### HEAT TREATMENT TECHNOLOGY 熱処理技術

### 1. PERIOD

September 3, 1992 to December 10, 1992 (3.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

### 3. QUALIFICATIONS

- 1) University graduates or equivalent
- Occupational experience of over 2 years
- Mechanical or metallurgical engineer (not academic researchers)
- 4) Between 30 and 40 years of age.
- Good working knowledge of English

### DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Basic Knowledge
  - Metallic Materials
    - Fundamentals of Heat Treatment
    - Heat Treatment Equipment
  - Heat Treatment of Steel and Iron

    - Structural Steel
       High Speed Steel
       Alloyed Tool Steel
       Case Hardening
- Related Technologies

   Advanced and Related Technologies

  - Quality ControlTechnical Meeting
- Observation Tours

### **FACILITIES AND INSTITUTIONS**

- 1) Aichi Industrial Research Association
- 2) Industrial Research Institute, Aichi Prefecture
- 3) Related Industries

### MAINTENANCE OF CONSTRUCTION MACHINERY 建設機械整備(英語)

### 1. PERIOD

May 14, 1992 to August 10, 1992 (3 months)

NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

### QUALIFICATIONS

- University graduates (mechanical engineering), or equivalent with occupational experience of more than 3 years
- Presently engaged in or expected to be engaged in near future in planning and administration work in 2) the field of construction machinery
- Under 40 years of age 3)
- Good working knowledge of English

#### **DESCRIPTION OF TRAINING**

- Lectures and practical training
  - Development and present situation of mechanized construction work and use of construction machinery
  - Planning of mechanized construction work and use of construction machinery
  - Function, structure and performance of construction machinery
  - Maintenance, repair, inspection, troubleshooting and field construction machinery
  - Planning, layout, parts control, tool control on administration of work shop
- Practical training

   Fundamental Practice: Engine, Clutch, Torqueconverter, Transmission, Final drive, Differential gear, Brake, Steering, Hydraulic System, Power shift transmission, Undercarriage, etc.

   Specialized Practice: Bulldozer, Scraper, Grader, Wheel-loader, Hydraulic excavator, Crane,
  - Compaction Machinery, Dump Trunk, etc.
- Presentation of country report
- Observation tours
  - Construction sites and related manufacturing firms

### **FACILITIES AND INSTITUTIONS**

- 1) Ministry of Construction
- Japan Construction Mechanization Association

### No. 207

#### D'ENTRETIEN ET DE REPARATION DE L'EQUIPEMENT 建設機械整備(仏語) DE CONSTRUCTION

#### 1. Durée

Du 5 octobre 1992 au 20 décembre 1992 (2 mois)

Nombre de participants à recevoir

Huit (8)

#### Qualifications 3.

- Etre titulaire de diplôme universitaire ou équivalent avec plus de trois ans d'expérience professionnelle
- 2) Etre engagé actuellement ou dans l'avenir dans le service de planification et d'administration dans le domaine de l'équipement de construction
- Etre âgé de moins de 40 ans 3)
- 4) Bonne connaissance de la langue française pour le travail

#### Nature de formation

- 1) Cours théoriques
  - --Planification de travail de construction mécanisé et utilisation d'équipements de construction -- Fonctionnement, structure, performance d'équipements de construction

  - -Entretien, réparation, inspection et dépistage de pannes d'équipements de construction -Planification, disposition, contrôle de pièces et d'outillage ainsi que gestion d'atelier de réparation
- 2) Travaux pratiques
  - Pratique fondamentale = Moteur, Embrayage, Boîte de vitesses, Diférentiel etc. Pratique spécialisée = Bulldozer, Scraper, Niveleuse, Excavatrice, Grue

#### Etablissements et institutions

- 1) Centre International de Formation de Hachioji, JICA
- Association Japonaise de Mécanisation de Construction

### Remarques

Le Cours s'effectuera en français ou par la traduction du japonais en français

# MECANIQUE AUTOMOBILE VEHICULES DIESEL (AUTOBUS, CAMIONS POIDS-LOURD)バス・トラック整備技術(仏語)

#### 1. Durée

Du 11 janvier 1993 tau 27 mars 1993 (3 mois)

