

List of Supervising Professors of Ph.D. of Disaster Management Program for Spring Semester 2021 Academic Year

Supervising Professors			Code Number
ICHII, Koji	Professor	Doctor of Engineering (Kyoto University)	75550
E-mail: ichiik@kansai-u.ac.jp			
<div style="border: 1px solid black; padding: 5px;"> <p>Theme Performance-based Seismic Design</p> <p>Seismic design of structures is a key element of societal safety against earthquake disaster. However, there are various type of structures to be considered. For example, not only the safety of buildings, but also the safety of lifelines such as electric power supply networks, pipelines for water supply, railways, road networks are essential for emergency response. However, the characteristics of damage to these various structures are not uniform. This seminar focuses on the method to estimate the damage to various types of structures. And students are expected to discuss how to integrate the advanced technologies into seismic design codes.</p> </div>			
<div style="border: 1px solid black; padding: 5px;"> <p>Lecture Earthquake Engineering</p> </div>			
<div style="border: 1px solid black; padding: 5px;"> <p>Research Works</p> <p>Koji Ichii, Takeko Mikami (2018) Cyclic threshold shear strain in pore water pressure generation in clay in situ samples, <i>Soils and Foundations</i>, Vol.58, pp.756-765.</p> <p>Koji Ichii and Yu Nandar Hlaing (2018) A simple framework for planning emergency routes in small townships in response to earthquake disasters, <i>Journal of Societal Safety Sciences</i>, No.7, pp.43-54.</p> <p>Koji Ichii, Keisuke Kitade, Mayumi Kawano and Ikuo Taguchi (2014) Surface wave-based health monitoring method for a sheet pile quay wall, <i>International Journal of Structural Stability and Dynamics</i>, Vol.14, No.05, DOI: 10.1142/S0219455414400094.</p> <p>Susumu Iai and Koji Ichii (2010) Soils and Foundations during Earthquakes, <i>Soils and Foundations</i> Vol.50, No.6, pp.937-953.</p> <p>Koji ICHII (2005) Towards the optimum seismic design of a gravity quay wall - a risk based approach for a soil-structure interaction problem, <i>On course (PIANC magazine)</i>, PIANC (International Navigation Association), Vol.120, pp.13-24, 2005.</p> </div>			

Supervising Professors			Code Number
KAMEI, Katsuyuki	Professor	Ph.D in Commerce (Osaka City University)	94732
E-mail: kamei@kansai-u.ac.jp			
Theme	Risk Management		
In modern society, facing with complicated and socialized risk, it is necessary to carry out social risk management approach. In this course, we try to study the general principle of organizational risk management and its practice from a viewpoint of social risk management. The topics addressed in the seminar include (1) contemporary risk control and risk finance, (2) organization of risk management, (3) risk information disclosure as a means of risk communication, (4) strategy and risk management, (5) leadership and crisis management, (6) SME and risk management, and (7) safety for school and children risk management, etc.			
Lecture	Risk Management		
Research Works	<p>Annelot Wismans, Roy Thurik, Ingrid Verheul, Olivier Torrès and Katsuyuki Kamei(2020), “Attention-Deficit Hyperactivity Disorder Symptoms and Entrepreneurial Orientation: A Replication Note” <i>Applied Psychology International Review</i>, Volume69, Issue3.</p> <p>Katsuyuki Kamei et Bérangère Deschamps(2020), “Cas Oikawa Denim Une entreprise japonaise reprise par l'épouse du fondateur”, Audrey Missonier et Catherine Thévenard-Puthod (sous la direction de), <i>Transmission-reprise d'entreprise 11 études de cas</i>, éditions ems pp.184-195.</p> <p>Katsuyuki Kamei (2019) <i>Risk Management Basic Theory and Case</i>, Kansai University Press.</p> <p>Katsuyuki Kamei, Sonia Boussaguet, Aude D'Andria and Romain Jourdan(2016), The transfer of small and medium-sized Japanese family businesses to the younger generation: narratives by student-successors, <i>International Journal of Entrepreneurship and Small Business</i>, Volume 27, Issue 4 .</p> <p>Katsuyuki Kamei and Leo Paul Dana (2015) <i>Asian Entrepreneurship Vol.3: Examining the Impact of New Policy Facilitating SME Succession in Japan: From a Viewpoint of Risk Management in Family Business</i>, SAGE Library in Business & Management. 50 pp.295-306.</p> <p>Katsuyuki Kamei, Teruo Shinato and Leo Paul Dana (2015) <i>Asian Entrepreneurship Vol.2: Entrepreneurship Education in Japanese Universities - How Do We Train for Risk Taking in a Culture of Risk Adverseness?</i>, SAGE Library in Business & Management. 23 pp.107-125.</p>		
KOSHIYAMA, Kenji	Professor	Doctor of Philosophy in Engineering (Kobe University)	70555
E-mail: k-koshi@kansai-u.ac.jp			
Theme	Urban Disaster Reduction Planning		
Globalization and Urbanization bring our society new risk of disasters. This seminar focuses the mechanism of new disaster occurrence and the methodology for disaster reduction from the viewpoint of urban design and planning. This will deal with the development of the disaster management cycle, the vulnerability approach, the hazard simulation, the environmental design after disaster and the prevention urban planning for disasters. This theme will face the new challenge for the risk reduction.			
Lecture	Urban Disaster Mitigation		
Research Works	<p>Kenji Koshiyama (2017) Sheltering Status after 1 year of the Multiple Disaster in Fukushima, <i>the 8th International i-Rec Conference</i>, Toronto</p> <p>Kenji Koshiyama (2016) Housing Recovery Process of the Great East Japan Earthquake Disaster, <i>the 4th International Conference on Urban Disaster Reduction</i></p> <p>Kenji Koshiyama (2014) Analysis of the allocation pattern of the temporary housing sites after disasters, <i>the 3rd International Conference on Urban Disaster Reduction</i></p> <p>Kenji Koshiyama (2014) Characteristics of emergency response at the Great East Japan Earthquake, <i>International Disaster Risk Conference in DAVOS</i>, Poster Collection, pp.91-94</p> <p>Kenji Koshiyama (2011) Comparison of International and Domestic Methods of Providing Housing After Disasters, <i>Journal of Disaster Research</i> Vol.6, No.2, pp.230-235.</p>		

