

Put Together Regional Powers to Realize Disaster Mitigation!

DISASTER MITIGATION RESEARCH CENTER

Creating models to realize disaster mitigation by deepening many types of cooperation in the whole region based on advanced disaster mitigation research



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(Prepared on February 28, 2013)



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Introduction of Members (Concurrent Professors)

 Hiroshi Omori	<p>Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Mechanics of Building Structures</p> <p>I am specialized in the development of the structural analysis and design of buildings, particularly those of big spatial structures such as indoor arenas, halls, theaters, and stadiums. The design of large telescopes and space structures is part of my professional territory. In particular, I think the succession of the principle of structural mechanics to the next generation is another important mission.</p>	 Hirokazu Kato	<p>Associate Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Low-carbon traffic/city planning, regional public transportation strategy</p> <p>I have studied building attractive, comfortable communities and transportation systems while reducing environmental burden on the earth, and engaged in the formation of policies for local governments around Nagoya. I will come up with specific measures for this area highly vulnerable to disasters.</p>
 Koji Kawasaki	<p>Associate Professor Position: Department of Civil Engineering, Graduate School of Engineering Specialty area: Coastal Engineering, Coastal Environment Engineering</p> <p>Even today coastal areas suffer enormous natural disasters, such as tsunamis, storm surges, and high waves. Not only in my specialized field but also through cooperation with many other fields, I will push along disaster prevention and mitigation activities in coastal areas.</p>	 Yasuo Kitane	<p>Associate Professor Position: Department of Civil Engineering, Graduate School of Engineering Specialty area: Structural engineering</p> <p>My research area is the load carrying capacity of steel and composite structures. I will contribute to disaster mitigation through enhanced earthquake resistance performance of structures.</p>
 Yuki Kubota	<p>Professor Position: Department of Psychology and Human Development, Graduate School of Education and Human Development Specialty area: Clinical-community psychology</p> <p>I have been involved with post-disaster/incident/accident psychological supports at schools and mental health education from a preventive perspective. I keenly realize the need of defining the capacity development of mental disaster mitigation for educational purposes, which helps school children deal with crises more flexibly.</p>	 Hiroaki Kojima	<p>Assistant Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Seismic Engineering</p> <p>Through vibration measurements such as the seismic observation of buildings and grounds, I am trying to uncover the earthquake resistance performance those buildings actually have. I will do my best to contribute to disaster mitigation in this region.</p>
 Hisashi Komatsu	<p>Associate Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Architectural planning, community development</p> <p>I am studying the roles of public facilities/spaces and community development in local communities under the age of low birthrate, aging, decreasing population. My belief is that anything that can work at ordinary times also can serve as the base in emergencies.</p>	 Takashi Tashiro	<p>Associate Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: River hydraulics, ecology and civil engineering</p> <p>On the basis of river hydraulics that addresses the flow of water and earth & sand in rivers, at the same time, looking at natural phenomena unique to the region, I am engaged in the studies on the management and reduction of flood disasters and the evaluation, maintenance, and reproduction of ecosystems.</p>
