## **ICES 2025**

9th International Conference on Economic Structures



Pan Pacific Association of Input-Output Studies
Chiba University of Commerce



# March 8-9, 2025 at Chiba University of Commerce

(Address: 1-3-1 Konodai, Ichikawa-shi, Chiba 272-8512 Japan )

- ◆ Chair of the Organizing Committee: Shinji TAHARA (Chiba University of Commerce)
- ◆ Chair of the Scientific Program Committee: Ken ITAKURA (Nagoya City University)
- ◆ Website: http://www.gakkai.ne.jp/papaios/en/conference.html
- ◆ Contact: ICES\_PAPAIOS@ml.gakkai.ne.jp
- ◆ Organized by the Pan Pacific Association of Input-Output Studies (PAPAIOS)
- ◆ Co-organized by Chiba University of Commerce

### The 9th International Conference on Economic Structures (ICES2025) PROGRAM OVERVIEW

Day 1 – Saturday, March 8, 2025

		Venue A Room 1101	Venue B Room 1103	Venue C Room 1208	Venue D Room 1209	Venue E Room 1212	
Opening	9:30 – 9:50	Opening Session	-	-	-	-	
Session 1	10:00 – 12:00		Special Session 1 (3)	Environment, Resource & Energy 1 (3)	Compilation of Input- Output Table and Theory (4)	International Economy and Development 1 (3)	
_	12:00 – 13:00	Lunch					
Session 2	13:00 – 14:30	_	Special Session 2 (3)	Environment, Resource & Energy 2 (3)	General Topics in I-O Analysis 1 (3)	International Economy and Development 2 (3)	
_	14:30 – 15:00	Coffee Break					
Session 3	15:00 – 16:30	-	Special Session 3 (3)	Resilience and Spatial Analysis (3)		International Economy and Development 3 (3)	
_	16:30 – 16:40	Short Break					
Keynote	16:40 – 17:40	Keynote Speech	_	_	-	_	
_	17:50 – 19:30	Social Gathering (at The University Dining)					

<sup>\*</sup> The number in parentheses indicates the number of presentations.

**Day 2 – Sunday, March 9, 2025** 

		Venue A Room 1101	Venue B Room 1103	Venue C Room 1208	Venue D Room 1209	Venue E Room 1212	
Session 4	10:00 – 12:00	-	General Topics in I-O Analysis 2 (3)	Macroeconomic Modelling and CGE (3)	Regional Input-Output Analysis (3)		
_	12:00 – 13:00	Lunch					
Session 5	13:00 – 14:30	Г	Special Session 4 (2)		Digital Economy and AI (3)	International Economy and Development 4 (3)	

<sup>\*</sup> The number in parentheses indicates the number of presentations.

#### PRACTICAL INFORMATION

#### **COFERENCE REGISTRATION**

Registration opens at 9:00 a.m. on Saturday, March 8, and will remain open each day until the end of the conference on the 1st floor of Building No.1.

#### **SESSION FORMAT AND PRESENTATION GUIDELINES**

The parallel sessions will take place in the rooms on the 1st and 2nd floor. Each parallel session will include 2 to 4 papers. Each presenter will have 20 minutes to present their work, followed by 10 minutes of Q&A from the audience. Abstracts and full papers will be available to all participants on the conference website: https://www.gakkai.ne.jp/papaios/en/conference.html

The session rooms will be equipped with projectors that can be connected <u>via an HDMI port</u>. Please note that you are responsible for bringing your own laptop and connecting it to the projector using an HDMI cable. For Mac users, we will prepare HDMI to Type C cable adapters. Please carefully check the date and location of your presentation or chairing session.

#### WIFI

. Free Wi-Fi is also available for visitors in the Building No.1. How to connect to Wi-Fi is shown on a paper handed out at the event.

#### **COWORKING SPACE**

A dedicated quiet working space is available during the conference in Room 1210 on the 2nd floor.

#### **LUNCH AND DINNER**

Please pick up your lunch on the 1th floor during the conference. Dinner will be served on March 8th at the social gathering in the University Dining. Staff will escort participants to the venue after the keynote session.

