



## INTERNATIONAL SYMPOSIUM ON MICROELECTRONICS AND LABOUR

Secretariat of International Symposium  
c/o National Institute of Employment and Vocational Research  
4-1-1, Nakano, Nakano-ku, Tokyo, 164 JAPAN Tel : 03-387-4808

May 30, 1985

Dear Sir:

As was stated in the preliminary announcement of the International Symposium on Microelectronics and Labour, the Executive Organizing Committee will hold, with the support of the Japanese Ministry of Labour, this Symposium in Japan next September and to this end sends herewith the second announcement with the details of the program.

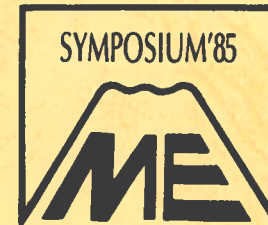
It is our pleasure to draw your attention to the Tokyo Meeting (the Symposium is composed of two Meetings) which will be held in Tokyo for three days from the 25th to the 27th of September, 1985 and in which people engaging in public administration, labour, management and scholars in OECD countries and Japan's neighboring countries are cordially invited to participate. The Meeting will provide an excellent opportunity to exchange research findings on the effect of microelectronics on such labour aspects as employment, human resources development and industrial relations, and to exchange opinions on responses to these labour-related problems. We expect that the discussion in this Meeting will surely contribute to the improvement of the workers' welfare.

We sincerely hope that you will be able to attend the Tokyo Meeting.

Yours sincerely,

*K. Amakasu*

Keisuke Amakasu  
Secretary General  
International Symposium on  
Microelectronics and Labour



**INTERNATIONAL SYMPOSIUM ON  
MICROELECTRONICS  
AND LABOUR**

# INTERNATIONAL SYMPOSIUM ON MICROELECTRONICS AND LABOUR

Improving the Workers' Welfare in the Progressing  
Field of Microelectronics



Organized by : Executive Organizing Committee for International Symposium  
on Microelectronics and Labour

Sponsored by : National Institute of Employment and Vocational Research  
Research and Development Institute of Vocational Training  
Japan Institute of Labour  
Occupational Health Promotion Foundation  
University of Occupational and Environmental Health

Supported by : Ministry of Labour  
Ministry of Foreign Affairs  
Ministry of International Trade and Industry  
Economic Planning Agency

Under the  
patronage of : Organisation for Economic Co-operation and Development

In cooperation  
with : International Labour Office

INTERNATIONAL SYMPOSIUM  
ON  
MICROELECTRONICS  
AND LABOUR



## GREETINGS

We are very much pleased to have received interested responses to the First Announcement on the International Symposium on Microelectronics and Labour, from trade unions, employers' organizations and scholars concerned with the topics of this Symposium.

It is within four months that the Symposium will be held. The Executive Organizing Committee sends herewith the Second Announcement including details of the program and registration.

We will ask for the participation from those government, labour, management and scholars of the industrialized as well as the neighboring nations. The main theme of the Symposium is "Improving the workers' welfare in the progressing field of microelectronics." The Symposium will provide a forum for the exchange of the fruit of research in such labour-related issues as "economic growth, employment and labour market," "human resources development," "industrial relations and working conditions," and "occupational health and safety." It will also provide an important opportunity to exchange opinions on responses of government, labour and management of these issues.

Since we are on the verge of full microelectronization today, it is expected that the exchange of views and research findings at this Symposium will contribute to the exploitation of concrete ways of dealing with these labour problems.

For this purpose, we ask for the active participation of all interested persons in government, labour and management and of scholars in this International Symposium on Microelectronics and Labour.

Mikio Sumiya

Chairman  
Executive Organizing Committee

## EXECUTIVE ORGANIZING COMMITTEE

Honorary Chairman Hiromi ARISAWA	Professor Emeritus, University of Tokyo
Chairman Mikio SUMIYA	President, Japan Institute of Labour
Kohei GOSHI	Chairman, Japan Productivity Center
Noboru GOTO	President, Japan Chamber of Commerce and Industry
Yoshizo IKEDA	Vice-Chairman, Business and Industry Advisory Committee, Organisation for Economic Co-operation and Development
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Bunpei OTSUKI	President, Japan Federation of Employers' Associations
Hideo SEKI	Vice Minister of Labour
Toshio TAGAYA	Director, Research and Development Institute of Vocational Training
Yoshikazu TANAKA	Regular Member of the Workers' Group of the Governing Body, International Labour Organisation; Member of the Administrative Committee, Trade Union Advisory Committee, Organisation for Economic Co-operation and Development
Toshifumi TATEYAMA	President, Japanese Private Sector Trade Union Council
Kenzaburo TSUCHIYA	President, University of Occupational and Environmental Health
Shojiro UJIHARA	Director, National Institute of Employment and Vocational Research
Tadanobu USAMI	President, Japanese Confederation of Labour
Mitsuharu WARASHINA	President, Federation of Independent Unions of Japan
Koh YOSHINO	Regular Member of the Employers' Group of the Governing Body, International Labour Organisation

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Notes: 1) The program of both meetings is the one as of May, 1985.

2) Forms enclosed in this announcement are

Registration Form (Tokyo - I),

Hotel Reservation Form (Tokyo - II),

Registration Form (Kitakyushu - I), and

Hotel Reservation Form (Kitakyushu - II).

# ESSENTIALS OF SYMPOSIUM

## ●Purpose

Not only developed countries but developing countries are concerned about the impact of technological innovations, with microelectronics as their primary factor, on workers. Conferences on this topic have been held in various parts of the world such as the International Conference on Technological Development and Employment that was held in April, 1985, in Venice under the participation of ministers of OECD countries.

Government, labour, management and scholars in industrialized countries and neighboring countries of Japan will be asked to participate in this symposium which is being organized as a forum to exchange experiences between governments, trade unions and employers' organizations. The symposium will focus on problems and research and study results regarding microelectronics in various countries, in order to develop concrete ways to improve the workers' welfare. Its specific concerns are with increasing employment opportunities, developing human resources, encouraging appropriate responses by labour and management, improving working conditions, and securing occupational safety and health.

