

The 3rd
East Asian Symposium
on
Environmental
and
Natural Resource
Economics

In Kunitachi, Japan,

February 19-21, 2008

Preface

The 1st East Asian Symposium on Environmental and Natural Resource Economics was held in November 2005, in Beijing, and the 2nd was held in November 2006, in Seoul. The 3rd East Asian Symposium on Environmental and Natural Resource Economics will be held in on February 19-21, 2008, in Kunitachi, Tokyo, Japan. The 3rd Symposium aims at promoting exchange of academic experiences and dissemination of sustainable development in the perspectives of environmental and natural resource economics in East Asia.

The 3rd Symposium's goals are to:

- 1) Facilitate academic research cooperation and collaboration in Environmental and Natural Resource Economics in East Asia;
- 2) Discuss and exchange academic experiences and practices on Sustainable Development in East Asia;
- 3) Promote research cooperation in Environmental and Natural Resource Economics in East Asia; and
- 4) Discuss the practical procedures of establishing the East Asian Association of Environmental Economics.

In this Symposium, we will have two invited speeches by Prof. UZAWA Hirofumi and Prof. SHIBATA Tokue, two plenary sessions of which themes are entitled of 'Circular Economies for Sustainable Development in East Asia' and 'Environmental Governance for Sustainable Development in East Asia', and fourteen parallel sessions. I hope to have fruitful exchanges and discussions among the distinguished participants in the Symposium.

On behalf of the Organizing Committee, I wish to acknowledge that part of the expenses for organizing this symposium was covered by the following grants; the 2007 Grant-in-Aid for Scientific Research (A) ("The Circular Society and Environmental Governance in Asia", Project Leader : Prof. YOSHIDA Fumikazu), the 2007 Grant-in-Aid for Scientific Research on Priority Areas ("Multi-level Environmental Governance for Sustainable Development", Project Leader : Prof. UETA Kazuhiro) from the Japan Society for the Promotion of Science, the 2007 Grant ("Promotion of Environmental Information Exchange and Network Building for Environmental Cooperation in Asian Region", Project Leader : Dr. OSHIMA Ken'ichi) from the Toyota Foundation, the 2007 special grant from Graduate School of Economics, Hitotsubashi University, and a special grant from Korea Gas Corporation .

February 2008

TERANISHI Shun'ichi

Professor of Environmental Economics,

Graduate School of Economics, Hitotsubashi University

Chair,

the Organizing Committee of

the 3rd East Asian Symposium

on Environmental and Natural Resource Economics



Organizing Committee

of the 3rd East Asian Symposium on Environmental and Natural Resource Economics

Chair:

Prof. TERANISHI Shin'ichi (Graduate School of Economics, Hitotsubashi University)

Vice-chairs:

Prof. MA Zhong (School of Environmental and natural Resources, Renmin University of China)

Prof. KIM Il-Chung (Department of International Trade, Dongguk University)

Dr. SHAW, Daigee (Chung Hua Institution for Economic Research)

Prof. YOSHIDA Fumikazu (Public Policy School, Hokkaido University)

Prof. UETA Kazuhiro (Graduate School of Economics, and Global Environmental Studies, Kyoto University)

Secretary General:

Dr. YAMASHITA Hidetoshi (Graduate School of Economics, Hitotsubashi University)

Contact Persons in Japan:

(For PRC)

Mr. AIKAWA Yasuxi (Tottori University of Environmental Studies)

Dr. MORI Akihisa (Global Environmental Studies, Kyoto University)

(For Korea):

Prof. LEE Soo-Cheol (Meijyo University)

Dr. HAYASHI Tadashi (Takahashi City University of Economics)

(For Taiwan):

Dr. CHEN Li-Chun (Yamaguchi University)

Time Table

Preparatory Meeting

Date: Tuesday, February 19, 2008

Venue: Palace Hotel TACHIKAWA

18:00 – 20:00

The 1st day Conference Program

Date: Wednesday, February 20, 2008

Venue: Hitotsubashi University

09:00 – 09:30 Registration

09:30 – 09:50 Opening Ceremony

10:00 – 10:30 Invited Speech: Prof. UZAWA Hirofumi

10:30 – 12:30 Plenary Session I:

Circular Economies for Sustainable Development in East Asia

12:30 – 13:30 Lunch

13:30 – 15:30 Parallel Sessions I: (A), (B), (F1), (G1)

15:30 – 15:45 Coffee Break

15:45 – 17:45 Parallel Sessions II: (D), (F2), (G2)

18:00 – 20:00 Gala Dinner

Venue: Sano Shoin Hall, Hitotsubashi University

The 2nd day Conference Program

Date: Thursday, February 21, 2008

Venue: Hitotsubashi University

- 09:30 – 11:30 Plenary Session II:
Environmental Governance for Sustainable Development in East Asia
- 11:30 – 12:00 Invited Speech: Prof. SHIBATA Tokue
- 12:00 – 13:30 Lunch
- 13:30 – 15:30 Parallel Sessions III: (C1), (E), (F3), (I1)
- 15:30 – 15:45 Coffee Break
- 15:45 – 17:45 Parallel Sessions IV: (C2), (H), (I2)

Issues for Parallel Sessions:

- (A) Energy and Environmental Economics
- (B) Measurement of Sustainability and Eco-efficiency
- (C) Environmental Governance
- (D) Evaluation of Environmental Goods
- (E) International Comparative Analysis of Environmental Policies
- (F) Waste Management and Circular Economy
- (G) Policies against Climate Change
- (H) Pollution and Relief of its Victims
- (I) Sustainable Use of Natural Resources

Agenda for the parallel sessions:

In each session, the last speaker chairs first two speakers.

Then the first speaker chairs the rest.

Each speaker has 30 min. for his/her presentation including questions and comments.

Program of the Symposium

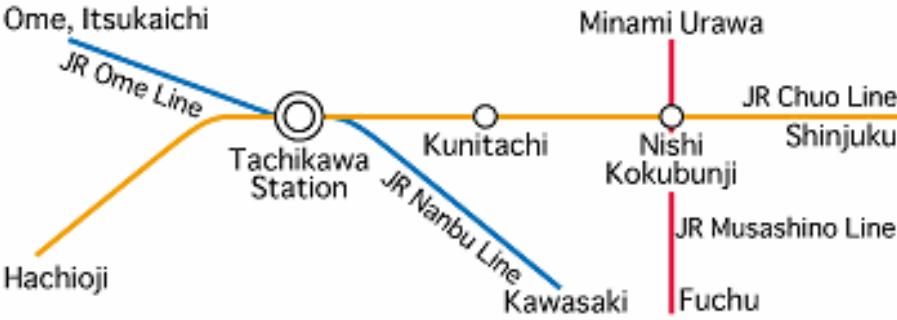
Session		Theme of the Session	
Venue		Date and Time	
No	Corresponding Author Co-Author/s	Title Organization of Corresponding Author	Page
Invited Speeches			
Room 21		20 Feb. 10:00 - 10:30	
1	Hirofumi UZAWA	Global Warming and Sustainable Economic Development	1
Room 21		21 Feb. 11:30 - 12:00	
2	Tokue SHIBATA	Controlling the Traffic Congestion in East Asian Metropolises	7
Plenary Session I		Circular Economies for Sustainable Development in East Asia	
Room 21		20 Feb. 10:30 - 12:30	
1	Fumikazu YOSHIDA Haruyo YOSHIDA	An Economic Analysis of WEEE in Japan School of Public Policy, Hokkaido University	8
2	Du HuanZheng	Recycling system and social issues on E-waste in China Jiaying University	9
3	Chung Sung Woo	Evaluation of E-waste Management in South Korea: From the EPR perspective Graduate school of Economics and business administration, Hokkaido University	10
4	Michikazu KOJIMA	E-Waste in Southeast Asia Institute of Developing Economies, JETRO	14
Plenary Session II		Economic Development and Environmental Policy in East Asia: Implications for Multi-level Environmental Governance	
Room 21		21 Feb. 09:30 - 11:30	
1	Chin-Seung Chung	Environmental Governance in Korea-Features and Challenges KDI School of Public Policy and Management	18
2	WEY, Kwo-Dong	The Global Warming and Biomass Energy Development in Taiwan: An Application of ORANIG Model Department of Economics, Taipei University	19
3	Chen Yun	Environmental Governance in Zhejiang Province:towards Circular Economy System School of International Relations and Public Affairs, Fudan University	20
4	Akihisa MORI	Economic Development and Environmental Policy in East Asia:Implications for Multi-level Environmental Governance Kyoto University	21
Session A		Energy and Environmental Economics	
Room 24		20 Feb. 13:30 - 15:30	
1	HU, Jin-Li Tzu-Pu Chang	Total-factor Energy Productivity Growth of Regions in China Institute of Business and Management, Chiao Tung University, Taiwan	25
2	Sang Mok Kang	Comparison of Competitiveness in Chinese and Korean Industries-Environmental Performance and Shadow Prices of Pollutants Dept. of Economics, Pusan National University	30
3	LIN,Hsing-Chun	A Regional Input Output Analysis of Increasing Bio-Ethanol Production in Taiwan Department of Applied Economics, Chiayi University	31
4	HUANG, Wei-Lung	The Impact of Biotechnology on Biodiversity from an Economic-Ecological Perspective China Institute of Technology, Taiwan	32