 Hiroki Tanikawa	<p>Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Environmental systems engineering</p> <p>My approach is based on the measurement of the "weight" of cities, analyzing the connection between living, environment, and economy through the movement of goods. The study is designed to achieve a low-material/low-carbon stock society by analyzing material/energy flows in a city or a regional area, using geographic information systems (GIS) and remote sensing techniques, and ultimately, to estimate the amount of rubble that will have to be disposed of in the wake of an earthquake disaster.</p>	 Gen Taniguchi	<p>Professor Position: Graduate School of Engineering Curriculum Specialty area: Architectural planning</p> <p>Though there is a tendency to see BCP measures as over-investment, I set it as one of major tasks for the rest of my life to contribute to construction and community development in ways that measures for environmental load reduction will go a long way in future disasters.</p>
 Tetsuro Tsujimoto	<p>Professor Position: Department of Civil Engineering, Graduate School of Engineering Specialty area: Hydraulic engineering, river engineering</p> <p>On the basis of studies such as hydrology, watershed geography, disaster prevention, and ecology related to river improvement, water utilization, and environment, I am striving to develop the integrated management of rivers and their basins. On the disaster prevention side, in addition to river improvement planning, I am providing assistance to research/education and administration such as crisis management and emergency support services.</p>	 Kazuhisa Tsunekawa	<p>Lecturer Position: Graduate School of Engineering (Campus Planning & Management Office) Specialty area: Architectural planning, construction design, city/regional planning, facility management</p> <p>I am responsible for the management of Nagoya University's facilities/equipment and operation, and part of a design team for the new building of Disaster Mitigation Research Center. I am intended to contribute to facility management for disaster prevention, ranging from the campus, city to the region.</p>
 Masaomi Teshigawara	<p>Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Construction structure, earthquake-resistant design, steel-reinforced concrete structure</p> <p>I am studying mainly on steel-reinforced concrete (RC) structures. Excellent in earthquake resistance, durability, and fire resistance, RC structures are being widely used in a variety of applications, such as general apartment buildings, ultra high-rise buildings, spatial structures, and infrastructure facilities. I am willing to contribute to rationalization and ensured safety of structural designs through destruction experiments of near life-size members and frame structures.</p>	 Jun Tobita	<p>Professor Position: Disaster Management Office Specialty area: Earthquake engineering</p> <p>I am working at Disaster Management Office to provide a solid foundation for the disaster prevention system of the University that accommodates as many as 20,000 people. On the front line of practical disaster prevention research, I leverage my knowledge of earthquake engineering such as hardware protection measures, system construction, promotion and awareness building.</p>
 Kentaro Nakai	<p>Associate Professor Position: Department of Civil Engineering, Graduate School of Engineering Specialty area: Geotechnical engineering, geotechnical engineering for disaster prevention</p> <p>I am trying to investigate and interpret the mechanism of ground disaster which may occur during and after an earthquake, such as liquefaction for sandy ground and long-term consolidation for clayey ground. Through my research effort, I will do my best to contribute to disaster prevention and mitigation in this region.</p>	 Masaki Nakano	<p>Professor Position: Department of Civil Engineering, Graduate School of Engineering Specialty area: Geotechnical engineering</p> <p>My main research field is effective utilization of various types of geomaterials, from natural materials to artificial materials, based on evaluation of their mechanical properties in terms of soil skeleton structure concept. I will contribute to disaster prevention and mitigation by effective utilization of disaster waste as geomaterial for the immediate restoration/reconstruction after disasters.</p>