2. Nombre de participants à recevoir

Onze (11)

#### 3. Qualifications

- 1) Formation qualifiée dans leur domaine concerné
- 2) Expérience professionnelle de plus de 3 ans dans le domaine de l'entretien et la réparation de véhicules diesel
- 3) Age entre 25 et 40 ans
- 4) Bonne connaissance de la langue française pour le travail

#### 4. Nature de formation

- 1) Cours et pratique

  -Connaissances de base sur le mécanisme et le fonctionnement de véhicules diesel
- 2) Voyage d'études

### 5. Etablissements et institutions

- 1) Centre International de Formation de Hachioji, JICA
- 2) Hino Motors S. A.

### 6. Remarques

Le Cours s'effectuera en français ou par la traduction du japonais en français.

# PLANT MAINTENANCE ENGINEERING プラントメンテナンス技術

#### PERIOD

May 11, 1992 to October 2, 1992 (4.5 months)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

### QUALIFICATIONS

- be university graduates or the equivalent
- have 3 years' or more occupational experience in the field of plant maintenance business and is in charge of maintenance business today in continuous process plants, such as Iron & Steel, Oil Refinery or Chemical, Cement plant, Automotive plant etc.
- not more than 45 year old
- have a sufficient command of spoken and written English\*
  - \* For an example, it is desirable to hold TOEFL (Test of English as a Foreign Language) score more than 500 points.

### DESCRIPTION OF TRAINING

- Lectures and practical training
  - Introduction to Plant Maintenance (18 hours) Computer Literacy (72 hours)

  - Maintenance of Automatic Control System (30 hours)
     Improvement Techniques (30 hours)

  - Basic Subjects of Maintenance Management (30 hours)
  - Maintenance Management in Corporations (24 hours)
     Fatigue of Metals and Fractography (12 hours)
  - Equipment Inspection Technique (18 hours)
  - Non-Destructive Testing (18 hours)
  - Technical Visit to Different Industries (201 hours, 18 Companies & 1 University)
- Observation tours (42 hours)

### **FACILITIES AND INSTITUTIONS**

- Kitakyushu International Training Association 1)
- Kyushu International Centre, JICA 2)
- 3) Related Industries

#### REMARKS 6.

### AUTOMATIC CONTROL (GENERAL INTRODUCTION)

自動制御

#### 1. PERIOD

July 6, 1992 to November 26, 1992 (5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

### 3. QUALIFICATIONS

- Have four years' occupational experience or more in the field of production, planning of plants and machinery, and be engaged in the automation at present or in the near future.
- Be those who have graduated from electrical, control or mechanical engineering department of university, or have the equivalent academic background,
- 3) Have a sufficient command of spoken and written English, and
- 4) Be not more than 40 years old
- 5) Be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the training.

### 4. DESCRIPTION OF TRAINING

- The course will be conducted in the form of: Lecture/discussions, studies by simulators, field trips, etc.
  - Theory of feedback control and feed forward Control
  - Modeling and its application in practical situations
  - Advanced control theory
  - Measurement and sensors and its importance in the control system
  - Basic knowledge of hydraulic, pneumatic and electric sequence control circuits, and then designing
  - Application of hydraulic, pneumatic and electric actuators
  - Computer literacy
  - Programmable Logic Controller (PLC), programming methods, operation and maintenance techniques

- Process control system
- Selection of process features and control characteristics
  - Measuring method of dynamic characteristics of process
- Optimum adjustment by control instruments
- Field observations

### 5. FACILITIES AND INSTITUTIONS

- 1) Kitakyushu International Training Association
- Kyushu Institute of Technology etc.

#### 1, PERIOD

June 29, 1992 to October 25, 1992 (4 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

#### QUALIFICATIONS

- be presently engaged and have more than three years job experience in maintenance 1)
- be those who graduated the faculty of engineering or have the equivalent academic background 2)
- have a sufficient command of spoken and written English 3)
- be not more than 35 years old 4)
- be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a 5) disqualifying condition for participation in the training.