Session B		Measurement of Sustainability and Eco-efficiency	
Room 28		20 Feb. 13:30 - 15:30	
1	Wei Su Toru Matsumoto, Kangkang Gu, Juan Liu, Yonghai Xue, Xindong Wei	Ecological footprint time series of China for 1991-2005 based on a modified method	33
		Faculty of Environmental Engineering, the University of Kitakyushu	
2	CHANG Ming-Chung Mu-Lin Wang, Jin-Li Hu	Green Efficiency for Cities in China	37
		Department of Risk Management, Kainan University	
3	HUNG Chin-Ming Daigee Shaw	Green Net National Product and Reference Points	41
		Chung Hua Institution for Economic Research	
4	TSAI, Tsung-Hsiu Sheng-Jang Sheu	Evaluate Sustainability by Simultaneous Equation Model: A Case Study from Taiwan	42
		University of Kaohsiung, Department of Applied Economics	
Session C1		Environmental Governance	
Room 26		21 Feb. 13:30 - 15:30	
1	Il Chung Kim Mun Seong Choi	Environmental Regulations and an Oligopolistic Market	43
		Department of International Trade, Dongguk University	
2	SHI Lei XING Lu, LU Genfa	Scale, Ownership and Market: Which Matter in Corporate Environmental Governance?	44
		State Key Laboratory of Pollution Control & Resource Reuse, School of the Environment, Nanjing University, P.R.China.	
3	Daigee Shaw Chiung-Ting Chang	Principle of interest-pay-say in institutional governance	48
		Chung Hua Institution for Economic Research	
Session C2		Environmental Governance	
Room 26		21 Feb. 15:45 - 17:45	
1	Wu Jian Ma Zhong, Zhou Lixuan	Can Environmental Expenditure Support China's Environmental Protection Target	49
		School of Environment & Natural Resources, Renmin University of China	
2	Jong Ho Hong Hojeong Park	Real Option Analysis of Korea's Low Pollution Program for Diesel Vehicles in Seoul Metropolitan Area	56
		Department of Economics and Finance, Hanyang University	
3	Myunghun Lee	A Test on the Relationship between Market Power and Environmental Regulation	60
		Inha University	
Session D		Evaluation of Environmental Goods	
Room 28		20 Feb. 15:45 - 17:45	
1	Andy S. Choi	The impact of functional forms in Discrete Choice Models	66
		Australian National University	
2	Heechan Kang	Inconsistent responses in the dichotomous choice contingent valuation with follow-up questions	71
		Samsung Economic Research Institute	
3	Young Sook Eom	Adding Another Heterogeneity of Preferences in Nested Logit Models	74
		Department of Economics, Chon Buk National University	
4	Yong-Joo Kim	Testing for Benefit Transferability When the Preferences for an Environmental Good is Heterogeneous	75
		Seoul Digital University	
Session E		International Comparative Analysis of Environmental Policies	
Room 24		21 Feb. 13:30 - 15:30	
1	Hiroshi KOJIMA	Determinants of Environmental Attitudes in Four Capitals in East Asia: A Comparative Analysis	79
		Faculty of Social Sciences, Waseda University	
2	ZHENG Yuejun	Cross-national Comparison of Environmental Consciousness on Construction of Harmonious Society in East Asia	80
		Research Department, Research Institute for Humanity and Nature	
3	Dongsoon Lim	Economic Development and Pollution Management in the Vietnamese Industry: Lessons from the Korean Sustainable Development Strategies	82
		Department of Economics, Dong-Eui University	