## ●Main Theme

Improving the workers' welfare in the progressing field of microelectronics

## ●Format

The symposium will be composed of two Meetings, one in Tokyo and another in Kitakyushu. The former Meeting's topics are employment, human resources development, and industrial relations and it will be held in Tokyo for three days, September 25-27, with features such as addresses and panel discussion by scholars, government officials, labour and management. The latter, which is basically an academic conference exchanging research results on occupational health, will be held in Kitakyushu, Fukuoka Prefecture during September 20-21. The Kitakyushu Meeting is a satellite symposium in which governments, labour and management will be asked to participate. Discussions of the Kitakyushu Meeting will be reported to the Tokyo Meeting where the concluding session will deal with them as well as with the discussion of the Tokyo Meeting.

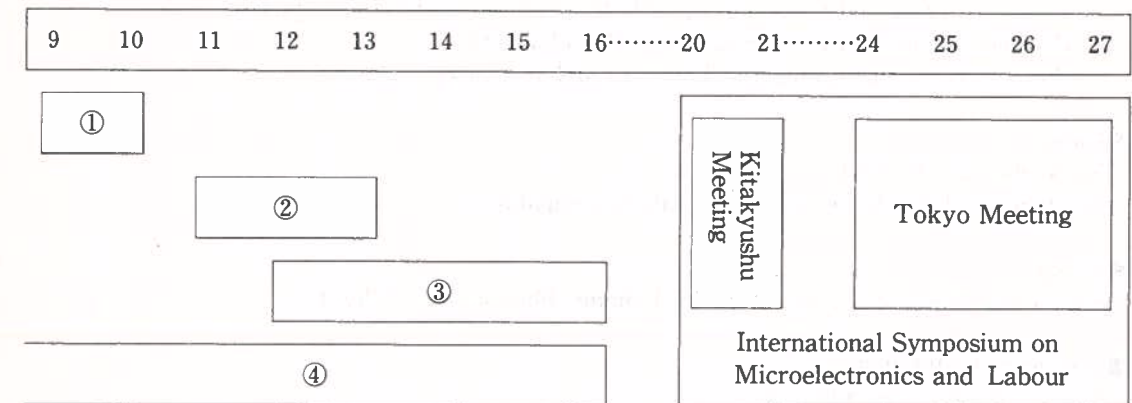
## ●Languages

The official languages are Japanese and English: simultaneous interpretation will be available.

## ●Other International Conventions and Exhibitions

The following topically related conventions and exhibitions will also be held in September, 1985 in Japan.

September 1985



- Notes: ① '85 International Conference on Advanced Robotics  
 Dates: September 9 and 10  
 Sponsor: Japan Industrial Robot Association  
 Venue: Keidanren Kaikan, Tokyo
- ② 15th International Symposium on Industrial Robots  
 Dates: September 11-13  
 Sponsor: Japan Industrial Robot Association  
 Venue: Keidanren Kaikan, Tokyo
- ③ '85 International Industrial Robots Exhibition  
 Dates: September 12-16  
 Sponsor: Daily Industrial News and Japan Industrial Robot Association  
 Venue: International Trade Fair Center, Tokyo
- ④ International Exposition, Tsukuba, Japan, 1985  
 Dates: March 17 - September 16  
 Sponsor: Japan Association for the International Exposition, Tsukuba 1985  
 Venue: Tsukuba Science City, Ibaragi Prefecture



# TOKYO MEETING

●Themes

1. Microelectronics and Economic Growth, Employment and Labour Market
2. Microelectronics and Human Resources Development
3. Microelectronics and Industrial Relations and Working Conditions

●Dates

September 25-27, 1985  
(September 24 will be set aside for visits to companies.)

●Venue

Keio Plaza Hotel (2-1, Nishi Shinjuku 1-chome, Shinjuku-ku, Tokyo)

●Document Distribution

Texts of reports and addresses

●Participation Fee

¥50,000 (This fee is good only for the Tokyo Meeting. A separate fee will be charged for the Kitakyushu Meeting.)

## SYMPOSIUM OUTLINE

●Technical Visit

September 24 (Tuesday)  
Technical visits to highly microelectronized factories and offices for overseas participants prior to the opening of the symposium

●Symposium

Plenary Meeting, September 25 (Wednesday)  
Propositions of basic ideas and issues to serve as the keynote of this symposium, as well as reports on the status quo of microelectronization

Working Session, September 26 (Thursday)  
Three work groups will be organized for presentations and discussions on the respective themes.

Plenary Meeting, September 27 (Friday)  
A general discussion based on the reports of discussions in the work groups and the Kitakyushu Meeting

●Social Program

Reception, September 25, 17:30-19:30  
at Concord Ball Room, Keio Plaza Hotel  
All participants and their accompanying persons of the Tokyo Meeting will be invited.

## SCHEDULE

8:00	September 23	Registration												
9:00	September 24 (Tue.)	Registration												
10:00		Technical Visit												
11:00	September 25 (Wed.)	Opening Ceremony	Lunch	Reports by ILO and OECD	Special Addresses	Welcome Reception								
12:00		Keynote Address												Report on the Venice Conference
13:00	September 26 (Thu.)	Working Session: Presentation												
14:00		Lunch												
15:00	September 27 (Fri.)	Working Session: Panel Discussion												
16:00		Special Lecture	Reports on Working Session	Report on Kitakyushu Meeting	Lunch	Concluding Session	Summary Report							
17:00														
18:00														
19:00														
20:00														
21:00														

# PROGRAM

## September 24 (Tuesday)

Technical Visit

## September 25 (Wednesday)

- 9:30-10:30 Opening Ceremony  
Dr. Mikio Sumiya  
Chairman, Executive Organizing Committee  
Mr. Yasuhiro Nakasone  
Prime Minister  
Mr. Toshio Yamaguchi  
Minister of Labour  
Mr. Takeshi Kurokawa  
President, General Council of Trade Unions of Japan  
Mr. Bunpei Otsuki  
President, Japan Federation of Employers' Associations  
Mr. Francis Blanchard  
Director-General, ILO  
(The message will be delivered by an ILO's participant.)  
Mr. Jean Claude Paye  
Secretary General, OECD  
(The message will be delivered by an OECD's participant.)
- 10:30-11:30 Keynote Address  
Prof. Shojiro Ujihara  
Director, National Institute of Employment and Vocational  
Research, Japan
- 11:30-12:00 Report on the International Conference on Technological Development  
and Employment  
Italian Government
- 12:00-14:00 Lunch
- 14:00-15:00 Reports by ILO and OECD  
Mr. Jack Martin  
Chief, Employment and Development Department, ILO  
OECD Secretariat
- 15:20-16:20 Special Addresses  
Mr. Tadanobu Usami  
President, Japanese Confederation of Labour  
Mr. Masao Kamei  
Vice President, Japan Federation of Employers' Associations
- 17:30-19:30 Reception

## September 26 (Thursday)

- 9:00-12:00 Working Session (Presentation)  
12:00-13:30 Lunch  
13:30-18:00 Working Session (Panel Discussion)  
Notes: 1) Three work groups will be organized.

