
- · Content: Let's experience an earthquake with an earthquake simulation vehicle!!
- Purpose: The earthquake simulation vehicle is equipped with a "vibration simulator to experience earthquake similarity". You will understand earthquake, the representative hazard in Japan, by experiencing an earthquake on the earthquake simulation vehicle with yourself.



Guest Speaker's Profile:

In "Disaster: Measures and Resilience" sectional meeting, Dr. Naoyuki KATO will lecture on "The Importance of Disaster Measures based on the Scientific Understanding of the hazard".

He is Vice Director in Earthquake Research Institute, The University of Tokyo and belongs to Coordination Center for Prediction Research of Earthquakes and Volcanic Eruptions division. His research area is Seismology.

Research:

Through numerical simulations using laboratory-derived friction laws, He investigates the mechanical process of seismic and aseismic sliding process on plate boundaries to understand the variation of seismic coupling, crustal deformation, and seismicity.

Specific research interests are as follows:

- (1) Development of constitutive friction laws.
- (2) Effects of stresses due to aseismic sliding on seismic activity.
- (3) Aseismic sliding preceding earthquakes.
- (4) Effects of fault interaction on seismic cycles.

Recent Publications:

- Kato, N., Deterministic chaos in a simulated sequence of slip events on a single isolated asperity, Geophys. J. Int., 198, 2, 727--736, 2014.
- Kato, N., Fracture energies at the rupture nucleation points of large interplate earthquakes, Earth Planet. Sci. Lett., 353-354, 190-197, 2012.
- Kato, N., Dependence of earthquake stress drop on critical slip-weakening distance, J. Geophys. Res., 117, B01301, doi:10.1029/2011JB008359, , 2012.
- Kato, N. and S. Yoshida, A shallow strong patch model for the 2011 great Tohoku-oki earthquake: A numerical simulation, Geophys. Res. Lett., 38, L00G04, doi:10.1029/2011GL048565, , 2011.

Breakout Session

Technology and Creation of Industry

Science-technology is created by humans for improvement of life and bright future of the earth. However, we estimate that increased use of advanced science technology in life will not always have good influences in terms of protection of natural environment and culture. In this group, we solve the issues about "the two-sidedness of science-technology", think over better ways to use science technology for protection of environment and culture, and aim to suggest an idea of creating new industry. Among the various fields of science technology, we focus in particular on 1. Information and Mechanical Engineering (mainly AI and VR) and ways to use them, and 2. Energy utilization. We will demonstrate new ideas of properly applying AI and VR to energy use and protection of natural environment, traditional culture and life.

• "Relevance between science-technology and creation of industry"

Science-technology have brought material wealth to our living, and influenced social and economical development. We think this is because many innovations and businesses using science-technology have been created as new industries. So, we argue that creation of new industry utilizing science-technology is necessary for sustainable social-environmental development.

• "Presentation about science-technology and environment"

Each participating student is to make a presentation on an example of science technology's impact on everyday life. (5 minutes for presentation and 5 minutes for Q&A)

Through the presentation, we exchange opinions with each other about "the two-sidedness of science-technology in environment".

• "Coexistence with AIs"

Als have great potential and advantages, such as improvement of convenience of life, medical care, business, and environment protection, but there are also disadvantages such as the fear of losing job to AI and the fear of Singularity. We will discuss a way of coexistence with AIs, based on the two-sidedness of them.

1 How AIs are viewed and used in the world

AI technologies include a voice and image recognition, natural language processing, deep learning, probabilistic reasoning, and so on. In the world, these techniques are used in many industries including services, medical care, information and communication, environment and energy.

However, there is great concern that AI may take work away from humans. Even if using AIs is wise and costs less, we can protect our employments by limiting the number of people being replaced with AIs. Furthermore, there is a threat that humans may be controlled by AIs with high intelligence, but we humans have the responsibility of putting them under control and should have them support us, as a way of coexistence with AIs. In

other words, commensalism where humans have profits, and AIs have neither profits nor loss is ideal.

Overseas participants are expected to share information on how AIs are used in their countries and their opinions on AIs.

(2) "How to come to terms with the negative part of AI" Lecture by Hiroshi Yamakawa

A guest lecture is being planned. The guest is Hiroshi Yamakawa, the chief of the Dwango Artificial Intelligence Laboratory. He has deep knowledge and insight of the field of artificial intelligence, the solution to environmental problems, and development of the technology.

We will be able to learn about the two-sidedness of AIs including possibilities of AIs and ethical problems caused by development of AIs.

• "The way of using of AIs and VR in combination to preserve culture and protect environment"

VR is the technique with which humans can experience a virtual space created by computers as if it is real. By putting advanced computerization by AIs and VR together, we can expect better utilization of them in more scenes.