#### **ICES 2025 Program**

Day 1 - Saturday, March 8, 2025

#### **Opening Session**

Sat., March 8, 9:30 - 9:50, Venue A (Room 1101)

**Opening Remarks**: Yoshifumi Ishikawa (President, PAPAIOS, Nanzan University)

#### Session 1.

## Special Session 1: Analysis of Key Issues in the Korean Economy

Sat., March 8, 10:00 - 12:00, Venue B (Room 1103)

CHAIR: Jinmyon LEE (Korea Institute for Industrial Economics and Trade)

- An Analysis of the Effects of the Israel-Hamas War on Industry, with Implications for Korean Policy
  - Hyunji BING (Korea Institute for Industrial Economics and Trade)
- Changing Role of the Service Industry in Korea's Manufacturing Exports
  - Kayoung PARK (Korea Institute for Industrial Economics and Trade)
  - Jaejin KIM (Korea Institute for Industrial Economics and Trade)
- 3. Identifying Key Areas for Korea-Indonesia Collaboration in the Automotive Industry
  - Seohyun LEE (Korea Automotive Technology Institute)

#### Session 1.

#### **Environment, Resource and Energy 1**

Sat., March 8, 10:00 - 12:00, Venue C (Room 1208)

CHAIR: Makiko TSUKUI (Tokyo International University)

- 1. Direct and Indirect Economic Impacts of Sea Level Rise in Japan
  - Ken ITAKURA (Nagoya City University)
  - Akira HIBIKI (Tohoku University)
  - Jun YOSHIDA (Tohoku Gakuin University)
  - Makoto TAMURA (Ibaraki University)

- Hiromune YOKOKI (Ibaraki University)
- 2. Input-Output Analysis of Virtual Water Trading between the Three Northeastern Provinces and the Southeastern Coastal Regions: Taking Jiangsu, Zhejiang, Fujian, and Guangdong as Examples
  - Yuxuan SUN (Yokohama National University)
  - Taku ISHIRO (Yokohama National University)
- 3. Structural Path Analysis of Asbestos Mining and the Manufacturing of Asbestos-containing Products in China and India
  - Makiko TSUKUI (Tokyo International University)

#### Session 1.

#### Compilation of Input-Output Table and Theory

Sat., March 8, 10:00 - 12:00, Venue D (Room 1209)

CHAIR: Kwangmoon KIM (Kochi University of Technology)

- 1. Decomposing South Asian GVC Integration Patterns
  - Lila Ballav BHUSAL (Yokohama National University)
- 2. Compilation of Input-Output Table by Firm Size Using Non-survey Method: Analyzing the Role of SMEs in Vietnam in 2015 and 2021
  - Kazuo INABA (Ritsumeikan University)
  - Ei Ei THEIN (Ritsumeikan University)
- 3. Validity of  $\delta$ -Values in FLQ Estimation Using Non-Survey Techniques:

A Case Study of the Regional Input-Output Table for Metro Manila

- Kwangmoon KIM (Kochi University of Technology)
- Yu MIYOSHI (University of Fukuchiyama)
- Josephine TEVES (University of the Philippine Manila)
- Constructing the Set of Input-Output Models by Direct
   Parameterizing the Product Balance Identity with Quantity and Price Indices
  - Vladimir MOTORIN (National Research University)

#### Session 1.

#### International Economy and Development 1

Sat., March 8, 10:00 - 12:00, Venue E (Room 1212)

CHAIR: Magdalena OLCZYK (Gdańsk University of Technology)

- Comparative Analysis of Non-Monetary Remittances and FDI Inflows on Economic Growth in Developing Countries
  - Mishael Joy S. BARRERA (Ritsumeikan University)
  - Jean-Claude MASWANA (Ritsumeikan University)

- 2. From Global Value Chains to Local Jobs: Exploring FDI-induced Job Creation in EU Countries
  - Magdalena OLCZYK (Gdańsk University of Technology)
- 3. Sectoral Effect of Economic Structure on Technology Accumulation in Several APEC's Members
  - Chairul MUBIN (University of Indonesia)
  - Mahyus EKANANDA (Universitas Indonesia)

#### Session 2.

## Special Session 2: Compilation and Analysis of Korea's Recent Input-Output Tables

Sat., March 8, 13:00 - 14:30, Venue B (Room 1103)

CHAIR: Jinmyon LEE (Korea Institute for Industrial Economics and Trade)

- 1. Changes in Korea Economy Through 2020-2022 IOTs
  - Sangdon BU (Bank of korea)
- 2. 2020 Regional Input-Output Tables of Korea
  - Seongwoon LIM (Bank of Korea)
- 3. Results of Korea's Experimental Air Emission Accounts
  - Young Jin PARK (Bank of Korea)

#### Session 2.

#### Environment, Resource and Energy 2

Sat., March 8, 13:00 - 14:30, Venue C (Room 1208)