Supervising Professors		Code Number
TSUCHIDA, Shoji	Professor	97501
E-mail: tsuchida@kansai-u.ac.jp		
Theme	Psychology of Societal Safety	
Theories in social psychology, such as attitude structure, emotion, social cognition, self-concept, interpersonal relations, communication, group dynamics, and collective behaviors are applied to field cases and studied as researches of (1) risk perception, (2) risk communication, and (3) psychological processes in crisis. The field cases, for example, are public acceptance/rejection and consensus formation processes of science/ technology (EMF, nuclear, GMO, etc.), the social psychological responses to disasters and crises (earthquake, tsunami, severe accident, etc.).		
Lecture	Psychology of Disaster Risks	
Research Works	<p>Shoji Tsuchida, Seiji Kondo, and Kenji Koshiyama (2018) Contemporary Societies and Risk, IN Abe, S., Ozawa, M., Kawata, Y.(eds.), "Science of Societal Safety: Living at time of risks and disasters" (Open Access), Pp.27-36. Springer.</p> <p>Shoji Tsuchida (2017) The Government and TEPCO Problems in Communicating Information with the Public during the Fukushima-1 NPP Accident." , IN Faculty of Societal Safety Sciences(ed.), <i>THE FUKUSHIMA AND TOHOKU DISASTER</i>, pp.287-308. Elsevier / Butterworth-Heinemann.</p> <p>Shoji Tsuchida, Takamasa Shiotani, Norifumi Tsujikawa, & Yuri Nakagawa (2016) Social Capital, Mutual Aids in Disasters, and Evaluation on Neighborhood' s Disaster-Preparation: Comparison between the States of Volunteer-Firefighter and the States of Career-Firefighter in the United States, <i>Safety Science Review</i>, 6, 21-38.</p> <p>Norifumi Tsujikawa, Shoji Tsuchida, & Takamasa Shiotani (2016) Changes in the Factors Influencing Public Acceptance of Nuclear Power Generation in Japan Since the 2011 Fukushima Daiichi Nuclear Disaster, <i>Risk Analysis</i>, 36(1), 98-113.</p> <p>Shoji Tsuchida, Norifumi Tsujikawa, Takamasa Shiotani, & Yuri Nakagawa (2013) Comparing disaster perception in Japan and the US", IN S. Ikeda & Y. Maeda (eds.) "<i>Emerging Issues Learned from the 3.11 Disaster as Multiple Events of Earthquake, Tsunami and Fukushima Nuclear Accident</i>", The Society for Risk Analysis, Japan, Pp. 59-61.</p> <p>Shoji Tsuchida (2011) Affect Heuristic with 'good-bad' Criterion and Linguistic Representation in Risk Judgments, <i>Journal of Disaster Research</i>, 6(2): 219-229.</p> <p>Hans Peter Peters, Dominique Brossard, Suzanne de Cheveigné, Sharon Dunwoody, Monika Kallfass, Steve Miller, & Shoji Tsuchida (2008) Interactions with the Mass Media, <i>Science</i>, 21, 204-205.</p>	