### 4. DESCRIPTION OF TRAINING

- 1) Lectures and Practical Training
  - Introduction to Maintenance Management and Engineering
  - Reliability and Maintainability
  - Fundamentals of CDT
  - Basic Concept Condition Based Maintenance System
  - Vibration and its Measurement
  - Non-destructive Testing (NDT) and its Measurement
  - Diagnostic Methods for Rotating Machines and Elements
  - Practice of Maintenance Management and Machine Condition Diagnosis
     Maintenance Control by Personal Computer
- 2) Observation Tours

### **FACILITIES AND INSTITUTIONS**

- Kitakyushu International Training Association 1)
- 2) Related Industries

### PLANT MAINTENANCE MANAGEMENT 保全管理

#### PERIOD

January 11, 1993 to May 16, 1993 (4 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

### QUALIFICATIONS

- be university (Engineering Department) graduates or equivalent
- have more than 3 years' occupational experience in the field of plant maintenance business 2)
- be not less than 30 years old, and not more than 40 years old 3)
- have a sufficient command of spoken and written English 4)
- be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the troining. 5)

### DESCRIPTION OF TRAINING

- Lecture (L), Practice (P), Field Study (F)

  Outline of Maintenance (L)

  - Management of Plants (L)
  - Computer Literacy (P) - Management Policy and Control (L, F)
    - Outline of Maintenance System (L)
    - Maintenance of Bearing (L)

  - Actual Samples of Corrosion and Countermeasure (L, F)
  - Diagnosis Technique of Machines (L, P)
     Non-distructive Tests (L, P)

  - Training of Repairing Technique (L, P)

  - Improvement Methods (L, P)
     Repairing and Change of Parts (L, F)
     Inspection of Electric Equipment Manufacturing (L, F)
     Management and Data (L, P)
     How to Make Inspection Plan (L, P)

  - Scheduled Time for Repairing (L, P)
    Repairing Plan (L, P) Control of Maintenance Materials (L, P)

  - Management of Welding and Assembling (L)
    Maintenance of Electric Equipments (L, F)
    Activity of Maintenance Management of Iron & Steel Plant, Car Manf. Co., Sugar Mfg., Cement Plant, Chemical Plant and Sanitary Wares Instrument Mfg. (L, F)
- Study Trip

### **FACILITIES AND INSTITUTIONS**

- Kitakyushu International Training Association 1)
- Other related industries

### SPARE PARTS FOR PLANT MAINTENANCE

保全用部品の設計・製造

#### 1. PERIOD

June 1, 1992 to October 29, 1992 (5 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

### QUALIFICATIONS

- be university graduates or equivalent
- be those who have more than five years' and less than ten years' occupational experience in the field of maintenance engineering and is in charge of spare parts purchasing or controlling.
- be under 40 years old 3)
- have a sufficient command of spoken and written English 4)
- be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the training.

#### **DESCRIPTION OF TRAINING**

- Lectures and Practical Training
  - Improvement Technique
  - Introduction to Plant Maintenance
  - Non-destructive Testing
  - How to Collect the Data and How to Use them
  - Basic Maintenance Management
  - Maintenance Spare Parts Management & Control - Parts Sketch
  - Manufacturing of Casting Forgings and Weldments
  - Practice of Spare Parts Manufacturing Job
     Equipment Inspection Technique

  - CAD/CAM
  - Design Concept of Spare Parts
  - Cause Investigation and Countermeasure for Spare Parts Breakage and Deterioration
  - Repair and Improvement Tecnique for Machine Parts
  - Machining & Assembly Procedure, Check Points, Test Run Procedure and Inspection Method, Technical Purchase Specification
- Field Training & Observation Tour

### **FACILITIES AND INSTITUTIONS**

- Kitakyushu International Training Association 1)
- Kyushu Institute of Technology 2)
- Kitakyushu College of Technology 3)
- 4) Fukuoka Industrial Technology Center
- 5) Related Industries