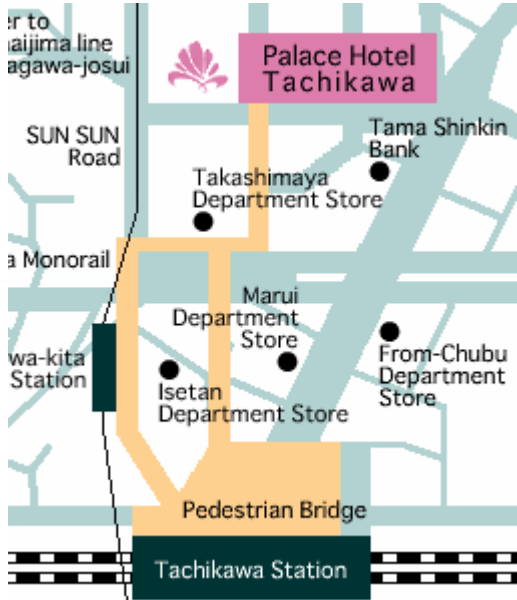
Session F1		Waste Management and Circular Economy	
Room 26		20 Feb. 13:30 - 15:30	
1	Arata Abe	A Study on Flow of End-of-Life Vehicles in Japan Graduate School of Economics, Hitotsubashi University	86
2	ASAZUMA Yutaka	The Relation between Japan and Russia about Automobile Recycling Hokkai Gakuen University, Faculty of Economics	90
3	WEN, Lih-Chyi Chun-hsu Lin	Electric and Electronic Equipment Wastes (EEEW) in Taiwan Chung Hua Institution for Economic Research	96
4	Aya YOSHIDA	Current Status of Waste Electrical & Electronic Equipment and End-of-Life Vehicle Recycling in China National Institute for Environmental Studies	97
Session F2		Waste Management and Circular Economy	
Room 26		20 Feb. 15:45 - 17:45	
1	Soo-cheol Lee Kazuhiro Ueta	Public Policy for the Disposal of High-Level Radioactive Wastes in Japan Faculty of Economics, Meijo University	99
2	Juan LIU Toru MATSUMOTO	Informal Collecting and Formal Recycling: Rival or Union Graduate School of Environmental Engineering, the University of Kitakyushu	102
3	Ma Zhong Fang Hao, Yang Li	County-level Circular Economy Pattern based on Biomass energy: Environmental Integrated Management and Infrastructure Construction in County-level Cities and Towns School of Environment and Natural Resources, Renmin University of China	105
4	KUO. Yen-Lien	An Empirical Analysis of the Effects of Waste Management Policies and Enforcements on Waste Generation and Recycling National Science and Technology Center for Disaster Reduction, Taiwan	108
Session F3		Waste Management and Circular Economy	
Room 28		21 Feb. 13:30 - 15:30	
1	Satoshi Honma Jin-Li Hu	Efficient Waste Abatements for Regions in Japan Faculty of Economics, Kyushu Sangyo University, Japan	109
2	Yonghai XUE Toru MATSUMOTO, Juan LIU	Scenario Analysis for Environment Load and Cost of Waste Management System of Beijing Considering of Recycling Cases Faculty of Environmental Engineering, The University of Kitakyushu	113
3	WU, Shih-Jye	Waste Recycling under Alternative Instruments of Extended Producer Responsibility Sun Yat-Sen University	117
Session G1		Policies against Climate Change	
Room 20		20 Feb. 13:30 - 15:30	
1	Hitomi Kimura	Sectoral approach in the post-2012 climate regime: Need for an institutional framework and procedures Institute of Global Environmental Studies (IGES)	118
2	Taek-Whan Ha Wonzoe Shin	Institutional Alternatives in CO2 Emission Trading Schemes Department of Economics, Seo-Kyeong University	122
3	LEE, Chien-Ming Chung-Huang Huang	Optimal Integration of Carbon Tax and Subsidy for Renewable Energy Development Institute of Natural Resource and Environmental Management, Taipei University	124
Session G2		Policies against Climate Change	
Room 20		20 Feb. 15:45 - 17:45	
1	Kim, Geum-Soo Han, Taek-Whan, Lim, Dong-Soon	The Incentive of a Firm under Imperfectly Enforceable Emission Tax with a Concentration Standard Hoseo University	125
2	LEE, Tsung-Chen	Optimal Intervention in International Emissions Trading Considering Ancillary Benefit of Carbon Abatement Department of Economics, Taipei University	127
3	CHEN, Hsiao-Chi Shi-Miin Liu	Tradeable Permit Pollution Control Systems With Imperfect Monitoring Department of Economics, Taipei University	130