Supervising Professors			Code Number
NAGAMATSU, Shingo	Professor	Ph.D. (Osaka University)	70558
E-mail: nagamatu@kansai-u.ac.jp			
<p>Theme Economics of Disasters and Policy Analysis for Disaster Reduction</p> <p>This seminar will focus on disaster management policy in terms from Economics. Students are expected to learn economic theory of disasters and policy analysis skills such as econometric analysis and cost benefit analysis (CBA), and write academic papers that can contribute to support or challenge existing disaster management theories. Students are also expected to have a compassionate heart, an accurate knowledge of scientific facts and policy practices, and an analytical mind to study policies under economic and public policy theory.</p> <p>Lecture Economics of Risk and Disaster</p> <p>Research Works</p> <p>Shingo Nagamatsu (2017) Building Back a Better Tohoku After the March 2011 Tsunami : Contradicting Evidence, Vicente Santiago-Fandino et al. eds. <i>The 2011 Japan Earthquake and Tsunami: Reconstruction and Restoration (Advance in Natural and Technological Hazards Research Vol.47)</i>, Springer., pp.37-54.</p> <p>Shingo Nagamatsu and Akiko Ono (2017) Job Creation after Catastrophic Events: Lessons from the Emergency Job Creation Program after the 2011 Great East Japan Earthquake, <i>Japan Labor Review</i>, Vol.14, No.1, Winter 2017, pp.112-131, 2017</p> <p>Shingo Nagamatsu (2016) Targeting Vulnerable People with a Social Safety Net: Lessons from the CFW program for the 2011 Great East Japan earthquake and Tsunami Disaster, <i>Journal of Disaster Research</i>, Vol.11 No.5 pp. 926-934.</p>			
Lecturer Professors			Code Number
HOSOKAWA, Shigeo	Professor	Doctor of Engineering (Kobe University)	76814
E-mail: hosokawa@kansai-u.ac.jp			
<p>Theme Industrial Safety System</p> <p>Industrial systems such as power plants, petrochemical complexes, steel mills and mechanical systems are essential for modern society and life. Their safety deeply depends on the mechanical characteristics and heat and fluid flows in the systems. This seminar focuses on safety of industrial systems from the viewpoint of mechanics, especially thermal-fluid dynamics. Understanding and control of heat and fluid flows for system safety are main subject. Experimental approaches are mainly used for investigation of thermal-fluid phenomena. Development of measurement methods for understanding and monitoring heat and fluid flows is also one of the subjects.</p> <p>Research Works</p> <p>Shigeo Hosokawa, Hideaki Shakutsui, Akio Tomiyama (2019) Turbulence Modification of Gas-Liquid-Solid Dispersed Three-Phase Flow in a Vertical Pipe, <i>Multiphase Science and Technology</i>, Vol. 31, pp. 175-197.</p> <p>Shigeo Hosokawa, Yuya Masukura, Kosuke Hayashi, Akio Tomiyama (2017) Experimental Evaluation of Marangoni stress and surfactant concentration at interface of contaminated single drops using spatiotemporal filter velocimetry, <i>International Journal of Multiphase Flow</i>, Vol. 97, pp. 157-167.</p> <p>Shigeo Hosokawa, Kosuke Hayashi, Akio Tomiyama (2014) Void Distribution and Bubble Motion in Bubbly Flows in a 4x4 Rod Bundle, Part I: Experiments, <i>Journal of Nuclear Science and Technology</i>, Vol. 51, Issue 2, pp. 220-230.</p> <p>Shigeo Hosokawa, Ikumi Mikiyama, Akio Tomiyama (2013) Development of a Submersible Small Fiber LDV Probe and Its Application to Flows in a 4x4 Rod Bundle, <i>Nuclear Engineering and Design</i>, Vol. 263, pp. 342-349.</p> <p>Shigeo Hosokawa, Taishi Yamamoto, Jun Okajima, Akio Tomiyama (2012) Measurements of Turbulent Flows in a 2x2 Rod Bundle, <i>Nuclear Engineering and Design</i>, Vol. 249, pp. 2-13.</p> <p>Shigeo Hosokawa, Kosuke Hayashi, Akio Tomiyama (2009) Multi-Fluid Simulation of Turbulent Bubbly Pipe Flows, <i>Chemical Engineering Science</i>, Vol. 64, pp. 5308-5318.</p>			

NAGAMATSU, Shingo Professor: Changed "Doctor of International Public Policy (Osaka University)" to "Ph.D. (Osaka University)".