### HIGH TECHNOLOGY OF METAL WORKS II 金属加工高品質化技術 I

### 1. PERIOD

September 17, 1992 to March 6, 1993 (6 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

### 3. QUALIFICATIONS

- 1) University graduates or equivalent (mechanical engineering)
- 2) Qualified in their respective fields
- 3) Occupational experience of more than 2 years
- 4) Between 26 and 35 years of age
- 5) Good working knowledge of English

### DESCRIPTION OF TRAINING

- Lectures and practical training

   Advanced cutting technology & its new materials
   Electronic control metal works

  - NC programming & metal works
     CAD & CAM technology
  - Factory automation
  - 3-dimensional precision measurement
- 2) Observation tours

### **FACILITIES AND INSTITUTIONS**

- Nagoya International Training Centre (NITC), JICA
- 2) Government Industrial Research Institute, Nagoya
- Industrial Research Institute, Aichi Prefecture
- Metal Working Industries 4)
- 5). Universities Nagoya University and other related universities

### No. 215

## FACTORY MANAGEMENT FOR PRODUCTION MANAGERS IN MACHINING INDUSTRY

PERIOD 1.

May 7, 1992 to September 19, 1992 (4.5 months)

NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

#### QUALIFICATIONS 3.

- University graduates or equivalent with occupational experience of more than 5 years 1)
- In charge of production management, industrial engineering, production engineering, etc. (Production managers, supervisors and industrial engineers are most preferable. The engineers in other field of engineering will be acceptable.)
- Under 45 years of age 3)
- Proficient in spoken and written English

### DESCRIPTION OF TRAINING

- Lectures and Practical Training 1)
  - Industrial Development from Macroscopic Viewpoint
     Practical knowledge of jigs & fixtures

  - Application of jigs & fixtures to process design and improvement
  - Practices of Plant Management
  - Plant improvement techniques
  - Integrated Production System
- Visits to public & private organizations
- Field trip to Kanto & Kansai area

### **FACILITIES AND INSTITUTIONS**

- 1) CHU-SAN-REN (Central Japan Industries Association)
- 2) Related industries
- 6. REMARKS

### WELDING TECHNOLOGY 裔接技術

4	P	r	R	10	D

April 30, 1992 to October 30, 1992 (6 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

### 3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Welding engineer or researcher
- 3) Occupational experience of more than 3 years
- 4) Between 26 and 35 years of age
- 5) Good working knowledge of English

### 4. DESCRIPTION OF TRAINING

1)	- Welding processes and equipment - Materials and their behaviour during welding - Construction and design - Fabrication, applications engineering					2	weeks
2)	Fundamental practical skills (indivisual)					2	weeks
3)	Observation and practice in industries, research institued ucational facilities and individual training	tes	a a	nd		3	weeks

### 5. FACILITIES AND INSTITUTIONS

- 1) The Japan Welding Engineering Society
- Universities, institutes, major private industries, medium and small factories.

### AIR-CONDITIONING ENGINEERING 空調技術

#### 1. PERIOD

August 6, 1992 to December 9, 1992 (4.5 months)

### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

### 3. QUALIFICATIONS

- 1) University graduates majoring in mechanical engineering or electrical engineering
- 2) Experience of at least 3 years in air-conditioning engineering including system layout
- 3) Under forty (40) years of age
- 4) Good working knowledge of English

### 4. DESCRIPTION OF TRAINING

Lectures, practices in plants and construction sites, on the job training and observation trips will cover the following items;

- 1) Fundamentals of air-conditioning
  - Fundamental knowledge
  - Basic practice
- 2) Air-conditioning basic works
  - Connecting pipings
- 3) Air-conditioning system design
- 4) Cooling and heating
  - Electric circuit
  - Mechanism and function of air-conditioners
- 5) Advanced system design

### 5. FACILITIES AND INSTITUTIONS

Sakai Plant, Daikin Industries, Ltd.

