

2.2.5 Laboratory : Landscape Architecture

Member:	Professor	Morimoto, Yukihiro, Dr. Agri. Sci.
	Associate Professor	Fukamachi, Katsue
	Assistant Professor	Imanishi, Junichi, Dr. Agri. Sci.
	Doctor's program	5
	Master's Program	7
	Undergraduate	4

A. Research Activities (2009.4-2010.3)

A-1. Main Subjects

a) Theory and history of landscape design

History and theory of modern landscape design have been researched continuously. The purpose of the studies is to clarify the social significance of public open spaces through the researches on economic and political backgrounds.

b) Habitat restoration and conservation research

Technological studies on conservation of forest and wildlife habitat have been researched through works in urban forest.

c) Landscape and land-use planning research

Landscape and land-use preference studies on open space in urban and urban fringe areas are conducted in order to get landscape and land-use planning theory.

d) Practice in landscape design

This laboratory has participated in the practical processes of several projects such as parks and urban planning.

A-2. Publications and presentations

a) Publications

Books

- Morimoto Y, Takeuchi K: "Forest Environment 2010: Toward Biodiversity COP10", 216pp, Shinrin-Bunka Kyokai, Tokyo, 2010.2 (in Japanese)

- Takemura S, Kamada M, Morimoto Y. 'Identification of Topographical and Climatic Factors Determining Suitability of Mangrove Habitat in India as a Basis for Restoration Planning', In Shaw R, Krishnamurthy R R Eds "Communities and coastal zone management", Research Publishing Services, Singapore, 2009
- Imanishi J: Forest Therapy, Imanishi, J Ed., "Complementary and Alternative Medicine for Medical Workers Rev 2", Kimpo-do, Kyoto, 2009.5, 465pp. (Pages: 349-355, 6 pages) (in Japanese)

Original Papers

- Imanishi, J., Nakayama, A., Suzuki, Y., Imanishi, A., Ueda, N., Morimoto, Y. and Yoneda, M. 'Nondestructive determination of leaf chlorophyll content in two flowering cherries using reflectance and absorptance spectra'. Landscape and Ecological Engineering, 6(2), 219-234. 2010.1
- Ioki, K., Imanishi, J., Sasaki, T., Morimoto, Y. and Kitada, K. 'Estimating stand volume in broad-leaved forest using discrete-return LiDAR: plot-based approach'. Landscape and Ecological Engineering, 6(1), 29-36. 2009.7
- Iida Y, Imanishi, J, Oishi Y, Morimoto Y: Consideration on suitable microclimate of moss garden based on turf surface moisture dynamics of Polytrichum commune Hedw, Japan Landscape Research 73(5):407-412, 2010.3 (in Japanese)
- Iwasa K, Fukamachi K, Oku H, Fukui W, Horiuchi M, Miyoshi I: Changes in a Satoyama landscape adjacent big cities since 1880s in the Kaseyama District of Kizugawa City, Kyoto Prefecture, J of Rural Planning Assoc 28:321-326, 2009 (in Japanese)
- Oku H, Fukamachi K, Miyoshi I, Horiuchi M: Comparative study of landscape perception between visitors from China and domestic visitors on landscapes dominated by tea plantation in the middle reaches of Oi river basin, Shizuoka Prefecture, Japan Landscape Research 72(5): 657-660, 2009 (in Japanese)
- Murakami K, Kamikubo F, Izumimoto N, Morimoto Y: An adaptation of the focal species approach for conserving the woody plant species diversity in fragmented shrine forests in urban or suburban landscapes, Landscape Ecology and Management 14(1): 41-51, 2009.(in Japanese)
- Hayase M, Imanishi J, Nakamura A, Toda K, Morimoto Y: Landscape simulation for restoring borrowed scenery of a Japanese garden using a terrestrial laser scanner, Japan Landscape Research (online) 2:62-66, 2009.7 (in Japanese)
- Fukamachi K, Ohgishi M, Oku H, Miyoshi I, Horiuchi M, Shibata S: Changes in the rice terrace landscape and factors playing a role in the survival of the rice terraces in a mountainous area of the Tango Peninsula, J of Rural Planning Assoc 28:315-320, 2009

(in Japanese)

- Hosogaki A, Hashimoto H, Komiyama A, Imanishi J, Morimoto Y: The relationship between avifauna and environmental conditions of shrine woods in rural area, J of Japan Society of Revegetation Tech 35(4): 523-531, 2010.3 (in Japanese)
- Horiuchi M, Fukamachi K, Oku H, Okada K: Early Showa period use of natural resources and natural space in child play in a rural community in the western part of Shiga Prefecture, Japan, Japan Landscape Research 72(5): 673-678, 2009 (in Japanese)