- ① Workshop using VR goggles by VR group of Doshisha University

 By experiencing VR workshop and watching displays about its structure and examples of utilization, overseas participants are expected to deepen understanding about the usefulness of VR.
- ② How VR and AIs can be utilized in terms of cultural preservation and environmental protection
 On the aspect of environmental protection, we think it is possible to draw the future image predicted by AIs on VR and put up measures. In addition, various simulations are possible by using AI to analyze what is drawn on VR. By applying AIs to VR and VR to AIs, they can be used in various scenes. On the aspect of the cultural preservation, we expect to preserve things that may be lost over time, such as ageing of buildings and techniques by using VR.

• "Energy utilization method and creation of industry"

Sustainable energy development is an issue all over the world. For example, with the majority of electricity in Japan generated by thermal power and the recent nuclear accident, the shift to renewable energy is considered necessary. However, Japan is lagging behind other countries in terms of the shift, due to the issues of cost and stable supply. Overseas participants are expected to share information on their country's situation as well as studies on renewable energy. Then, we discuss how to use science-technology for sustainable energy development and its stable supply. We also think of new energy utilization method based on the first day's presentation, the utilization method of AI and of VR.

For example...

- ① Increase energy efficiency
 Als can be utilized in setting the upper limit of power usage, management and distribution of electricity, and efficient adjustment of electric power.
- ② Solve the issues of energy development

 Problems in each method of electricity generation can be solved by using AIs for prediction and hazard prevention.

Time schedule

August 27	
9:00~10:30	Presentation about "Science-technology and environment"
10:40~11:30	Discussion about "Ways to use AI and opinions"
13:30~14:00	Summarization of opinions
14:15~15:45	Lecture by Mr. Hiroshi Yamakawa, the Chief of DWANGO Artificial Intelligence Laboratory
16:00~17:30	VR experience and subsequent discussion on its use
August 28	
9:00~10:30	Discussion on energy utilization
10:40~11:30	Review of the two days
13:30~14:30	Preparation of two-part proposal and slides



Guest Speaker's Profile:

Hiroshi Yamakawa received an SB in physics from Tokyo University of Science in 1987, and an MS in physics and PhD in engineering from the University of Tokyo in 1989 and 1992 respectively. He joined Fujitsu Laboratories Ltd. in 1992. And in 1994, He was seconded to Ministry of International Trade and Industry's Real World Computing Project. Since 2014, He has been a chief of Dwango Artificial Intelligence Laboratory, Dwango Co.. And since 2015, He has been a visiting researcher of the Artificial Research Center, National Institute of Advanced Industrial Science and Technology(AIST), chairperson of the Whole Brain Architecture

Initiative(an NPO) and visiting professor of Graduate School of Information Systems, The University of Electro-Communications. And he has been senior staff member of Keio Research Institute at SFC since 2016. His research interests include artificial intelligence, in particular cognitive architecture, concept acquisition, neurocomputing, and opinion aggregation technology.

Lecture Contents:

Title: Advance of intelligent agent and its impact on society

In recent years, machine learning such as deep learning leads artificial intelligence technology and it is spread in our lives. As future technology, artificial general intelligence(AGI), which can perform various tasks like human beings, also researched. We are researching method to build AGI named the whole brain architecture approach where we learn entire structure and function of brain system.

These technologies are very powerful; while enriching our lives, there is also the possibility of adversely affecting human society. In other words, it has duality. Therefore, in this presentation, first of all, we look at the development of AI in recent years. After that, I would like to talk about some of the social impacts that AI brings.

Common theme for all breakout sessions

Symbiosis of Culture and Nature

1. Exhibition

Nature is everything that is not controlled by humans. Humans were born and lived there. Meanwhile, culture is things that humans have created to live comfortably and in prosperity. Not only physical things such as buildings and cultural properties, but invisible and spiritual things are also included. The development of humans has made symbiosis of culture and nature. However, sometimes this relationship is broken. Contradiction among symbiosis of culture and nature can be classified into these three patterns

- 1. Destruction of nature→Decline of culture
- 2. Development of culture→Destruction of nature(or might notice it afterwards)
- 3. Decline of culture—Destruction of nature that has been harmonized with culture

We would collect specific examples of contradiction that is happening in the hometown of the participating students in advance. Moreover, we would group these examples into three parts. Examples that have solution, examples that is unsolved and examples that can be solved by applying another county's solution. On the day of the summit, we would exhibit all the examples in the same place to make the student be able to comment freely. Our goal of exhibition is to learn about the contradiction that is happening in the world among symbiosis of culture and nature, and seek for the solution by cooperating regardless of countries

2. Lecture by Mr.Masataka Hosoo.

To preserve culture, "making an agreement" or "searching for change" is needed between traditional relation of culture and nature, and new social relation. Mr. Hosoo is a representative director of corporation Hosoo, long-established store of Nishijin textile. He is seeking for a new potential of Nishijin textile by harmonizing tradition and innovation. Through the lecture of Mr.Hosoo, we would think about new ways for traditional crafts to last and how we could pass traditional culture to the future generations.