Supervising Professors			Code Number
KOYAMA, Tomofumi	Associate Professor	Ph. D Land and Water Resources Science (Royal Institute of Technology, KTH, Sweden)	69845

E-mail: t-koyama@kansai-u.ac.jp

Theme **Geo-disaster Prevention and Mitigation**

Recently many geo-disasters (such as landslide, slope collapse and liquefaction) have been occurred by torrential rainfall and earthquakes. This seminar focuses on the mechanism of geo-disasters caused by torrential rainfall and earthquake and their structural and non-structural countermeasures. Students are expected to solve one the problems related geo-disaster prevention and mitigation using computer simulations, field measurement/monitoring and in-situ/laboratory experiments. Students are also expected write academic papers and make a sresentation at the international/domestic conferences.

Lecture **Geo-disaster**

Research Works

Ryota Hashimoto, Mamoru Kikumoto, Tomofumi Koyama and Mamoru Mimura (2017) Method of deformation analysis for composite structures of soils and masonry stones. *Computers and Geotechnics*, 82(2), 67-84.
Tomofumi Koyama, Yusuke Yasuki and Hiroyuki Shimizu (2016) CFD-DEM simulations for dynamic injection of cement-based grout-grout injection mechanism and suitable injection conditions. *Nordic Grouting Symposium*, Oslo, Norway, 26-27, September, pp.87-98.
Tomofumi Koyama, Masakazu Chijimatsu, Hiroyuki Shimizu, Shigeo Nakama, TomooFuijita, Akira Kobayashi and Yuzo Ohnishi (2013). Numerical modeling for the coupled thermal-mechanical processes and spalling phenomena in Äspö Pillar Stability Experiment. *J Rock MechGeotechEng, DECOVALEX-2011 special issue*, 5(1), 58-72.
Tomofumi Koyama, Kohei Nagano, Keita Lee and Yuzo Ohnishi (2013). Experimental and numerical studies on rainwater infiltration mechanism during torrential rainfall. *Caspian Journal of Applied Sciences Research*, 2 (AICCE' 12/GIZ' 12): 440-448.

Supervising Professors			Code Number
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OKUMURA, Yoshihiro	Associate Professor	Ph.D in Informatics (Kyoto University)	70838
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E-mail: okumura@kansai-u.ac.jp

Theme **Disaster Reduction and Resilient Society**

This lecture focuses on a broad field for disaster reduction and measures for a resilient society against a mega disaster, ranging from the mechanism of natural disasters, analysis of people's evacuation behavior, and implementation of research. The following topics are an example of what will be covered; (1) a tsunami source modeling, (2) numerical analysis of tsunami propagation and inundation, (3) numerical analysis of structural response to a tsunami, (4) development of an evacuation simulation model focusing on evacuation start, and (5) evacuation behavior observation by using UAV.

Research Works

Yoshihiro Okumura, Ryosuke Kato, Fusao Oka, Numerical Analysis of Liquefaction of Sandy Ground Induced by Tsunami, Proceedings of the Twenty-ninth International Ocean and Polar Engineering Conference (29th ISOPE), pp.3218-3225, 2019.
Yoshihiro Okumura, H.R. Riggs and Junji Kiyono, Toward a Resilient Society Against a Mega-Tsunami Disaster, In: Takeshi Katsumi and Shizuka Hashimoto (Eds), Towards Future Earth: Challenges and Progress of Global Environmental Studies, Kaisei Publishing Co., Ltd., pp.171-189, March 2016.
Yuji Dohi, Yoshihiro Okumura, Maki Koyama, Junji Kiyono, Evacuee Generation Model of the 2011 Tohoku Tsunami in Ishinomaki, *Journal of Earthquake and Tsunami*, Vol.10, No.2, 1640010 (17 pages), DOI: 10.1142/S1793431116400108, 2016.
Okumura Y, Yane T, Kiyono J, Tsunami Response Analysis of Pile-supported RC Buildings in Onagawa Town due to the 2011 Great East Japan Earthquake and Tsunami, Coastal Structures & Solutions to Coastal Disasters Joint Conference, Boston, MA, ASCE, pp.227-234, 2015.
Yoshihiro Okumura, Kenji Harada, Yoshiaki Kawata, Evacuation Behavior in the 29 September 2009 Samoa Islands Region Earthquake Tsunami, *Journal of Earthquake and Tsunami*, Vol.5, No.3, pp.217-229, 2011.

OKUMURA, Yoshihiro Associate Professor: Changed "Lecturer Professor" to "Supervising Professor".