Reports

- Imanishi, A., Morimoto, J., Imanishi, J., Shibata, S., Nakanishi, A., Osawa, N., Sakai, S. 'Sprout initiation and growth for three years after cutting in an abandoned secondary forest in Kyoto, Japan'. Landscape and Ecological Engineering 6(2), 325-333. 2009.9
- Morimoto Y, Hashimoto H, Imanishi A, Murakami K, Tabata K, Oishi Y: Biodiversity in Cities: Current Status of Field Researches, Bio City 43, 112-115, 2009 (in Japanese)
- Morimoto Y: Biodiversity and Nature Restoration, Kyoto University Environment Report 2009, p.46, 2009 (in Japanese)
- Imanishi J, Okugawa H, Iida Y, Kim H, Morimoto Y, Yamanaka K, Kojima T: Relationship of tree vigor and soil hardness to root distribution of *Cerasus jamasakura* (Siebold ex Koidz.) H. Ohba var. *jamasakura*, J of Japan Society of Revegetation Tech 35(1): 182-185, 2009.7 (in Japanese)
- Imanishi J, Nakau M, Imanishi A, Imanishi J, Watanabe E, Kimura M, Morimoto Y: Effect of a health promotion program consisted of forest therapy, horticultural therapy and yoga on healthy elderly, J of Japan Society of Revegetation Tech 35(2): 363-369, 2009.9 (in Japanese)
- Nakau M, Imanishi J: A new utilization of urban green parks for cancer patients as a therapeutic space, J of Japan Society of Revegetation Tech 35(2): 301-303, 2009.11 (in Japanese)

Patents

- Application 2009-185818
Measurement device and method for leaf chlorophyll determination
Imanishi, Junichi
Kyoto University
August 10, 2009

b) Conference and seminar papers presented

- Japan Society of Civil Engineers: 1 presentation

- The Japanese Forest Society: 2 presentations
- The 53rd Meeting of The Mycological Society of Japan: 1 presentation
- Geoinformation Forum Japan 2009 Student Forum: 1 presentation
- The 19th Meeting of Japan Association for Landscape Ecology: 2 presentations
- The 40th Meeting of Japan Society of Revegetation Technology: 2 presentations
- Japanese Institute of Landscape Architecture Kansai Branch Meeting: 1 presentation
- The 13rd Meeting of Integrated Medicine of Japan: 1 presentation
- The 10th International Congress of Ecology: 2 presentations
- The 15th international symposium on problems of landscape ecological research conference: 2 presentations
- COTTBUS Japanese-German Symposium: 1 presentation
- IUFRO Division 4: 2 presentations

A-3.Off-campus activities

Membership in academic societies

- Morimoto, Yukihiro, D.Agric.Sci : Japanese Institute of Landscape Architecture (representative), Japanese Society of Revegetation Technology (auditor), Japan Association for Landscape Ecology (chair), Center for Environmental Information Science (councilor), Association for Nature Restoration and Conservation, Japan (executive board member)
- Fukamachi, Katsue : Japanese Institute of Landscape Architecture (executive board member, International Affair), Japanese Society of Revegetation Technology (executive board member), Japanese Forest Society (councilor, editorial board member), Japan Association for Landscape Ecology (acting committee, editorial board)
- Imanishi, Junichi, D.Agric.Sci : Japanese Institute of Landscape Architecture (academic affair, Kansai Branch member, Kansai Branch Office), Japan Association for Landscape Ecology (specialist), Japanese Society of Revegetation Technology (editorial board, research member)

Membership in Science Council of Japan, etc.

- Morimoto, Yukihiro, D.Agric.Sci : Science Council of Japan (coalition member (environmental science))

Research grants

1. Grants-in-aid for Scientific Research(KAKENHI)

- Scientific Research (A)(1) : Morimoto, Yukihiro : Study on grand design of hierarchical

nature restoration

- Scientific Research (A) : Nakamura, Futoshi : Academic study on extraction of target ecosystem, engineering technology and scientific assessment in nature restoration
- Scientific Research (A) : Natuhara, Yoshihiro : Development of assessment system based on comparative landscape ecological method

2.Other Research Grants

- funded research : Morimoto, Yukihiro : Expo'70 Park Independent Forest Creation Survey
- Kurita Water and Environmental Foundation : Imanishi, Junichi : Factors affecting the distribution of buried seeds as materials for vegetation restoration of Lake Biwa

A-4.International cooperation and overseas activities

Membership in academic societies

- Morimoto, Yukihiro : International Consortium for Landscape and Ecological Engineering (Vice president), International Federation of Landscape Architects - Japan (Board Member)

International meetings(country,roles)

- Morimoto, Yukihiro : URBIO2010 Organizing Committee (Japan, co-chair)
- Fukamachi, Katsue : URBIO2010 Organizing Committee (Japan, member)
- Imanishi, Junichi : URBIO2010 Organizing Committee (Japan, chief of Academic Affairs Division)

Visiting Research Scholars

- Research Student 2 (China)
- Doctor (GSGES) 1 (Korea)
- Doctor (GSGES) 1 (Malaysia)
- Research Student (GSGES) 1 (Malaysia)
- Research Student (GSGES) 1 (Brasil)
- Research Student (GSGES) 1 (Taiwan)

B.Educational Activities(2009.4-2010.3)