CHAIR: Mitsuo YAMADA (Chukyo Univerisity)

- 1. Dependence of Carbon Intensities on Input Coefficients in the Uncertainty Analysis of Carbon Footprints
  - Jian JIN (Waseda University)
  - Yasushi KONDO (Waseda University)
- 2. Input-Output Analysis of Life-cycle CO2 in the Carbon Circulation System of Direct Air Capture and Methanation
  - Mitsuo YAMADA (Chukyo Univerisity)
  - Keiko NAKAYAMA (Chukyo University)
  - Soichiro MASUDA (Toho Gas Co., Ltd.)
  - Yuki NAKAYAMA (Toho Gas Co., Ltd.)
  - Koyo NORINAGA (Nagoya University)

- 3. The Impact of EU's CBAM on China's Economy and Trade Patterns
  - Lili YU (Shanghai University of International Business and Economics)
  - Lina WU (Shanghai University of International Business and Economics)

#### Session 2.

#### General Topics in I-O Analysis 1

Sat., March 8, 13:00 - 14:30, Venue D (Room 1209)

CHAIR: Hiroshi DEGUCHI (Chiba University of Commerce)

- 1. Human Capital in a Business, a Household and the National Economy
  - Hiroshi DEGUCHI (Chiba University of Commerce)
- 2. Impact of Global Value Chain Participation in the Textile Industry on Economic Growth: Evidence from Developing Asian Economies
  - Mohammad Sayedur RAHMAN (Ritsumeikan University)
  - Taku ISHIRO (Yokohama National University)
  - Kazuo INABA (Ritsumeikan University)
- 3. Sophistication of China's Manufacturing Exports by Region and its Determinants: an Analysis based on Regional IO Tables
  - Jia REN (Rissho University)

#### Session 2.

#### International Economy and Development 2

Sat., March 8, 13:00 - 14:30, Venue E (Room 1212)

CHAIR: Oscar LEMMERS (Statistics Netherlands)

- International Trade and the Social Costs of Carbon Emission:
   Industry-Level Analysis based on GVC in the Asia-Pacific Region
  - Shuning CHEN (Kyushu University)
  - Masaru KAGATSUME (Kyoto University)
  - Shunsuke MANAGI (Kyushu University)
- 2. Quantifying the Effect of Shifting Trade Patterns on Employment
  - Oscar LEMMERS (Statistics Netherlands)
- 3. The Transformation of the UK in the Global Value Chain after Brexit Vote: An Analysis Based on International Input-Output Tables
  - Yuxiang HUANG (Ritsumeikan University)

#### Session 3.

## Special Session 3: Input Output Analysis for Environmental Issues

Sat., March 8, 15:00 - 16:30, Venue B (Room 1103)

CHAIR: Kiyoshi FUJIKAWA (Aichi Gakuin University)

- 1. A Study of China's Decarbonization Using International Input-Output Tables: Impacts on Value-added and CO2 Emissions
  - Jiayang WANG (Aichi Gakuin University)
  - Takatoshi WATANABE (Aichi Gakuin University)
- 2. Impacts of Transforming Energy Taxes into Pure Carbon Tax on Household Expenditures in Japan
  - Koki YADA (Aichi Gakuin University)
  - Kiyoshi FUJIKAWA (Aichi Gakuin University)
- A Study on Vulnerability of the Paris Agreement: Fusion of CGE and I-O Analysis
  - Hikari BAN (Kobe Gakuin University)
  - Kiyoshi FUJIKAWA (Aichi Gakuin University)

#### Session 3.

#### Resilience and Spatial Analysis

Sat., March 8, 15:00 - 16:30, Venue C (Room 1208)

CHAIR: Euijune KIM (Seoul National University)

- Spatial and Temporal Dynamics of Province-level Economic
   Disparities in Vietnam: Evidence from the Pandemic and Post-Recovery Period: Spatial Dependence across Provinces in Vietnam
   During and After the COVID-19 Pandemic
  - Mitsuhiko KATAOKA (Rikkyo University)
  - Pham Anh TON (Rikkyo University)
- 2. Supply Chain Resilience in Japan's Food Service Industries: An Empirical Approach to Business-to-business Transaction Data
  - Kiyotaka ISHIKAWA (Surugadai University)
- 3. Multiregional Perspectives on Spatial Economic Linkages in Northeast Nations: a Structural Path Analysis Approach
  - Euijune KIM (Seoul National University)
  - Shimin FAN (Seoul National University)