List of Supervising Professors of Ph.D. of Disaster Management Program for Fall Semester 2021 Academic Year

Supervising Professors			Code Number
ICHII, Koji	Professor	Doctor of Engineering (Kyoto University)	75550
E-mail: ichiik@kansai-u.ac.jp			
<div style="border: 1px solid black; padding: 5px;"> <p>Theme Performance-based Seismic Design</p> <p>Seismic design of structures is a key element of societal safety against earthquake disaster. However, there are various type of structures to be considered. For example, not only the safety of buildings, but also the safety of lifelines such as electric power supply networks, pipelines for water supply, railways, road networks are essential for emergency response. However, the characteristics of damage to these various structures are not uniform. This seminar focuses on the method to estimate the damage to various types of structures. And students are expected to discuss how to integrate the advanced technologies into seismic design codes.</p> </div>			
<div style="border: 1px solid black; padding: 5px;"> <p>Lecture Earthquake Engineering</p> </div>			
<div style="border: 1px solid black; padding: 5px;"> <p>Research Works</p> <p>Koji Ichii, Takeko Mikami (2018) Cyclic threshold shear strain in pore water pressure generation in clay in situ samples, <i>Soils and Foundations</i>, Vol.58, pp.756-765.</p> <p>Koji Ichii and Yu Nandar Hlaing (2018) A simple framework for planning emergency routes in small townships in response to earthquake disasters, <i>Journal of Societal Safety Sciences</i>, No.7, pp.43-54.</p> <p>Koji Ichii, Keisuke Kitade, Mayumi Kawano and Ikuo Taguchi (2014) Surface wave-based health monitoring method for a sheet pile quay wall, <i>International Journal of Structural Stability and Dynamics</i>, Vol.14, No.05, DOI: 10.1142/S0219455414400094.</p> <p>Susumu Iai and Koji Ichii (2010) Soils and Foundations during Earthquakes, <i>Soils and Foundations</i> Vol.50, No.6, pp.937-953.</p> <p>Koji ICHII (2005) Towards the optimum seismic design of a gravity quay wall - a risk based approach for a soil-structure interaction problem, <i>On course (PIANC magazine)</i>, PIANC (International Navigation Association), Vol.120, pp.13-24, 2005.</p> </div>			

Supervising Professors			Code Number
KAMEI, Katsuyuki	Professor	Ph.D in Commerce (Osaka City University)	94732
E-mail: kamei@kansai-u.ac.jp			
Theme	Risk Management		
<p>In modern society, facing with complicated and socialized risk, it is necessary to carry out social risk management approach. In this course, we try to study the general principle of organizational risk management and its practice from a viewpoint of social risk management. The topics addressed in the seminar include (1) contemporary risk control and risk finance, (2) organization of risk management, (3) risk information disclosure as a means of risk communication, (4) strategy and risk management, (5) leadership and crisis management, (6) SME and risk management, and (7) safety for school and children risk management, etc.</p>			
Lecture	Risk Management		
Research Works	<p>Annelot Wismans, Roy Thurik, Ingrid Verheul, Olivier Torrès and Katsuyuki Kamei(2020), “Attention-Deficit Hyperactivity Disorder Symptoms and Entrepreneurial Orientation: A Replication Note” <i>Applied Psychology International Review</i>, Volume69, Issue3.</p> <p>Katsuyuki Kamei et Bérange Deschamps(2020), “Cas Oikawa Denim Une entreprise japonaise reprise par l'épouse du fondateur”, Audrey Missonier et Catherine Thévenard-Puthod (sous la direction de), <i>Transmission-reprise d'entreprise 11 études de cas</i>, éditions ems pp.184-195.</p> <p>Katsuyuki Kamei (2019) <i>Risk Management Basic Theory and Case</i>, Kansai University Press.</p> <p>Katsuyuki Kamei, Sonia Boussaguet, Aude D'Andria and Romain Jourdan(2016), The transfer of small and medium-sized Japanese family businesses to the younger generation: narratives by student-successors, <i>International Journal of Entrepreneurship and Small Business</i>, Volume 27, Issue 4 .</p> <p>Katsuyuki Kamei and Leo Paul Dana (2015) <i>Asian Entrepreneurship Vol.3</i>: Examining the Impact of New Policy Facilitating SME Succession in Japan: From a Viewpoint of Risk Management in Family Business, SAGE Library in Business & Management. 50 pp.295-306.</p> <p>Katsuyuki Kamei, Teruo Shinato and Leo Paul Dana (2015) <i>Asian Entrepreneurship Vol.2</i>: Entrepreneurship Education in Japanese Universities - How Do We Train for Risk Taking in a Culture of Risk Adverseness?, SAGE Library in Business & Management. 23 pp.107-125.</p>		
KOSHIYAMA, Kenji	Professor	Doctor of Philosophy in Engineering (Kobe University)	70555
E-mail: k-koshi@kansai-u.ac.jp			
Theme	Urban Disaster Reduction Planning		
<p>Globalization and Urbanization bring our society new risk of disasters. This seminar focuses the mechanism of new disaster occurrence and the methodology for disaster reduction from the viewpoint of urban design and planning. This will deal with the development of the disaster management cycle, the vulnerability approach, the hazard simulation, the environmental design after disaster and the prevention urban planning for disasters. This theme will face the new challenge for the risk reduction.</p>			
Lecture	Urban Disaster Mitigation		
Research Works	<p>Kenji Koshiyama (2018) Sheltering Status a Year After the Multiple Disaster in Fukushima, Resettlement Challenges for Displaced Populations and Refugees, pp.153-162, Springer</p> <p>Kenji Koshiyama (2016) Housing Recovery Process of the Great East Japan Earthquake Disaster, <i>the 4th International Conference on Urban Disaster Reduction</i></p> <p>Kenji Koshiyama (2014) Analysis of the allocation pattern of the temporary housing sites after disasters, <i>the 3rd International Conference on Urban Disaster Reduction</i></p> <p>Kenji Koshiyama (2014) Characteristics of emergency response at the Great East Japan Earthquake, <i>International Disaster Risk Conference in DAVOS</i>, Poster Collection, pp.91-94</p> <p>Kenji Koshiyama (2011) Comparison of International and Domestic Methods of Providing Housing After Disasters, <i>Journal of Disaster Research</i> Vol.6, No.2, pp.230-235.</p>		