### DESIGN AND MANUFACTURING OF CARGO HANDLING EQUIPMENT

荷役機械の設計・製造

#### PERIOD

October 26, 1992 to March 21, 1993 (5 months)

NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

### 3. QUALIFICATIONS

- 1) be university graduates (faculty of engineering) or equivalent
- have 3 years' or more occupational experience on machine design or manufacturing\*
- be not more than 40 years old 3)
- have a sufficient command of spoken and written English\*\* 4)

A maintenance technician is improper to this course.

\*\* For an example, it is desirable to hold TOFEL (Test of English as a Foreign Language) score more than 500 points.

### 4. DESCRIPTION OF TRAINING

- 1) Lectures and Practice
  - Computer Literacy (66 hours)
  - Outline of Cranes (6 hours)
  - Fatigue of Metals (18 hours)
  - Strength of Materials (12 hours)
  - Basic Design of Cranes (18 hours)
  - Design of Crane Parts (18 hours)
    Crane Design by Personal Computer (18 hours)

  - Computer Aided Design (60 hours)
     Theory of Structures for Crane Design (6 hours)
     Planning of Cranes (18 hours)

  - Design of Crane Girder (12 hours)
     Design and Drawing of Crane Girder (24 hours)
  - Control and Maintenance of Electric Motor

  - (18 hours) Control of Cranes (12 hours)
  - Manufacturing Control, Testing, and Maintenance of Cranes (18 hours)
  - Heat treatment of Metals (6 hours)
  - Improving Technique of Industrial Control
  - (12 hours)
  - Non-Destructive Testing (18 hours)
  - Welding Technique (6 hours)

- Manufacturing of Machine Parts (12 hours)
- Outline of Maintenance (12 hours)
- Machine Condition of Diagnosis Technique (18 hours)
- Plant Visit (36 hours, 12 companies)
- Observation Tours

### **FACILITIES AND INSTITUTIONS**

- 1) Kitakyushu International Training Association
- Kyushu International Centre, JICA 2)
- Hamada Heavy Industries Ltd. 3)
- Kyushu Institute of Technology 4)
- 5) Related Industries

# OIL HYDRAULICS AND ITS APPLICATION 油田とその応用

#### PERIOD

November 2, 1992 to March 26, 1992 (5 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

### QUALIFICATIONS

- be those who have occupational experience of planning, design, use or maintenance on hydraulic equipment.
- be those who are university graduates or have the equivalent academic background. 2)
- have a sufficient command of spoken and written English. 3)
- be thirty five (35) years of age or less. 4)
- be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the training.

### DESCRIPTION OF TRAINING

- 1) Lectures
  - Introduction to Oil Hydraulics
  - Construction and Function of its Elementary Components
  - Basic Conception in Application of Hydraulic System
     Actual Application of Hydraulic System in Various Fields
     Advanced Hydraulic System

  - Maintenance Techniques and its Practice in Actual Hydraulic System
- 2) Field Study
  - Application of Hydraulic SystemPlant Visits
- 3) Study Trip

### **FACILITIES AND INSTITUTIONS**

- Kitakyushu International Training Association, 1)
- Mitsubishi Heavy Industries, Shimonoseki Ship Yard, Nippon Steel Yahata Works, Japan Casting and Forging Corp., Mitsubishi Nagasaki Machinery Manufacturing Corp. Hydraulic Unit Manufacturers and other several companies

#### REMARKS 6.

#### INSPECTION AND TESTING TECHNIQUES FOR HOUSEHOLD 雷気製品検査技術 ELECTRICAL APPLIANCES

### PERIOD

September 24, 1992 to December 2, 1992 (2.5 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

#### QUALIFICATIONS

- Testing staff belonging to Government Inspection Organizations, or Public Institutions authorized by the Government Inspection Organizations, or under the control of the Government
- University graduates majored in Electrical, Electronics, Mechanical Engineerings or the equivalent 2)
- Occupational experience of more than 3 years
- Between 25 and 40 years of age 4)
- Good working knowledge of English

### DESCRIPTION OF TRAINING

- Lectures 1)

  - Introduction to Export Inspection System
    Summary of Sampling Inspection Method
    Outline of Japanese Legal Requirements
- 2) Lectures and practical training
  - Technology transfer (fundamental techniques) of inspection & testing for General Electric Heaters, lighting equipment, General Communication Equipment and Cooking Appliance, General Electric Rotating Machinery, etc.