#### Session 3.

#### International Economy and Development 3

Sat., March 8, 15:00 - 16:30, Venue E (Room 1212)

CHAIR: Masaaki KUBONIWA (Hitotsubashi University)

- Contributions of Developments in GVCs to Economic Growth in the World: A Research Report
  - Masaaki KUBONIWA (Hitotsubashi University)
  - Yusuke Nakatani (Bunri University of Hospitality)
- 2. Effects of Trade-Induced Technological Progress and Resource-Endowment Patterns on Economic Growth: Focusing on the Central American and Caribbean (CAC) Region
  - Roxanna Shawn PENA (Ritsumeikan University)
  - Kazuo INABA (Ritsumeikan University)
- 3. The Role of Agriculture in Industrialization: Inter-Industrial Linkages and Structural Transformation in South Korea (1975-1995)
  - Yaerin YOON (SOAS University of London)

#### **Keynote Speech**

Sat., March 8, 16:40 - 17:40, Venue A (Room 1101)

CHAIR: Yoshifumi Ishikawa (President, PAPAIOS, Nanzan University)

• Valeria Ferreira (Joint Research Centre, European Commission)

#### **Social Gathering**

Sat., March 8, 17:50 - 19:30, The University Dining

#### Session 4.

#### General Topics in I-O Analysis 2

Sun., March 9, 10:00 - 12:00, Venue B (Room 1103)

CHAIR: Kaya AKAGI (Chiba University of Commerce)

- Organizing and Classifying Books of the Leontief Library
  - Mikio SUGA (Hosei University)
  - Jun OMATA (Meiji University)
- 2. The Role of Socioemotional Wealth and Religiosity in Shaping Entrepreneurial Orientation: Evidence from Bahraini Family Businesses
  - Khadija ALTARAIFI (Ritsumeikan University)
- 3. Unfolding Input-Output Tables: From the System of National Accounts to Agent Accounts
  - Kaya AKAGI (Chiba University of Commerce)

#### Session 4.

#### Macroeconomic Modelling and CGE

Sun., March 9, 10:00 - 12:00, Venue C (Room 1208)

CHAIR: Tony Shih-Hsun HSU (National Taiwan University)

- An Economy-wide Impact Analysis of Carbon Tax and Carbon Fee on Taiwan's Economy and Environment
  - Sheng-Ming HSU (Taiwan Research Institute)
  - Min-Long CHEN (Academia Sinica)
  - Hsing-Chun Lin (National Chiayi University)
  - Ruey-Wan LIOU (National Taiwan University)
  - Ching-Cheng CHANG (Academia Sinica)
  - Tony Shih-Hsun HSU (National Taiwan University)
- Analysis of Spillover Effects of Technological Progress from the Perspective of the Integration of Production and Innovation Networks
  - Chuan LI (University of Chinese Academy of Sciences)
  - Jian XU (University of Chinese Academy of Sciences)
  - Qi SU (University of Chinese Academy of Sciences)
  - Jialu SUN (University of Chinese Academy of Sciences)
  - Zhijian JIANG (University of Chinese Academy of Sciences)

- 3. Integrating Carbon Tax into Environmental Sustainability: How Economic Tools Can Support Ecology Protection
  - Shamsiev FAZLIDDIN (Ritsumeikan University)

#### Session 4.

#### Regional Input-Output Analysis

Sun., March 9, 10:00 - 12:00, Venue D (Room 1209)

CHAIR: Zuoyi YE (Okinawa International University)

- Impacts of Rules of Origin on Global Value Chain: Evidence from Free Trade Agreements Signed by China
  - Juan ZHANG (Shanghai University of International Business and Economics)
  - Zuoyi YE (Okinawa International University)
- 2. Input-Output Linkages and Spillover Effects: The Case of China, India, and Nepal
  - Shreedhar GAUTAM (Yokohama National University)
- 3. Multiplier Decomposition in Three-Region Model
  - Jun OMATA (Meiji University)

#### Session 5.

## Special Session 4: Input Output Analysis for China's Carbon Emission Issues

Sun., March 9, 13:00 - 14:30, Venue B (Room 1103)

CHAIR: Hui SONG (Hebei Input-Output Association of China)