Supervising Professors		Code Number
TSUCHIDA, Shoji	Professor	97501
E-mail: tsuchida@kansai-u.ac.jp		
Theme	Psychology of Societal Safety	
Theories in social psychology, such as attitude structure, emotion, social cognition, self-concept, interpersonal relations, communication, group dynamics, and collective behaviors are applied to field cases and studied as researches of (1) risk perception, (2) risk communication, and (3) psychological processes in crisis. The field cases, for example, are public acceptance/rejection and consensus formation processes of science/ technology (EMF, nuclear, GMO, etc.), the social psychological responses to disasters and crises (earthquake, tsunami, severe accident, etc.).		
Lecture	Psychology of Disaster Risks	
Research Works	<p>Shoji Tsuchida, Seiji Kondo, and Kenji Koshiyama (2018) Contemporary Societies and Risk, IN Abe, S., Ozawa, M., Kawata, Y.(eds.), "Science of Societal Safety: Living at time of risks and disasters" (Open Access), Pp.27-36. Springer.</p> <p>Shoji Tsuchida (2017) The Government and TEPCO Problems in Communicating Information with the Public during the Fukushima-1 NPP Accident." , IN Faculty of Societal Safety Sciences(ed.), <i>THE FUKUSHIMA AND TOHOKU DISASTER</i>, pp.287-308. Elsevier / Butterworth-Heinemann.</p> <p>Shoji Tsuchida, Takamasa Shiotani, Norifumi Tsujikawa, & Yuri Nakagawa (2016) Social Capital, Mutual Aids in Disasters, and Evaluation on Neighborhood' s Disaster-Preparation: Comparison between the States of Volunteer-Firefighter and the States of Career-Firefighter in the United States, <i>Safety Science Review</i>, 6, 21-38.</p> <p>Norifumi Tsujikawa, Shoji Tsuchida, & Takamasa Shiotani (2016) Changes in the Factors Influencing Public Acceptance of Nuclear Power Generation in Japan Since the 2011 Fukushima Daiichi Nuclear Disaster, <i>Risk Analysis</i>, 36(1), 98-113.</p> <p>Shoji Tsuchida, Norifumi Tsujikawa, Takamasa Shiotani, & Yuri Nakagawa (2013) Comparing disaster perception in Japan and the US", IN S. Ikeda & Y. Maeda (eds.) <i>Emerging Issues Learned from the 3.11 Disaster as Multiple Events of Earthquake, Tsunami and Fukushima Nuclear Accident</i>, The Society for Risk Analysis, Japan, Pp. 59-61.</p> <p>Shoji Tsuchida (2011) Affect Heuristic with 'good-bad' Criterion and Linguistic Representation in Risk Judgments, <i>Journal of Disaster Research</i>, 6(2): 219-229.</p> <p>Hans Peter Peters, Dominique Brossard, Suzanne de Cheveigné, Sharon Dunwoody, Monika Kallfass, Steve Miller, & Shoji Tsuchida (2008) Interactions with the Mass Media, <i>Science</i>, 21, 204-205.</p>	