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 Haruhisa Nakamichi	<p>Assistant Professor Position: Earthquake and Volcano Research Center, Graduate School of Environmental Studies Specialty area: Observational volcanology</p> <p>Through earth observation, I have uncovered the subsurface structure of volcanoes and the mechanism of earthquakes occurring there. From now on, I will look at volcanic eruption phenomena as an interesting theme in the science field of predicting disasters.</p>	 Yasuhiko Nishizawa	<p>Associate Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Architectural history, technological history, and civil engineering history</p> <p>The start of my search on the severity and influence of the Great Nobi Earthquake in the stricken area, as part of my research effort aimed at architectural history, encouraged me to get involved in disaster mitigation. I am determined not to forget the history of Japanese architecture having battled with fires and earthquakes, but to apply the lessons learned from past hazards to mitigate disasters in the future.</p>
 Tadatashi Furukawa	<p>Associate Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Architectural structure (mainly wooden structures)</p> <p>I am studying the safety of a wide variety of (mostly wooden) architectural structures, such as large spatial structures and quake-absorption/damping structures. To reduce casualties in the event of an earthquake, I will continue my research and development that will contribute to disaster mitigation such as the promotion of earthquake-resistant, wooden houses.</p>	 Muneyoshi Furumoto	<p>Professor Position: Earthquake and Volcano Research Center, Graduate School of Environmental Studies Specialty area: Solid-earth planet physics</p> <p>I believe the Tokai area is where we should be prepared for not only ocean-trench mega earthquakes but also inland earthquakes. I want to contribute to disaster mitigation by figuring out what types of earthquakes can happen.</p>
 Naoyuki Matsuda	<p>Professor Position: Graduate School of Medicine Specialty area: Disaster, emergency and critical care medicine</p> <p>As acute care medicine, I am teaching the medical treatment and knowledge of emergency medicine and critical care medicine, and has started bringing up these specialists in Japan. At the same time, I will pursue the construction of acute-phase medical management systems and the development of acute-phase innovative drugs as critical and basic research. I am committed to improve the emergency medical service, providing medical treatments suited for disaster mitigation in Nagoya, Tokai area.</p>	 Mariko Matsumoto	<p>Professor Position: Nagoya University Center for Developmental Clinical Psychology and Psychiatry Specialty area: Clinical psychology</p> <p>My main research theme is the international comparison and child profiling relating to the environment surrounding Japanese children and their mental health. From now on, I will add to my research themes, children's ability to mitigate mental disasters.</p>
 Ippei Maruyama	<p>Associate Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Building material science, cement chemistry, steel-reinforced concrete structure, thermodynamics of porous media</p> <p>Starting with the issues of building materials, I am driving the performance assessment of decontaminated, naturally aged structures. My recent engagements include the performance assessment of concrete structures that are kept exposed to radioactivity in nuclear power plant facilities. None of these issues is something easy to solve in a short period of time, but I think I should make steps forward steadily on a long-term basis.</p>	 Norimi Mizutani	<p>Professor Position: Department of Civil Engineering, Graduate School of Engineering Specialty area: Coastal engineering</p> <p>I am engaged in studies on coastal disaster prevention and the utilization and maintenance of coastal and marine areas. I am recently focusing on tsunami disaster prevention-related studies. Human lives, assets, and economic activities concentrate in coastal areas in Japan. I will pursue my studies so that these spaces can be utilized and applied in a safe, comfortable manner.</p>
 Tsunetoshi Mizoguchi	<p>Professor Position: Environmental Sociology, Graduate School of Environmental Studies Specialty area: Seismology, historical geography</p> <p>In Japan, we learn about natural disasters, such as earthquakes, thunders, fires, wind and flood damage, from modern archives and illustrations, considering measures against disasters. We are accumulating data from the living survey of flood-prone areas in Bangladesh in South Asia.</p>	 Akito Murayama	<p>Associate Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Urban planning, urban design, community development</p> <p>My research and practice focus on urban/regional-scale spatial planning and local-scale community development. What interests me most these days is how I can incorporate elements that will contribute to disaster mitigation in my research and practice.</p>
 Yasuhiro Mori	<p>Professor Position: Department of Environmental Engineering and Architecture, Graduate School of Environmental Studies Specialty area: Seismic engineering, risk theory</p> <p>I am studying methods to better deal with uncertain future risks. I think it important to efficiently improve the safety of the whole society with limited resources by weighing the cost-effectiveness of disaster mitigation targets/measures in mind, based on linear safety assessment, rather than simply whether safe or not.</p>	 Koshun Yamaoka	<p>Professor Position: Earthquake and Volcano Research Center, Graduate School of Environmental Studies Specialty area: Seismology, volcanology</p> <p>I have been involved in disaster mitigation activities since NSL 10 years ago, and am working more closely with Ministry of Education, Culture, Sports, Science & Technology, and the Nuclear Safety Commission. Leveraging such experience, I hope I can help mitigate disasters in this region.</p>
 Yasushi Yamaguchi	<p>Professor Position: Department of Earth and Environmental Sciences, Graduate School of Environmental Studies Specialty area: Remote sensing</p> <p>I used to be a geologist walking around fields. I am now studying the environmental diagnosis of the earth using remote sensing techniques as observation tools. I will apply these sensing techniques to better understand the state of disasters.</p>	 Yoshiko Yamanaka	<p>Associate Professor Position: Earthquake and Volcano Research Center, Graduate School of Environmental Studies Specialty area: Seismology</p> <p>Conscious of what science can do to reduce disasters in the event of next huge earthquake along the Nankai Trough, I am engaged in the study on the mechanism of great earthquakes developing between the plate boundaries. Recognizing recently the importance of archives, I have started to delve into appropriate archives.</p>
 Mitsuko Yokouchi	<p>Associate Professor Position: Department of Nursing Science, Graduate School of Medicine Specialty area: Emergency nursing science, disaster nursing science, health care management</p> <p>I am specialized in severe injury/emergency care. Recently, I am engaged mainly in the studies on health care systems that are designed to provide safe, high-quality medical care. I am intended to contribute to disaster mitigation research and activities, aiming at saving lives from disasters and reducing health damage as much as possible.</p>		