- How Does the Digital Economy Effectively Reduce China's Carbon Emissions? A Non-competitive Input-Output Perspective
  - Hui SONG (Hebei Input-Output Association of China)
  - Yuanjie LI (Hebei University of Technology)
  - Zibaio LI (Hebei University of Technology)
- 2. Accounting for China's Provincial Carbon Emission Responsibility: from the Perspective of Interregional Equity
  - Jinfang TIAN (Shandong University of Finance and Economics)
  - Xiaotong YANG (Shandong University of Finance and Economics)
  - Yunjing WANG (Shandong University of Finance and Economics)

#### Session 5.

#### Digital Economy and Al

Sun., March 9, 13:00 - 14:30, Venue D (Room 1209)

CHAIR: Su QI (University of Chinese Academy of Sciences)

- Digitization, Industry Network and the Increasing Labor Income Share in China: Based on Non-competitive Digital Economic Input-output Table
  - Su QI (University of Chinese Academy of Sciences)
- 2. Financial Literacy, Mobile Money Adoption, and Informal Enterprises Performance: Empirical Evidence from Developing Asia
  - Usman ALHASSAN (Ritsumeikan University)
  - Kazuo INABA (Ritsumeikan University)
- 3. Is the Digital Economy the Key to Driving the Domestic Circulation?

  Based on Non-competitive Digital Economic Input-Output Table
  - Jialu SUN (University of Chinese Academy of Sciences)

#### Session 5.

#### International Economy and Development 4

Sun., March 9, 13:00 - 14:30, Venue E (Room 1212)

CHAIR: Thi Ngoc Anh PHUNG (Wuhan University)

- Foreign Direct Investment and Productivity Spillovers in Manufacturing Firms in Vietnam: An Empirical Study in Vietnam
  - Linh Phuong NGUYEN (Ritsumeikan University)
  - Kazuo INABA (Ritsumeikan University)
- The Impact of Inward Foreign Direct Investment on ASEAN Countries's Participation into Global Value Chains
  - Thi Ngoc Anh PHUNG (Wuhan University)
  - Yongming HUANG (Wuhan University)
- Impact of Infrastructure Connectivity and Human Capital in the Trade-Growth Nexus in ASEAN Countries
  - Phoutvichay LINSOMPHOU (Ritsumeikan University)

#### Saturday, March 8

## The 6th Lawrence R. Klein Award Keynote Speaker



#### Valeria Ferreira

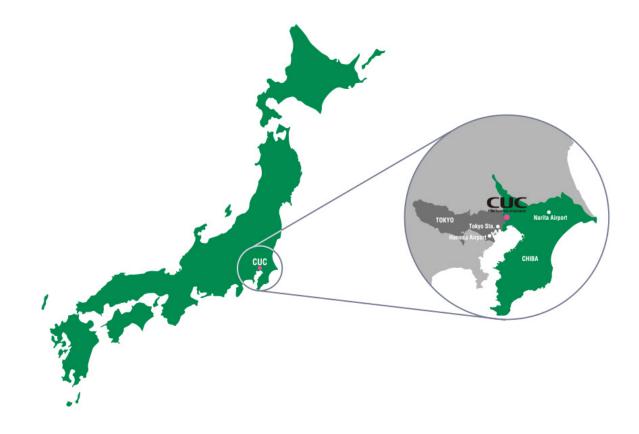
Scientific Project Officer, Unit B7 Innovation Policies and Economic Impact, Joint Research Centre, European Commission.

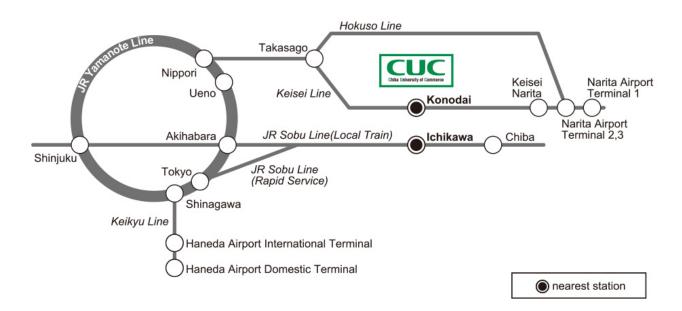
Valeria Ferreira is a member of the Analysis and Modelling of Trade and Industrial EU Policies (AMADEUS) group at the Joint Research Centre (JRC) of the European Commission. Her research focuses on bioeconomy, input-output analysis, agriculture, industrial policies, and Social Accounting Matrices (SAMs).