Supervising Professors			Code Number
NAGAMATSU, Shingo	Professor	Ph.D. (Osaka University)	70558
E-mail: nagamatu@kansai-u.ac.jp			
<p>Theme Economics of Disasters and Policy Analysis for Disaster Reduction</p> <p>This seminar will focus on disaster management policy in terms from Economics. Students are expected to learn economic theory of disasters and policy analysis skills such as econometric analysis and cost benefit analysis (CBA), and write academic papers that can contribute to support or challenge existing disaster management theories. Students are also expected to have a compassionate heart, an accurate knowledge of scientific facts and policy practices, and an analytical mind to study policies under economic and public policy theory.</p> <p>Lecture Economics of Risk and Disaster</p> <p>Research Works</p> <p>Shingo Nagamatsu (2017) Building Back a Better Tohoku After the March 2011 Tsunami : Contradicting Evidence, Vicente Santiago-Fandino et al. eds. <i>The 2011 Japan Earthquake and Tsunami: Reconstruction and Restoration (Advance in Natural and Technological Hazards Research Vol.47)</i>, Springer., pp.37-54.</p> <p>Shingo Nagamatsu and Akiko Ono (2017) Job Creation after Catastrophic Events: Lessons from the Emergency Job Creation Program after the 2011 Great East Japan Earthquake, <i>Japan Labor Review</i>, Vol.14, No.1, Winter 2017, pp.112-131, 2017</p> <p>Shingo Nagamatsu (2016) Targeting Vulnerable People with a Social Safety Net: Lessons from the CFW program for the 2011 Great East Japan earthquake and Tsunami Disaster, <i>Journal of Disaster Research</i>, Vol.11 No.5 pp. 926-934.</p>			
Lecturer Professors			Code Number
HOSOKAWA, Shigeo	Professor	Doctor of Engineering (Kobe University)	76814
E-mail: hosokawa@kansai-u.ac.jp			
<p>Theme Industrial Safety System</p> <p>Industrial systems such as power plants, petrochemical complexes, steel mills and mechanical systems are essential for modern society and life. Their safety deeply depends on the mechanical characteristics and heat and fluid flows in the systems. This seminar focuses on safety of industrial systems from the viewpoint of mechanics, especially thermal-fluid dynamics. Understanding and control of heat and fluid flows for system safety are main subject. Experimental approaches are mainly used for investigation of thermal-fluid phenomena. Development of measurement methods for understanding and monitoring heat and fluid flows is also one of the subjects.</p> <p>Research Works</p> <p>Shigeo Hosokawa, Hideaki Shakutsui, Akio Tomiyama (2019) Turbulence Modification of Gas-Liquid-Solid Dispersed Three-Phase Flow in a Vertical Pipe, <i>Multiphase Science and Technology</i>, Vol. 31, pp. 175-197.</p> <p>Shigeo Hosokawa, Yuya Masukura, Kosuke Hayashi, Akio Tomiyama (2017) Experimental Evaluation of Marangoni stress and surfactant concentration at interface of contaminated single drops using spatiotemporal filter velocimetry, <i>International Journal of Multiphase Flow</i>, Vol. 97, pp. 157-167.</p> <p>Shigeo Hosokawa, Kosuke Hayashi, Akio Tomiyama (2014) Void Distribution and Bubble Motion in Bubbly Flows in a 4x4 Rod Bundle, Part I: Experiments, <i>Journal of Nuclear Science and Technology</i>, Vol. 51, Issue 2, pp. 220-230.</p> <p>Shigeo Hosokawa, Ikumi Mikiyama, Akio Tomiyama (2013) Development of a Submersible Small Fiber LDV Probe and Its Application to Flows in a 4x4 Rod Bundle, <i>Nuclear Engineering and Design</i>, Vol. 263, pp. 342-349.</p> <p>Shigeo Hosokawa, Taishi Yamamoto, Jun Okajima, Akio Tomiyama (2012) Measurements of Turbulent Flows in a 2x2 Rod Bundle, <i>Nuclear Engineering and Design</i>, Vol. 249, pp. 2-13.</p> <p>Shigeo Hosokawa, Kosuke Hayashi, Akio Tomiyama (2009) Multi-Fluid Simulation of Turbulent Bubbly Pipe Flows, <i>Chemical Engineering Science</i>, Vol. 64, pp. 5308-5318.</p>			

NAGAMATSU, Shingo Professor: Changed "Doctor of International Public Policy (Osaka University)" to "Ph.D. (Osaka University)".