- 2) The First Work Group will focus on the subjects of economic growth, employment and labour market; the Second Work Group on human resources development; and the Third Work Group on industrial relations and working conditions.  
3) Topics for discussion will be suggested for each work group.  
4) In the morning presentations will be made by 5 to 8 speakers in each group.  
5) In the afternoon a panel discussion in which speakers, panelists, as well as attending participants may participate, will take place.

## September 27 (Friday)

- 9:00 - 9:45 Special Lecture  
Dr. Christopher Freeman  
Professor, Science Policy Research Unit, University of Sussex, U.K.
- 9:45-11:30 Report on Working Session  
Dr. Yoko Sano (Chairman of First Work Group)  
Dr. Marc Maurice (Chairman of Second Work Group)  
Dr. Kazuyoshi Koshiro (Chairman of Third Work Group)
- 11:30-12:00 Report on Kitakyushu Meeting  
Dr. Kenzaburo Tsuchiya  
President, University of Occupational and Environmental Health, Japan
- 12:00-13:30 Lunch  
13:30-15:30 Concluding Session  
Chairman: Dr. Mikio Sumiya (Chairman, Executive Organizing Committee)  
Panelists: Dr. Friedrich Fürstenberg (Chairman of First Work Group)  
Dr. Kazuo Koike (Chairman of Second Work Group)  
Dr. Michael Piore (Chairman of Third Work Group)  
Dr. Kenzaburo Tsuchiya  
Mr. Ray Protti  
Mr. Takashi Kato  
Director-General of Employment Security Bureau,  
Ministry of Labour, Japan  
Mr. Mitsuharu Warashina  
President, Federation of Independent Unions of Japan  
Mr. Roland Schneider  
Mr. Tsuneo Shimokawa  
Member of Policy Board, Japan Federation of Employers'  
Associations  
Mr. John Dorsey
- 15:55-16:25 Summary Report  
Dr. Mikio Sumiya
- 16:25-16:30 Close of Symposium  
Dr. Hiromi Arisawa  
Honorary Chairman, Executive Organizing Committee



## FIRST WORK GROUP

### ●Theme

Microelectronics and Economic Growth, Employment and Labour Market

What impact do technological innovations, with microelectronics as their primary factor, have on the quantity and quality of macro- and micro-employment, on the qualitative composition of employment and on the labour market? What economic and employment policies should be pursued in order to expand economic growth and employment while coping with the change in the labour market caused by this trend?

### ●Issues

- (1) The impact of microelectronics on employment and conditions for the maintenance and expansion of employment
  - a. What is the impact on employment (expansion, reduction, generation, or qualitative change) found in which areas (type of industry and business, workers' attributes) in response to the nature of microelectronics (factory automation and office automation)?
  - b. What effects do such changes have on the labour market and the quantity of employment in the macro-economy as a whole? How can the correlations between changes in the labour market and variations in the quantity of employment be best understood?
  - c. What kind of mechanism should be created to ensure economic growth and the maintenance and expansion of employment under conditions of continuing technological innovation? What conditions are necessary for such a mechanism?
- (2) Problems demanding special attention for adjusting labour demand and supply
  - a. Employment of women and middle-aged and elderly workers
  - b. Securing workers in the software industry
  - c. Dealing with new employment modes such as work at home
- (3) Views of and responses to employment under microelectronics by those in government, labour and management
  - a. Employment practices and corporate response to employment system for the expansion and maintenance of employment, and ideas of the government, labour and management at the company and industry-wide level.
  - b. Roles and responses of government concerning the maintenance and expansion of employment and the adjustment of labour demand and supply.

### ●Chairmen

Dr. Yoko Sano  
Professor, Department of Business and Commerce, Keio University, Japan  
Dr. Friedrich Fürstenberg  
Professor of Sociology, Ruhr-University Bochum, F.R.Germany

### ●Presentations

1. The impact of microelectronics on employment and conditions for the maintenance and expansion of employment  
Prof. Masahiro Kuroda  
Department of Business and Commerce, Keio University, Japan  
Dr. Friedrich Fürstenberg
2. Views of and responses to employment under microelectronics by those in labour and management  
Mr. Takuhiko Nakamura  
President, Japanese Federation of Iron and Steel Workers' Unions  
Mr. Anders Bäckström  
Senior Economist, Swedish Trade Union Confederation - LO, Sweden  
Mr. Bernard Bachelot  
Head of Training Department, Union des Industries Métallurgiques et Minières, France
3. Roles and responses of government to maintain and expand employment and to adjust labour demand and supply  
Dr. Gregory Schoepfle  
Director, Foreign Economic Research, Bureau of International Labor Affairs, Department of Labor, U.S.A.  
Mr. Graham Reid  
Chief Economic Advisor and Head of Economic and Social Division, Department of Employment, U.K.  
Dr. Kreuzaler  
Abt. 1, 1a1, Bundesministerium für Arbeit und Sozialordnung, F.R. Germany

### ●Panelists

Italian Government  
Mr. Tsutae Hyodo  
Executive Vice President, Sumitomo Heavy Industries, Ltd., Japan  
Mr. Naoyuki Kameyama  
Senior Researcher, National Institute of Employment and Vocational Research, Japan

## SECOND WORK GROUP

### ●Theme

Microelectronics and Human Resources Development

What changes has microelectronics brought to job content and job requirements? What are the effects of these changes on the sequence of job promotion or workers' career? In order to make adaptation to these changes, what kind of new systems are needed for developing workers' abilities, and what rearrangement of the working environment is needed to harmonize human capabilities with these changes?