She has extensive experience in academia, having been a lecturer at the Universitat Rovira i Virigli for many years. Currently, at the JRC, she contributes to the research agenda and policy support of the European Commission by analysing the socio-economic impact of the EU trade, industrial, digital and/or innovation policies. Her work involves the use of macroeconomic statistics, thematic accounts and models, econometric analysis, and global input-output models. As part of the AMADEUS team, she specialises in the FIDELIO model (Fully Interregional Dynamic Econometric Long-term Input-Output) and the FIGARO database (Full International and Global Accounts for Research in Input-Output analysis).

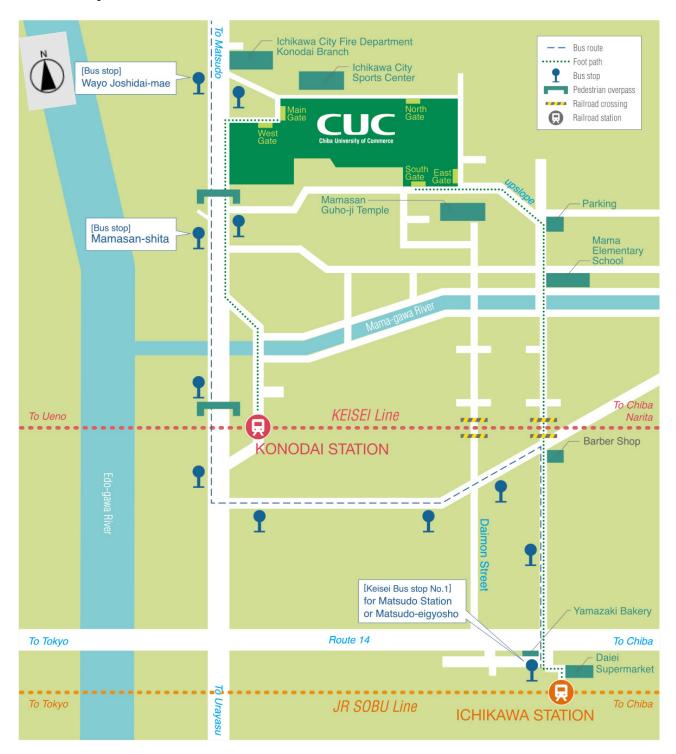
Previously, Valeria worked in the Economics of the Food System Unit at the JRC and contributed to the PANAP association (Pan-African Network for economic Analysis of Policies), developing SAMs databases for African countries, including Côte d'Ivoire, Ghana, Cameroon, Tanzania, Niger, and Nigeria. Her article "The role of the agricultural sector in Ghanaian development: a multiregional SAM-based analysis," published in the *Journal of Economic Structure*, was selected for the 6th Lawrence R. Klein Award.

#### **Acces Map**





#### Area Map

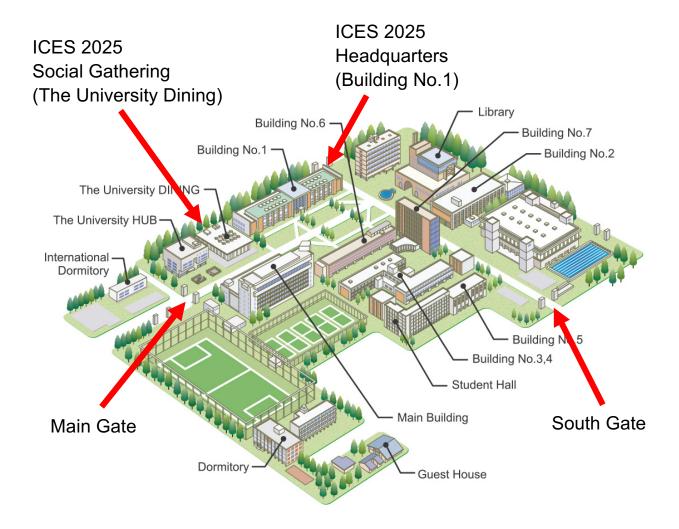


#### **Chiba University of Commerce**

1-3-1 Konodai, Ichikawa, Chiba 272-8512 Japan

- · CUC is about a 10-minute walk from Keisei Konodai Station (approximately 25 minutes from Nippori).
- Or you can walk about a 20 minutes walk from JR Ichikawa Station (approximately 20 minutes from Tokyo Station by Express Train).
- Or you can take the bus for Matsudo Station or Matsudo-eigyosho from Keisei Bus Stop No.1 in front of JR Ichikawa Station and get off at Wayo-joshidai-mae. CUC is about 3 minutes from the bus stop.

#### **Campus Map**



#### Floor Map (Building No.1)