Session H		Pollution and Relief of its Victims	
Room 28		21 Feb. 15:45 - 17:45	
1	Wei Su Toru Matsumoto, Jingshuang Liu, Jingxin Dou, Guangying Zhao	Heavy metals health risk assessment of the Second Songhua river, Northeast China	133
		Faculty of Environmental Engineering, the University of Kitakyushu	
2	HAYASHI Kiminori	Military Base Pollution and Citizens' Right to Know	138
		Part-time Teacher , Faculty of Home Economics, Otsuma Women's University	
3	Kazuya Wada Katsuharu Sato, Akiyoshi Suzuki, Miki Minami, Hiroshi Akiba	Environmental Damage and Human Suffering Caused by Soil and Water Pollution at An-shun and Current Government Policy	142
		Graduate School of Economics, Hitotsubashi University	
4	Song Guojun Xu Sha	Analysis on the policy of acid rain control in China	145
		School of Environment and Natural Resources, Renmin University of China	
Session I1		Sustainable Use of Natural Resources	
Room 20		21 Feb. 13:30 - 15:30	
1	Wang Xiaoxia Ma zhong, WANG Yongqiang	Northeast Blackbee Honey Commodity-Chain Analysis: Conservation and Distributional Equity	148
		School of Natural Resources and Environment, Renmin University of China	
2	Takeshi Fujiya	How to Finance Costs for Nature and Amenity Conservation : A case Study of the National Trust in U.K	151
		Graduate School of Economics, Hitotsubashi University	
3	HUNG Ming-Feng Daigee Shaw	An Efficient and Equitable Water Right Transfer System	155
		Department of Industrial Economics, Tamkang University	
Session I2		Sustainable Use of Natural Resources	
Room 20		21 Feb. 15:45 - 17:45	
1	ZHANG, Yufu Satoshi TACHIBANA	Development of China's Forest Industry and Its Impacts on Forest Management	156
		Forestry and Forest Products Research Institute	
2	Mika Asai	Financing forest conservation: lessons from the grant in Kanagawa Prefecture, Japan	160
		Graduate School of Economics, Hitotsubahi University	
3	TAIN, Yih-Chi Jihn-Sung Lai, Fong-Zuo Lee	High sediment concentration damaged to water supply system at Shimen Reservoir in Taiwan	164
		Hydrotech Research Institute and Professor, Dept. of Bioenvironmental Systems Eng., Taiwan University	