### ●Issues

- (1) Microelectronics and changes in job content, job requirements, and a sequence of job promotion or workers' career
  - a. How have job content and job requirements changed with microelectronics? Is there an increasing trend toward polarization?
  - b. How have conventional nomenclature of jobs, the span of occupation, and of a sequence of job promotion or workers' career changed because of microelectronics?
  - c. What are the factors for these changes in job content?
- (2) New plan of the worker's skill, of the worker's career and of the system for developing workers' capabilities in the age of microelectronics
  - a. What are the goal of worker's skill and the expected job requirement in the age of microelectronics?
  - b. What are the best systems to develop skills and enhance workers' adaptability in the age of microelectronics?
  - c. How should the responsibility and the cost for enhancing workers' capabilities be shared between the individual workers, corporations and the government?
- (3) Harmony between technology and human capabilities in microelectronics
  - a. Why is it necessary to promote harmony between human capabilities and microelectronic technology?
  - b. How should microelectronic technology be directed at a move toward humanized work? How should work be designed?

### ●Chairmen

Dr. Kazuo Koike  
Professor, Institute of Economic Research, Kyoto University, Japan  
Dr. Marc Maurice  
Laboratoire d'Economie et de Sociologie du Travail, France

### ●Presentations

1. Microelectronics and changes in job content, job requirements and a sequence of job promotion or workers' career

Dr. Marc Maurice  
Mr. John Monks  
Director, Organization and Industrial Relations Department, Trade Union Congress, U.K.

2. New plan of the worker's skill, of the worker's career and of the system for developing workers' capabilities in the age of microelectronics

Mr. André Ramoff  
Délégué à la Formation Professionnelle, Ministère du Travail, de l'Emploi et de la Formation Professionnelle, France  
Mr. Yukio Sato  
Executive Vice President and Director, NEC Corporation, Japan

3. Harmony between technology and human capabilities in microelectronics

Prof. Kenji Okuda  
Faculty of Economics, Sophia University, Japan  
Mr. Alexander Koch  
Mitglied des Vorstandes, Grundig A.G., F.R.Germany

### ●Panelists

Mr. Ray Protti  
Assistant Deputy Minister of Policy, Ministry of Labour, Canada  
Mr. Ichiro Shioji  
President, Confederation of Japan Automobile Workers' Unions  
Mr. John Dorsey  
Director of Labor Relations, ITT Corporation, U.S.A.  
Mr. Terutaka Izumi  
Director, Basic Research Department, Research and Development Institute of Vocational Training, Japan

## THIRD WORK GROUP

### ●Theme

Microelectronics and industrial relations and working conditions

What changes has progress in microelectronics brought to industrial relations? What changes are anticipated? How should labour and management respond to the situation in an effort to create a system of industrial relations which aims at the improvement of working conditions (such as wage and work hours) and of overall workers' welfare while solving problems created by these changes?

### ●Issues

- (1) Changes in industrial relations under advances in microelectronics
  - a. What effect has microelectronics had on the traditional labour strata? Is microelectronics creating new sectors in national economies?
  - b. How is microelectronics changing industrial relations at the workplace, company, industry and national level? Compared with past instances of technological innovation, what characterizes today's microelectronics? Will further advances in microelectronics expand or reduce the role of the labour unions? In what aspects is microelectronics notably changing working conditions?
- (2) Labour and management views of and their responses to microelectronics
  - a. With what strategies and methods have labour and management responded to microelectronics? How have these contributed to the stabilization of industrial relations and to working conditions? How have unorganized workers responded to microelectronics? How have the fruits of the increased productivity, stemming from microelectronics, been shared?
  - b. What should government and labour and management do in order to improve the workers' welfare under advances in microelectronics? How do they view the following issues?
    - (i) communication between labour and management and a labour-management consultation system
    - (ii) items that labour and management must pay attention to in order to enhance workers' adaptability to microelectronics and improve the workers' welfare, and their responses to such items
    - (iii) formation of consensus at the industry and national level, and distribution of the fruits of advances in microelectronics to society

### ●Chairmen

Dr. Kazuyoshi Koshiro  
Professor, Faculty of Economics, Yokohama National University, Japan  
Dr. Michael Piore  
Professor of Economics, Massachusetts Institute of Technology, U.S.A.

### ●Presentations

1. Changes in industrial relations under advances in microelectronics  
Dr. Michael Piore
2. Microelectronics and the improvement of working conditions  
Mr. Hiroyuki Kawaguchi  
Vice-President, Japanese Federation of Electrical Machine Workers' Unions  
Mr. P.W.M. Lobban  
Deputy Director, Social Affairs Directorate, Confederation of British Industry, U.K.
3. Experience and prospect of labour-management consultation and collective bargaining regarding microelectronics  
Dr. Dennis Chamot  
Associate Director, Department for Professional Employees, AFL-CIO, U.S.A.
4. Labour and management views of and their responses to microelectronics in Japan  
Prof. Yasuo Kuwahara  
Faculty of Economics, Dokkyo University, Japan

### ●Panelists

Mr. Taiji Hosokawa  
Managing Director, Nissan Motor Company Ltd., Japan  
Mr. Roland Schneider  
Deputy Director of Technological Department, Deutscher Gewerkschaftsbund  
Bundesvorstand - DGB, F.R. Germany  
Prof. Takeshi Inagami  
Faculty of Social Science, Hosei University, Japan

# TECHNICAL VISIT

Prior to the opening of the Tokyo Meeting, overseas participants will be encouraged to visit representative Japanese enterprises which have introduced office automation and factory automation. Details are as follows.

●Date

September 24, 1985

●Participants

Overseas participants in the Tokyo Meeting

●Courses

Participants will be divided into five groups and each group will be composed of 10 to 20 persons. Please indicate by numbers from 1 to 5 the order of your preference on the Registration Form(TOKYO- I). When more than 20 people choose the same course as their first preference, a first-come first-served principle will be applied.