3. Integration of four sessions

"Sharing our information" is important theme in this summit. Sharing information means making use of knowledge and technology that each person has over place and time. Recently, the industry of information science has been developing rapidly. In the exhibition, we have aimed to solve the contradiction by sharing the technology and solutions cultivated in one country with other countries. We would like to solve the contradiction by transnational sharing of information about nature and culture and connect to the "Integration" where we would like to think about the effectiveness of information sharing.

In each session, there will also be a diversity of discussion about sharing information. In this integration meeting, we will first present how the discussion went, and did it reach a solution on each of the session. After that, we would ask leaders of each session to give an opinion on symbiosis of culture and nature through the point of sharing of information that was discussed in each of the sessions by panel discussion. Finally, we would like to make a solution as a whole.

Time schedule

August 27,28 Exhibition: Symbiosis of Culture & Nature over their Contradictions

August 28

15:00~16:00 Plenary Talk by Mr. Masataka Hosoo

16:30~18:00 Conclusion of all sessions

Presentation of each session/ Panel discussion among representatives of each session



Guest Speaker's Profile:

Mr. Masataka Hosoo was born in 1978 to the Hosoo family, one of the leading Nishijin textile makers in Kyoto since its foundation in 1688.

After graduating from college, he did musical activities for a while before joining a major jewelry manufacturer, where he took charge of the overseas strategy of the Japanese global company from 2002 to 2008, living in many countries including China, Singapore and India.

After leaving the company, he studied in Florence before joining his family's business Hosoo Corporation in 2008. He has been in charge of launching new projects since 2009, and has

promoted the brand's fabric, which is made based on the technique to make Nishijin brocade obi, to overseas. Hosoo's fabric has been used as wallpaper in Dior and CHANEL boutiques designed by architect Peter Marino.

He is active both in Japan and overseas as a member of "GO ON", a project led by young inheritors of his generation in the traditional crafts industry.

In 2014, the Nikkei Business magazine selected him as "100 major players in Japan".

He has been appointed as a Director's Fellow (special researcher) at the Media Lab of the Massachusetts Institute of Technology (MIT) since 2016, developing innovative textiles by integrating Nishijin textile with cutting-edge technology.

His more recent ventures include "tangotango", a collaborative project of three weaving firms in the Tango region.

His work is not limited to marketing and branding of existing products, but is also expanded to creation of projects and services that introduce new values based on the traditions of Kyoto and Japan.

· Lecture contents

A wide variety of unique traditional crafts have been handed down over many generations, but they are now in danger of extinction due to the failure to meet the needs of the modern lives and the shortage of successors.

Mr. Masataka Hosoo, however, is breaking through this critical situation: he has stirred up the potential of handicrafts for kimono, and has expanded its market in an innovative way.

The case study on Nishijin textile will suggest general keys to sustain traditional crafts and innovate their production.

How can the traditional crafts — e.g. Nishijin textile — survive such crisis?

How has Mr. Masataka Hosoo revolutionized the world of Nishijin textile, and what direction should it take in the future?

Let's consider these problems and revisit the conflicts between traditions and contemporary lifestyles in order to hand down culture to the next generations!

xcursion: Field survey and visit Wednesday, 29th August

You will choose one of the following three courses (City Center Course, Fushimi Area Course, Arashiyama Area Course) to participate on the fourth day (August 29th). Student Committee of WSEN 2018 Global Summit will guide each course.

	Course	Schedu I e	Lunch
1	City Center Course	Doshisha Biwako Retreat Center—Charter Bus—Kinkaku-ji(Tour)—Walking— 9:00 10:30 11:45 Oshokujidokoro-Kinkaku(Lunch)Nishijin Textile Center(Experience · Tour) 12:00 13:30 15:30 Doshisha Biwako Retreat Center— 17:30	Kinugake lunch (Oshokujidokoro -Kinkaku)
2	Fushimi Area Course	Doshisha Biwako Retreat Center—Charter Bus—Gekkeikan Okura Sake Museum(Tour)— 9:00 10:30 11:15 Kizakura Kappa Country(Lunch)—Fushimi Inari Taisha (Tour)— 11:30 12:45 13:30 15:15 Doshisha Biwako Retreat Center— 17:00	Sakagura lunch (Kizakura Kappa Country)
3	Arashiyama Area Course	Doshisha Biwako Retreat Center—Charter Bus—Kanshundo (Japanese Traditional Confectionary Shop) — 9:00 10:45 12:30 Restraunt Arashiyama (Lunch)Walking—Tenryu—ji Temple (Tour)Doshisha Biwako Retreat Center— 12:45 14:00 14:15 15:30 17:30 Timelimit:50 minutes (13:00-13:50)	Obanzai Buffet (Restraunt Arashiyama)

Course, departing and arriving time may be changed due to traffic conditions.