B-1.On-campus teaching

a) Courses given

- Undergraduate level : Landscape Architecture Part I, II (Imanishi, J., Morimoto, Y.),
Planting Design for Landscape (Imanishi, J. and Morimoto, Y.),

- Landscape Planning (Fukamachi, K.), Practice in Landscape Planning and Design Part I, II (Imanishi, J, Morimoto, Y), Laboratory Course in Applied Forest and Biomaterials Science (Morimoto, Y., Fukamachi, K., Imanishi, J.), Laboratory Course in Forest and Biomaterials Science IV (Morimoto, Y., Fukamachi, K., Imanishi, J.), Forest and Biomaterials Science, IV (Morimoto, Y.), Information Technology in Forest and Biomaterials Science (Imanishi, J. and others)
- Graduate level : Special Lecture in Landscape Architecture (Morimoto, Y.), Seminar in Landscape Architecture (Morimoto, Y., Fukamachi, K., Imanishi, J.), Laboratory Works in Landscape Architecture (Morimoto, Y., Fukamachi, K., Imanishi, J.

B-2.Off-campus teaching etc.

Part-time lecturer

- Morimoto, Yukihiro: Kyoto Prefecture University (Landscape Design, Forest Management)
- Imanishi, Junichi: Kyoto Seika University (Landscape Design)

Open lectures, etc.

- Morimoto, Yukihiro: "Kyoto Summit for Conservation of Japanese Forests" Division "Greening Activities for Next Generation", Cordinator, host: Friends of Regional Banks for Conservation of Japanese Forests, ICC Kyoto, Kyoto, December 4, 2009
- Morimoto, Yukihiro: Symposium proposal, cordinate: Center for Environment Information Science, Meeting on environmental design from local (2nd), "Utilization of benefits from ecosystems", Shiran Kaikan Yamauchi Hall, Kyoto, December 9, 2009
- Morimoto, Yukihiro: "From Sato in Japan to Sato in the World", Symposium Panelist, host: Research Institute for Humanity and Nature, Kanazawa University, UNU-IAS, Shirin Bunka Kyokai, February 6, 2010, Ishikawa Pref.
- Morimoto, Yukihiro: "Scenery of Flowering Cherries", Golden Age Academy, Lecture, Kyoto, March 10, 2010
- Morimoto, Yukihiro: "100 Selection of Japanese Sato", Invited Lecture, host: Nishino-shima Cho commerce and industry association, October 3, 2009
- Morimoto, Yukihiro: "Landscape Ecology and Planning in Japan", Invited Lecture, Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya, March 8, 2010
- Morimoto, Yukihiro: "Ecosystems and Environemtal Conservation Measures", Lecture, host: Ministry of Environment, Osaka, December 8, 2009

- Imanishi, Junichi: "Integrative Learning (Introduction to the Cutting-Edge Researches)",
Lecture, Yanagi Junior-high and High School, February 23, 2010

C.Other Remarks

- Morimoto, Yukihiro: Central Environmental Council (Temporal Member (Natural Environ.), Strategic Board Member), MEXT Textbook Assessment Board (Temporal Member), Agency for Cultural Affairs Cultural Council (Specialist), Kyoto City Landscape Beauty Management Board (Member), Kyoto City Landscape Beauty Consultant, Kobe City Park and Green Council (Member), Kyoto City Green Promotion Council (Chair), MLIT Yodo River Conservation and Use Council (Chair), Kyoto Model Forest Association (Executive Board Member), Kyoto City Greenery Association (Executive Board Member), NPO Green Environment (Executive Board Member), NPO Association for Nature Restoration and Conservation, Japan (Executive Board Member), Council for Kyoto Traditional Forest Culture (Vice President), Urban Green Tech Japan (Research Advisor), Kyoto Biotope Research Group

- Fukamachi, Katsue: Kyoto City Landscape Beauty Management Board, Kyoto City Environmental Impact Assessment Board (Member), Kyoto City City Planning Council, Kyoto City Environmental Basic Plan Planning Committee, Kyoto Prefecture Environment Council, Kyoto Prefecture Landscape Council, Kyoto Prefecture Forest Council, Kyoto Prefecture Special Plan (Ursus thibetanus) Planning Committee, Amano Hashidate World Heritage Potential Assessment Board, Kyoto Prefecture "Wa" Public Project Assessment Board, Kyoto Prefecture Public Project Assessment Board, Shiga Prefecture Environment Council, Shiga Prefecture Hometown, Water and Soil Conservation Committee, Otsu Watershed Forest Management Committee, Sigaraki Heritage Conservation Planning Committee, Hyogo Prefecture Wildlife Management Council, Kyoto Prefecture Agriculture, Forestry and Fisheries Technology Assessment Board, Kyoto Prefecture Proposal-type Public Project Assessment Board, Meeting on Arashiyama National Forest, Protected Forest Monitoring Survey Assessment Board (Forest Agency), Satoyama Network Seya (Executive board member), Hira no Sato Hito (Executive board member), Kami Miyazu 21 Dream Meeting, Friends of Tanoue Residence, Field Society, Explorer of Yabukogi, Lake Biwa Nature Environment Network