●Schedule

Courses 1, 2 and 3

Departure from Keio Plaza Hotel	8:30
Briefing at an enterprise	9:30-10:00
Tour	10:00-11:00
Discussion	11:00-12:00
Transfer	12:00-14:30

\* Lunch will be provided on the way to a next enterprise.

Briefing at an enterprise	14:30-15:00
Tour	15:00-16:00
Discussion	16:00-17:00
Arrival at Keio Plaza Hotel	18:30

Courses 4 and 5

Departure from Keio Plaza Hotel	8:30
Briefing at an enterprise	10:00-10:30
Tour	10:30-12:00
Lunch	12:00-13:30
Discussion	13:30-15:00
Arrival at Keio Plaza Hotel	16:30

●Notes

The following points should be of special interest:

- Introduction of microelectronic machine and equipment
- The impact of the introduction of microelectronic machine and equipment on employment, work organization, training and working conditions

Discussion will focus on the exchange of opinions on view of and responses to microelectronics and labour.

●Lunch

Lunch will be provided by the Secretariat.

Course 1

●Head Office, Toshiba Corporation, 7,000 employees

Products: Electric machine, equipment and others in the electric fields

Features: A leading company in introducing office automation, equipped with 1,000 OA machines and equipments; the decision room and board of directors' room with various kinds of machines and equipments; an OA system throughout the building

●Keihin Works, Nihon Kokan, 11,000 employees

Products: Steel and iron

Features: A computer-operated iron works; computer controls production plan and operation including efficient use of energy.

Course 2

●Abiko Plant, NEC Corporation, 3,200 employees

Products: Communication equipments and computers

Features: An experimental office-automated plant for promoting NEC's strategy, computer & communication; mail, file and slip are processed by an OA system.

●Hitachi Seiki Company Ltd., 1,400 employees

Products: Machine tools

Features: A representative Japanese manufacturer of machine tools introducing a flexible manufacturing system; microelectronization of the production process for a range of products including machine tools for general purposes

Course 3

●Head Office, The Dai-ichi Kangyo Bank, 3,000 employees

Business: Banking

Features: One of the largest banks in Japan promoting office automation and processing 25 different jobs by office computer and personal computer

●Tokyo Head Office, Asahi Shinbun Publishing Company, 4,500 employees

Business: Newspaper

Features: Reducing printing and editing time for newspaper by rationalizing the process through systematization of editing and plate making

Course 4

●Murayama Plant, Nissan Motor Company, 6,600 employees

Products: Automobiles

Features: Automation of the supply of parts in the production line; 200 robots and a system sensing accidents in the line

Course 5

●Fuchu Factory, Toshiba Corporation, 7,300 employees

Products: Switchboards

Features: Manufacturing control and supervision systems for power stations, factories and water services; introducing a flexible manufacturing system in the production process of switchboards which can be applied to the production of various products

# REGISTRATION

## ●Participation Fee

Participation fee is ¥50,000 and it covers

1. Participation in all the three-day programs and lunch (3 times),
2. Technical visit and lunch on Tuesday, September 24, 1985,
3. Participation in the Welcome Reception on the evening of Wednesday, September 25, 1985,
4. One set of symposium documents, and
5. Symposium Report (to be mailed after the symposium).

## ●Application and Remittance

Please complete the Registration Form(TOKYO- I ) herewith enclosed and send it to the Symposium Secretariat at the below address with a copy of the remittance receipt of the participation fee issued by the bank by JULY 31, 1985. The Registration Form consists of two pages, please send the first page. The second page is your copy. Those who sent the "Request" post-card from the first announcement are kindly requested to send this form to affirm their registration.

Secretariat of Tokyo Meeting  
c/o National Institute of Employment and Vocational Research  
4-1-1, Nakano, Nakano-ku  
Tokyo 164 Japan

Participation fee must be remitted by bank transfer to the following account in Japanese yen only.

name of the account :  
Mr. Keisuke Amakasu, Secretary General, International Symposium on Microelectronics and Labour  
name of the bank :  
Nakano Branch, The Sumitomo Bank  
A/C No. 114172

- Notes: 1) No personal cheques will be accepted.  
2) Due to the hotel capacity, registration is limited.  
3) Registration will be granted on a first-come first-served basis.

## ●Confirmation

Upon receiving your Registration Form and payment, the Secretariat will send you a Registration Confirmation Form.

## ●Registration Desk on Site

The registration desk will be located in the lobby of 4th floor, Keio Plaza Hotel as follows :

September 23, 1985	15:00 - 21:00
September 24, 1985	8:00 - 21:00
September 25 - 27, 1985	8:00 - 18:00

Upon your presentation of the Confirmation Form, symposium documents, name card and other

materials will be issued.

On-site registration can be also made at the desk. In this case, please note that payment should be made only with Japanese yen in cash. However, pre-registration is strongly requested to facilitate the registration procedure on site.

## ●Cancellation

Cancellation should be made in writing to the Secretariat. Please enclose your Registration Confirmation Form and clearly indicate the bank account to which the refund should be remitted. Refund rates are as follows:

Cancellation received by August 31, 1985	90%
Cancellation received after August 31, 1985	no refund

All the refund will be made after the symposium.

# HOTEL ACCOMMODATIONS

The Secretariat of the Tokyo Meeting has appointed International Congress Service, Inc. (ICS) as the official travel agent in charge of hotel and travel arrangements. In order to simplify application procedures, all applications for hotel and travel will be accepted through the Secretariat. However, ICS will be in charge of issuing a Hotel Reservation Confirmation Form, and arranging alterations and cancellation.

Please forward all inquiries concerning hotel accommodations to :

International Congress Service, Inc.  
Kasho Bldg. 2F, Nihombashi 2-14-9,  
Chuo-ku, Tokyo 103 Japan  
Tel: 03-272-8011

in charge: Mr. Kita, Ms. Kato, and Ms. Ito

ICS has reserved the following hotels for use by participants.

Hotel	Single	Twin
Keio Plaza Hotel (Congress site)	¥17,000	¥19,000
Shinjuku Washington Hotel (3-minute walk from Congress site)	¥ 6,800	¥14,000

- Notes: 1) Tax and a service charge, each 10%, are not included in the above room charge.  
2) The ¥20,000 booking deposit (charged at application) will be returned to you at the hotel reception at check-out time.