1. City Center Course

The greatest feature of this course is Kinkaku-ji, which is a tourist site representing Kyoto. The official name of Kinkaku-ji is Rokuon-ji. Rokuon-ji has the most famous building called Kinkaku, which is covered by gold. Gold is called "kin" in Japan. So that is why it's called Kinkaku-ji. Kinkaku is known not only for its appearance, but also for its three-layers structure. These layers are built in different styles. You can also see the building in the pond and spring. The point of the view always attracts many people. Nishijin textile is expensive silk fabric made in Kyoto. You can hand-woven actually in Nishijin Textile Center. You can make a table center while receiving advice from staff and bring it back. You can also learn about Nishijin textile and see the kimono show. Kimono is used as a formal wear, and important in Japanese traditional culture, for example, Sado(chano-Yu), Kado(ikebana) and so on. In Oshokujidokoro Nishikizuru, You can eat Tofu, one of famous meals in Kyoto. Let's go around Kyoto City, and you can feel its long history.





2. Fushimi Area Course

In this tour, you can visit Kizakura Kappa Country, Gekkeikan Okura Sake museum and Fushimi Inari Taisha. Especially, Fushimi Inari Taisha is the main tourist spot of this course and is very popular among visitors from different countries. At Kizakura Kappa Country, Kyoto's traditional food, is offered in lunch box style. At Gekkeikan Okura Sake museum, rice wine museum, you can see old tools used to make sake. At the end of the tour, you can get the souvenirs. Gekkeikan is sake that is widely known among Japanese. Fushimi Inari Taisha is the most famous



shrine in Japan. You can see spectacular views. There are so many shrine archways. When you visit popular tourist spots in Kyoto, you may know why Kyoto is loved by people around the world.

3. Arashiyama Area Course

Arashiyama is one of the main sightseeing spots in Kyoto. Tourists are attracted to Arashiyama, where you can enjoy the beautiful scenery of each season. Having many historical temples scattered around the area, including the World Cultural Heritage Tenryu-ji, is also one of the good points of Arashiyama. Tenryu-ji has a beautiful garden called Sogenchi Teien, which borrows the scenery of Arashiyama and Kameyama. Also, you can see and enjoy the unique architecture and Japanese art works in the main hall of this temple. For lunch, you can enjoy Obanzai, which is synonymous with traditional Kyoto dishes in buffet



style. Moreover, in Kanshundo, you can experience how to make Kyogashi(traditional Japanese sweets). Kyogashi is world-class sweets that Japan can be proud of. Please enjoy Japanese culture in Arashiyama where is deeply related to Japanese tradition and history

Sponsors & Partners











This program is supported by a subsidy from Kyoto City and the Kyoto Convention & Visitors Bureau.









€京都信用金庫









同志社校友会 同志社校友会 有志の方々 播島 幹長 様 (同志社校友)

公益財団法人 平和堂財団

Darticipating universities in WSEN 2018 Global Summit

Japan	Doshisha University
China	Zhejiang University
India	Integral University
	Jamia Hamdard
	S.R.M University Amaravati
Indonesia	Bogor Agricultural University
muonesia	Diponegoro University
Malaysia	Universiti Sains Malaysia
Thailand	Asian Institute of Technology
Taiwan	National Cheng Kung University
Jordan	German Jordanian University
France	IPAG Business School
Germany	Eberhard Karls University Tubingen
Great Britain	Keele University
Poland	Warsaw School of Economics
U.S.A	Carleton College
Mexico	Universidad Nacional Autónoma de México (UNAM)
Argentina	National University of General Sarmiento
Austraria	Murdoch University
	WSEN Executive Board
	India India Indonesia Malaysia Thailand Taiwan Jordan France Germany Great Britain Poland U.S.A Mexico Argentina

World **Student**Environmental Network

CONTACT: Student Committee of WSEN 2018 Global Summit

E-mail: wsen2018@mail.doshisha.ac.jp Website: http://wsen2018-doshisha.jimdo.com