Supervising Professors			Code Number
KOYAMA, Tomofumi	Associate Professor	Ph. D Land and Water Resources Science (Royal Institute of Technology, KTH, Sweden)	69845

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Theme **Geo-disaster Prevention and Mitigation**

Recently many geo-disasters (such as landslide, slope collapse and liquefaction) have been occurred by torrential rainfall and earthquakes. This seminar focuses on the mechanism of geo-disasters caused by torrential rainfall and earthquake and their structural and non-structural countermeasures. Students are expected to solve one the problems related geo-disaster prevention and mitigation using computer simulations, field measurement/monitoring and in-situ/laboratory experiments. Students are also expected write academic papers and make a sresentation at the international/domestic conferences.

Lecture **Geo-disaster**

Research Works

Ryota Hashimoto, Mamoru Kikumoto, Tomofumi Koyama and Mamoru Mimura (2017) Method of deformation analysis for composite structures of soils and masonry stones. *Computers and Geotechnics*, 82(2), 67-84.
Tomofumi Koyama, Yusuke Yasuki and Hiroyuki Shimizu (2016) CFD-DEM simulations for dynamic injection of cement-based grout-grout injection mechanism and suitable injection conditions. *Nordic Grouting Symposium*, Oslo, Norway, 26-27, September, pp.87-98.
Tomofumi Koyama, Masakazu Chijimatsu, Hiroyuki Shimizu, Shigeo Nakama, TomooFuijita, Akira Kobayashi and Yuzo Ohnishi (2013). Numerical modeling for the coupled thermal-mechanical processes and spalling phenomena in Äspö Pillar Stability Experiment. *J Rock MechGeotechEng, DECOVALEX-2011 special issue*, 5(1), 58-72.
Tomofumi Koyama, Kohei Nagano, Keita Lee and Yuzo Ohnishi (2013). Experimental and numerical studies on rainwater infiltration mechanism during torrential rainfall. *Caspian Journal of Applied Sciences Research*, 2 (AICCE' 12/GIZ' 12): 440-448.

Supervising Professors			Code Number
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OKUMURA, Yoshihiro	Associate Professor	Ph.D in Informatics (Kyoto University)	70838
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Theme **Disaster Reduction and Resilient Society**

This lecture focuses on a broad field for disaster reduction and measures for a resilient society against a mega disaster, ranging from the mechanism of natural disasters, analysis of people's evacuation behavior, and implementation of research. The following topics are an example of what will be covered; (1) a tsunami source modeling, (2) numerical analysis of tsunami propagation and inundation, (3) numerical analysis of structural response to a tsunami, (4) development of an evacuation simulation model focusing on evacuation start, and (5) evacuation behavior observation by using UAV.

Research Works

Yoshihiro Okumura, Ryosuke Kato, Fusao Oka, Numerical Analysis of Liquefaction of Sandy Ground Induced by Tsunami, Proceedings of the Twenty-ninth International Ocean and Polar Engineering Conference (29th ISOPE), pp.3218-3225, 2019.
Yoshihiro Okumura, H.R. Riggs and Junji Kiyono, Toward a Resilient Society Against a Mega-Tsunami Disaster, In: Takeshi Katsumi and Shizuka Hashimoto (Eds), Towards Future Earth: Challenges and Progress of Global Environmental Studies, Kaisei Publishing Co., Ltd., pp.171-189, March 2016.
Yuji Dohi, Yoshihiro Okumura, Maki Koyama, Junji Kiyono, Evacuee Generation Model of the 2011 Tohoku Tsunami in Ishinomaki, *Journal of Earthquake and Tsunami*, Vol.10, No.2, 1640010 (17 pages), DOI: 10.1142/S1793431116400108, 2016.
Okumura Y, Yane T, Kiyono J, Tsunami Response Analysis of Pile-supported RC Buildings in Onagawa Town due to the 2011 Great East Japan Earthquake and Tsunami, Coastal Structures & Solutions to Coastal Disasters Joint Conference, Boston, MA, ASCE, pp.227-234, 2015.
Yoshihiro Okumura, Kenji Harada, Yoshiaki Kawata, Evacuation Behavior in the 29 September 2009 Samoa Islands Region Earthquake Tsunami, *Journal of Earthquake and Tsunami*, Vol.5, No.3, pp.217-229, 2011.

OKUMURA, Yoshihiro Associate Professor: Changed "Lecturer Professor" to "Supervising Professor".