Please apply for reservation by completing the enclosed Hotel Reservation Form(TOKYO-II) to be received by the Symposium Secretariat by July 31, 1985. Please remit a ¥20,000 booking deposit by bank transfer together with the participation fee. ICS will send you a Reservation Confirmation Form upon the receipt of your remittance.

●Cancellation

Cancellation should be notified in writing addressed to ICS. Please clearly indicate the bank account to which the refund should be made and enclose your Reservation Confirmation Form. The following cancellation fee will be deducted when the refund is made.

- If notice of cancellation reaches ICS,
- 9 days before the first night of stay or earlier ..... ¥1,000.
- 2 - 8 days before ..... 20% of the charge for 1 night of stay
- 1 day before or in case no notice is given ..... 100% of the charge for 1 night of stay.

## TRAVEL INFORMATION

●Air fares

If you are arriving from Europe to participate in both Tokyo and Kitakyushu Meetings, Japanese domestic flight (e.g. Narita - Fukuoka) tickets can be obtained free of charge if they are purchased together with the international flight.

In some cases in which the travel period exceeds a certain length, discount air tickets are available. However, as such tickets entail restrictions, we would recommend that you consult with a travel agency.

●Visas

Before your departure, visa requirements should be checked at travel agencies, the Japanese Embassy or the Japanese Consulate.

●Transportation from Narita

The limousine bus service which takes you directly from the Narita International Airport to the Keio Plaza Hotel (30 shuttles daily, ¥2,700 one way) is convenient. It generally takes 90 to 120 minutes, depending on traffic conditions.

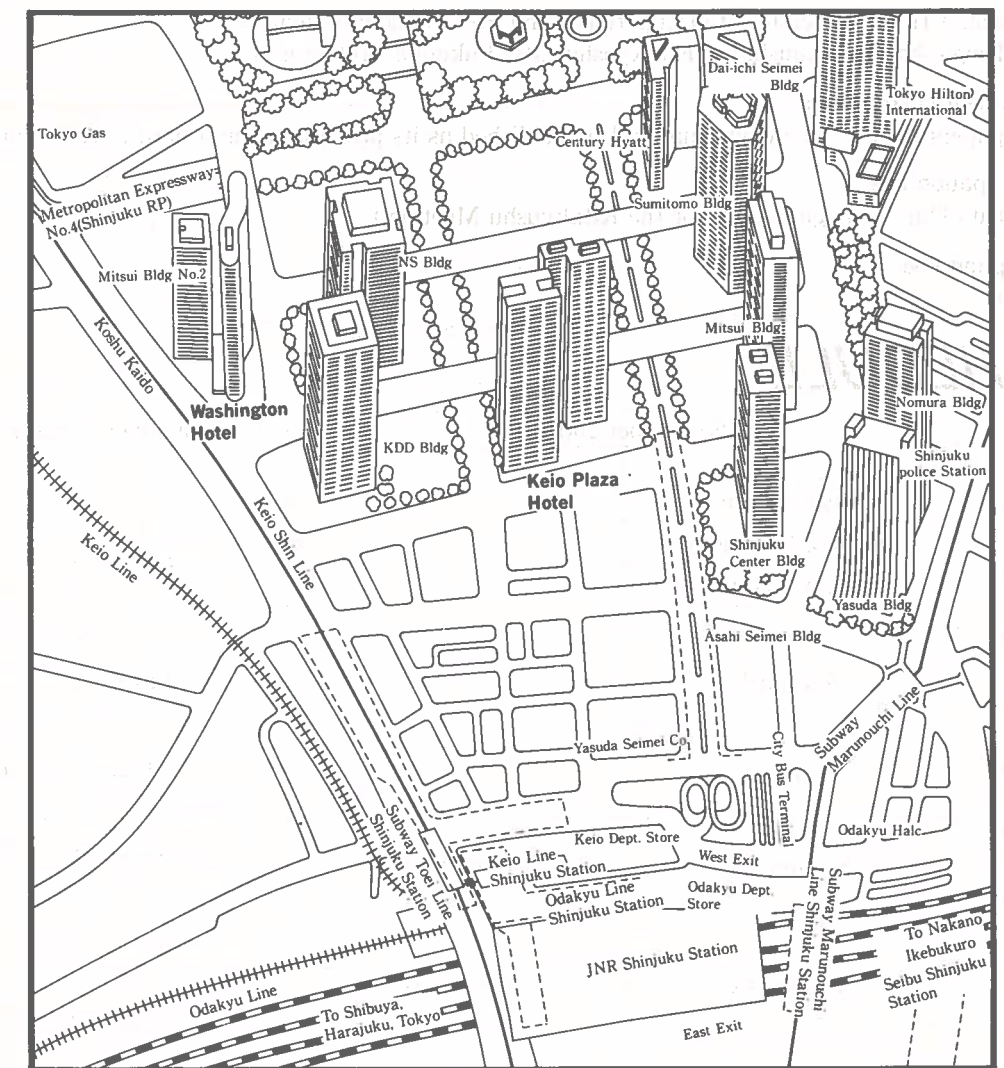
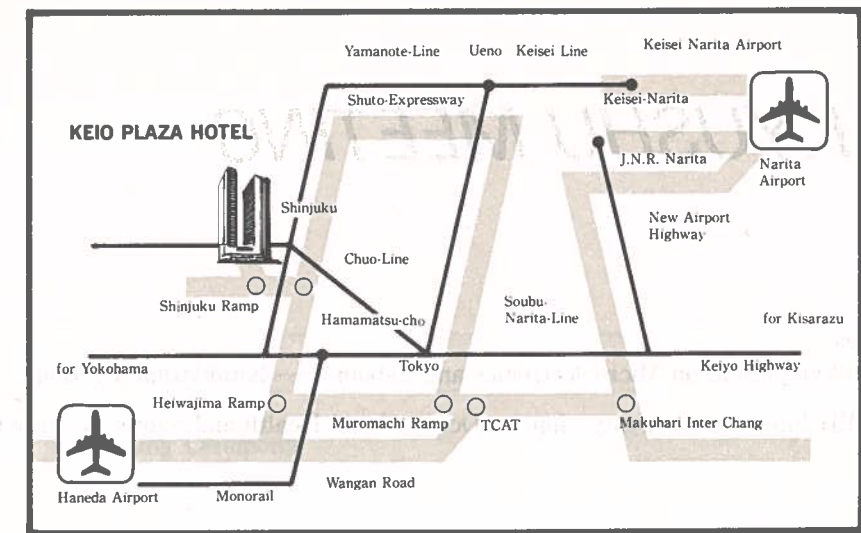
Limousine bus service from the Narita Airport to the Tokyo City Air Terminal (¥2,500 one way) leaves every 10 minutes. From the City Air Terminal, it is approximately 40 minutes (¥2,500) by taxi to the Keio Plaza Hotel.