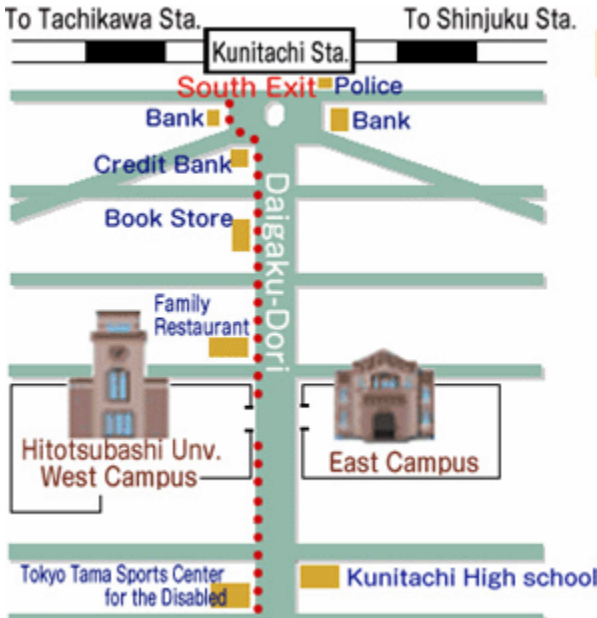
Map of Tachikawa and Kunitachi



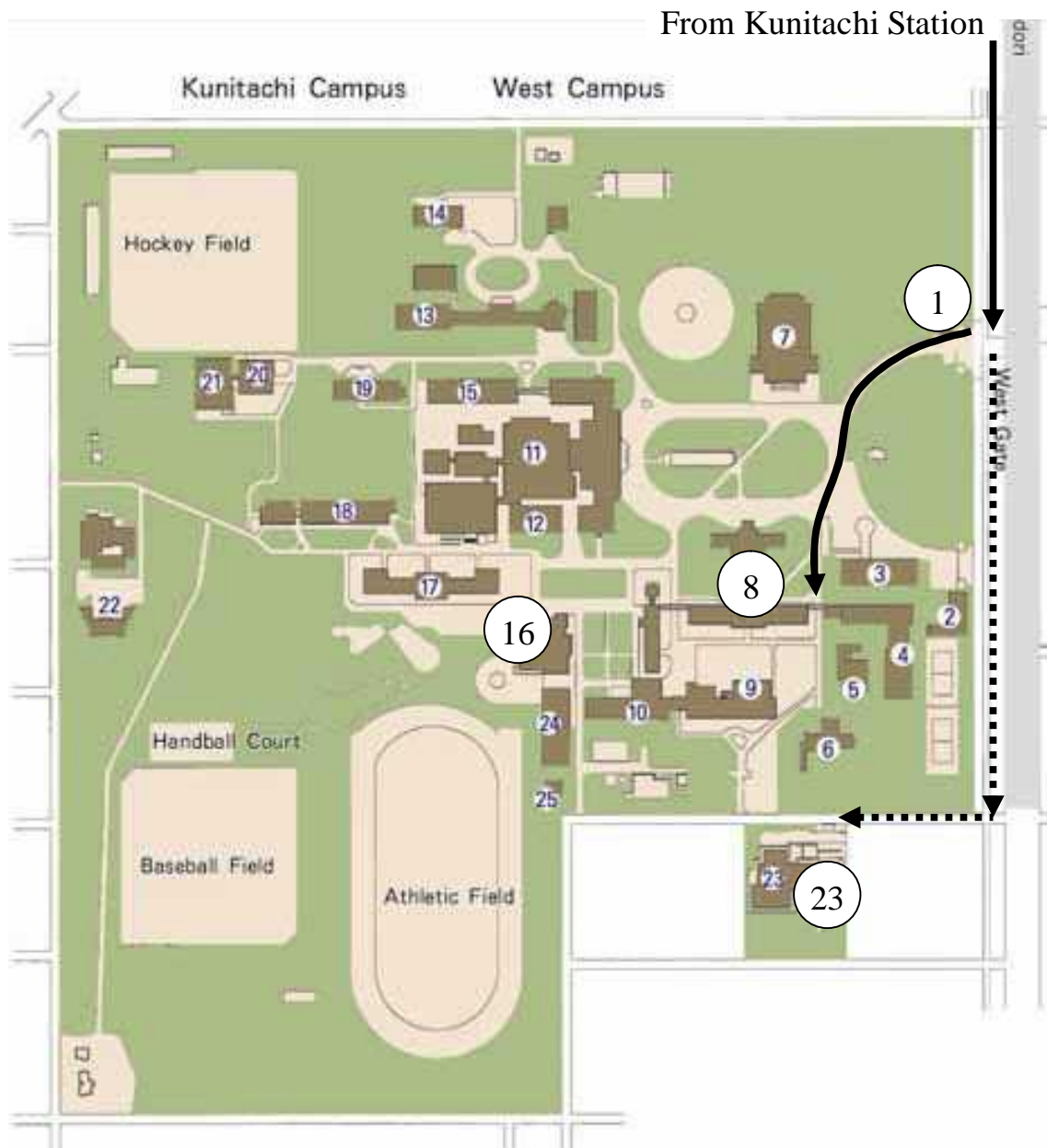
Tachikawa Station



Kunitachi Station



Map of West Campus, Hitotsubashi University



Route to Main Building **—————▶**

Route to Sano Shoin Hall **-----▶**

1	West Gatehouse (Entrance of the Campus)
8	Main Building (Venue of the symposium)
16	West Plaza (Univ. COOP Restaurant)
23	Sano Shoin Hall (Venue of Gala Dinner)

Map of Main Building