●Climate and Dress

Temperature in Tokyo in September averages 20° - 27°C.  
Summer dress is recommended.

●Travel Information Desk

ICS will open a Travel Information Desk in the lobby of the 4th floor, Keio Plaza Hotel and provide information on tours and other forms of travel.



SHINJUKU AREA MAP

# KITAKYUSHU MEETING

●Meeting Titles

International Symposium on Microelectronics and Labour — Kitakyushu Meeting

The 5th UOEH International Symposium on Occupational Health and Safety in Automation and Robotics

●Dates

September 20 — 21, 1985

●Venue

Remazzini Hall, University of Occupational and Environmental Health  
(1-1, Iseigaoka, Yahatanishi-ku, Kitakyushu City, Fukuoka Prefecture.)

●Document Distribution

The papers read at the symposium will be published as its proceedings in a hard cover volume.

●Participation Fee

¥15,000 (This fee is good only for the Kitakyushu Meeting.)

●Reception Fee

¥6,000

## SCHEDULE

	September 20(Fri.)	September 21(Sat.)
9:00	Registration	
	Opening Ceremony	
10:00	Special Lecture	Session 4
11:00		
	Session 1	Session 5
12:00		
13:00	Lunch	Lunch
14:00	Session 2A	Session 6
15:00		
16:00	Session 3A	Session 7
17:00		
18:00	Reception	
19:00		

# PROGRAM

## September 20 (Friday)

9:15 - 9:45	Opening Ceremony Dr. Kenzaburo Tsuchiya President, University of Occupational and Environmental Health Mr. Toshio Yamaguchi Minister of Labour
9:45-10:30	Special Lecture "Robotization and Humanization" Dr. Masahiro Mori Professor, Department of Control Engineering, Tokyo Institute of Technology, Japan
10:45-12:15	Session 1 "Occupational Health Issue in Automated Factory"
12:15-12:30	Discussion
12:30-13:45	Lunch
13:45-15:15	Session 2A "Man-Machine Systems for VDT Work at Factory and Office"
15:15-15:30	Discussion
13:45-14:45	Session 2B "Interaction between Man and Robot in High-Technology Industries"
15:45-16:45	Session 3A "Occupational Safety and Health Problems Caused by Increase in Robot Population"
16:45-17:00	Discussion
15:00-17:00	Session 3B "Occupational Health Issue in Office Automation"
17:00-17:30	Discussion
17:30	Reception

## September 21 (Saturday)

9:00-10:30	Session 4 "Roles of Industrial Medicine for Man-Robot Interface"
10:30-10:45	Discussion
11:00-12:00	Session 5 "Human Factors Considerations Required When Introducing Robots"
12:00-12:15	Discussion
12:15-13:45	Lunch Visit to Research Facilities
13:45-14:45	Session 6 "Measures for Improving Occupational Safety and Health of People Working with VDTs or Robots — small-group activities and safety and health education"
14:45-15:00	Discussion
15:15-16:45	Session 7 Summary: "Future of Robotics and Automation — their effect on health of people"

## Session 1

●Theme: Occupational Health Issue in Automated Factory

●Chairmen

Mr. Rinzo Ebukuro  
Assistant General Manager, C&C Sensing Systems Development Division,  
NEC Corporation, Japan

Dr. Helmut Strasser  
Lehrstuhl und Institut für Arbeitsphysiologie der Technischen,  
Universität München, F.R. Germany

●Presentations

1. Emerging technology and trends in blue-collar stress

Dr. Olov Östberg  
Director, Human Factors Research, Swedish Telecommunications  
Administration, Sweden

2. Uncertainty and anxiety in continuous process industries

Dr. Alain Wisner  
Professor, Department des Sciences de l'Homme au Travail, Conservatoire  
National des Arts et Metiers, Ministère des Universités, France

3. Prediction of high technology development and problems of man-machine system

Dr. Kageyu Noro  
Professor, Department of Human Factors Engineering, University of  
Occupational and Environmental Health, Japan

## Session 2A

●Theme: Man-Machine Systems for VDT Work at Factory and Office

●Chairmen

Dr. Sohei Yamamoto  
Chief, Department of Industrial Physiology, National Institute of Industrial  
Health, Japan

Dr. Martin Helander  
Associate Professor, University of South Florida, U.S.A.

●Presentations

1. The changing role of the operator

Mr. Reginald Sell  
Work Research Unit, Department of Employment, U.K.

2. Human factors problems of VDT operation at factory

Dr. Yoshio Hayashi  
Professor, Faculty of Science and Technology, Keio University, Japan

3. Eye fatigue in VDT work - from standpoint of occupational ophthalmology

Dr. Shinji Kurimoto  
Professor, Department of Ophthalmology, University of Occupational and  
Environmental Health, Japan

## Session 2B

●Theme: Interaction Between Man and Robot in High-Technology Industries

●Chairmen

Dr. Tadashi Yamashita  
Professor, Department of Control Engineering Kyushu Institute of Technology,  
Japan

Dr. Alain Wisner

●Presentations

1. Interaction between man and robots with some emphasis on 'intelligent' robots

Mrs. Lena Martensson  
Industrial Psychologist, Unit of Work Science, Royal Institute of  
Technology, Sweden

2. Reports on conditions in a country

## Session 3A

●Theme: Occupational Safety and Health Problems Caused by Increase in Robot Population

●Chairmen

Prof. Katsumi Yokomizo  
Waseda University, Japan

Dr. Olov Östberg



●Presentations

1. Subjects and problems of robot safety technology  
Mr. Noboru Sugimoto  
Chief Researcher, Mechanical Research Division, Research Institute of Industrial Safety, Ministry of Labour, Japan
2. Robotics and the health of workers  
Dr. H. M. Parsons  
Essex Corporation, U.S.A.

**Session 3B**

●Theme : Occupational Health Issue in Office Automation

●Chairmen

Prof. Sadao Sugiyama  
Kwansei Gakuin University, Japan  
Mr. Reginald Sell

●Presentations

1. The impacts of office automation on the quality of worklife: considerations for United States policy  
Dr. B.C. Amick, III  
Analyst, Communications and Information Technologies Program, Office of Technology Assessment, Congress of the United States, U.S.A.
2. Multivariate analysis of fatigue in VDT work  
Dr. Koji Morooka  
Professor, Department of Management, Tokai University, Japan
3. Introduction and expansion of VDTs' work in Japan and their occupational health problem  
Dr. Katsuo Nishiyama  
Instructor, Department of Preventive Medicine, Shiga University of Medical Science, Japan
4. Survey of health hazards of work with visual display terminals in pregnancy  
Prof. Alison McDonald  
Department of Epidemiology and School of Occupational Health, McGill University, Canada

**Session 4**

●Theme : Roles of Industrial Medicine for Man-Robot Interface

●Chairmen

Dr. Masamitsu Oshima  
Chairman of Directors, Medical Information System Development Center,  
Japan  
Dr. H.M. Parsons

●Presentations

1. Assessment of psycho-mental workload in modern factory  
Dr. Helmut Strasser
2. Problems of and industrial medicine measures for introduction of robots  
Prof. Yukio Hasegawa  
System Science Institute, Waseda University, Japan
3. Mindlessness: A new dimension of technological alienation - Implications for man/machine interface in high technology work environments  
Dr. Gary Benson  
Coordinator, UW-Casper Business Program, University of Wyoming, U.S.A.

**Session 5**

●Theme : Human Factors Considerations Required When Introducing Robots

●Chairmen

Prof. Mitsuo Nagamachi  
Hiroshima University, Japan  
Dr. Andrew Imada  
Associate Professor, Institute of Safety and Systems Management University of Southern California, U.S.A.

●Presentations

1. Human participation in automated manufacturing : Some ergonomics issues  
Dr. Martin Helander
2. Man's role in automation and robotization of operation  
Dr. Tadashi Yamashita

**Session 6**

●Theme : Measures for Improving Occupational Safety and Health of People Working with VDTs or Robots - small-group activities and safety and health education

●Chairmen

Dr. Yoshio Hayashi  
Mrs. Lena Martensson

●Presentations

1. Managing human and machine system requirements through participation :  
the need for an integrated organizational culture  
Dr. Andrew Imada
2. Occupational safety and health measures taken for introduction of robots in automobile  
industry  
Mr. Minoru Goto  
General Manager, Safety and Sanitation Department, Nissan Motor  
Company, Japan

Session 7: Summary

- Theme : Future of Robotics and Automation – Their Effect on Health of People
- Chairman  
Dr. Kenzaburo Tsuchiya  
President, University of Occupational and Environmental Health, Japan
- Panelists  
8 people : one of the chairmen in each session

# REGISTRATION

●Participation Fee

Participation fee is ¥15,000 and it covers

1. Participation in all the two-day programs, and
2. Proceedings consisting of papers read at the symposium to be published by Taylor and Francis in London in spring, 1986 and to be sent to participants.

●Reception Fee

A ¥6,000 fee will be separately charged for participation in the Reception on the evening of Friday, September 20.

●Application and Remittance

Please complete the Registration Form (KITAKYUSHU- I ) herewith enclosed and send it to the Secretariat at the below address with a copy of the remittance receipt of the participation fee issued by your bank. Those who sent the "Request" postcard from the first announcement are also requested to send this form to affirm their registration.

Secretariat of International Symposium  
c/o Department of Human Factors Engineering  
University of Occupational and Environmental Health  
1-1, Iseigaoka, Yahatanishi-ku,  
Kitakyushu City, Fukuoka 807 Japan

Participation fee must be remitted by bank transfer to the following account in Japanese yen only.

A/C No. 343261  
name of the account:  
Dr. Kageyu Noro, Secretariat of the 5th UOEH International  
Symposium  
name of the bank:  
UOEH office of Orio Branch, The Fukuoka Bank

●Cancellation

Cancellation should be made in writing to the Secretariat. Please clearly indicate the bank account to which the refund should be remitted. Refund rates are as follows:

Cancellation received by August 31, 1985      90%  
Cancellation received after August 31, 1985      no refund

All the refund will be made after the symposium.

# HOTEL ACCOMMODATIONS

The Secretariat of the Kitakyushu Meeting has appointed Japan Travel Bureau, Inc. (JTB) as the official agent in charge of hotel arrangements. JTB has reserved rooms at the Hotel SUNROUTE Kurosaki and the New Seto Hotel.

Please fill in the Hotel Reservation Form (KITAKYUSHU-II) herewith enclosed and send it to JTB. The room charge should be paid at the reception of the hotel.

Hotel	Single
Hotel SUNROUTE Kurosaki	¥6,500
New Seto Hotel	¥6,500

Note: This room charge includes breakfast, 10% tax and 10% service charge.

Please forward all inquiries concerning hotel accommodations to :

Kitakyushu Branch, Japan Travel Bureau, Inc.  
1-1-1 Sakai-cho  
Kokurakita-ku, Kitakyushu City  
Fukuoka 802 Japan

in charge: Mr. Takakura, Mr. Shibata, and Mr. Suzuki

For further information :

#### Tokyo Meeting

Secretariat of Tokyo Meeting  
c/o National Institute of Employment and Vocational Research  
4-1-1, Nakano, Nakano-ku  
Tokyo 164 Japan  
Tel : 03-387-4808  
Fax : 03-387-4489

#### Kitakyushu Meeting

Secretariat of International Symposium  
c/o Department of Human Factors Engineering  
University of Occupational and Environmental Health  
1-1, Iseigaoka, Yahatanishi-ku,  
Kitakyushu City, Fukuoka 807 Japan  
Tel : 093-603-1611  
Fax : 093-601-3446