    — Introduction of techniques in using general type of testing equipment
- Observation tour
  - Related manufacturers

### **FACILITIES AND INSTITUTIONS**

- International Trade and Industry Inspection Institute, Ministry of International Trade and Industry 1)
- JMI Institute 2)
- Japan Electrical Testing Laboratory (JET)
- Tokyo International Centre (Hatagaya), JICA

### SHIPBUILDING, REPAIRING AND MAINTENANCE

船舶建造メンテナンス

### 1. PERIOD

January 7, 1993 to December 6, 1993 (11 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Twenty (20)

#### QUALIFICATIONS

- be university graduate who majored in engineering and have more than three (3) years of occupational experience in shipbuilding, repairing and maintenance
- be not less than thirty five (35) years old 2)
- have a sufficient command of spoken and written English 3)
- be in good health, both physically and mentally 4)
- not be serving as a military personnel. 5)

#### DESCRIPTION OF TRAINING

- **Obligatory Subjects** 
  - Basic planning I, II
  - Basic designHull design

  - Outfitting design
  - Ship repair

  - Marine engine
    Marine Electrical equipment
  - Marine electronics
  - Computer application in shipbuilding

  - Outline of special purpose ship
     Automation & energy saving methods on ships
  - Quality assurance in shipyards
  - International cooperation concerning shipbuilding
  - International convention on ship safety & environmental preservation
  - Special lecture

- Optional Subjects A
  - Hull construction I, II
  - Outfitting process
  - Production control & shipyard
  - management
  - Standardization in shipyards Safety control in shipyards
  - Rationalization and modernization in shipyards
- Optional Subjects B
  - Maintenance of ship machine I, II
  - Systems to secure ship safety
  - Ship safety standards I, II
  - Approval of plans I, II
  - Field survey and supervision I, II
  - Recent inspection technology and equipment
- Observation study tours 4)
- Practice at shipyard on related organization 5)

#### **FACILITIES AND INSTITUTIONS**

- Maritime Technology and Safety Bureau, Ministry of Transport
- Overseas Shipbuilding Cooperation Centre

### MOTORIZATION モークリゼーション

### 1. PERIOD

May 18, 1992 to July 13, 1992 (2 months)

### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

### 3. QUALIFICATIONS

- 1) University graduates
- Should have basic knowledge of automotive engineering with administrative experience of more than 3 years
- 3) Over 25 and under 40 years of age
- 4) Good working knowledge of English

### 4. DESCRIPTION OF TRAINING

- 1) Introduction
- 2) Motor industry and relevant policies in Japan
- 3) Motorization and vehicles in future
- 4) Technical knowledge on automobile engineering
- 5) Pollution and automobiles
- 6) Safety and automobiles
- 7) Observation tours

### 5. FACILITIES AND INSTITUTIONS

- 1) Japan Automobile Research Institute (JARI)
- 2) Tsukuba International Centre, JICA

# RENOVATION OF INDUSTRIAL EQUIPMENT

設備のリノベーション

### 1. PERIOD

February 15, 1993 to July 10, 1993 (5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

### 3. QUALIFICATIONS

- be those who have more than five years experience in equipment design, construction or maintenance in the field of process industries such as chemical, cement, oil refainary, iron and steel plant.
- be those who graduated from the department of technology of university or have the equivalent academic background.
- have a sufficient command of spoken and written English.
- 4) be forty (40) years of age, or less.
- be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the training.

### 4. DESCRIPTION OF TRAINING

- 1) Maintenance and Renovation of Equipment
- 2) Technology Required for Planning of Equipment Improvement
- 3) Relevant Instrumentation
- 4) Design and Practice of Heat Exchangers

### . FACILITIES AND INSTITUTIONS

- 1) Kitakyushu International Training Association
- 2) Krosaki Corporation
- 3) Takada Corporation
- 4) Nippon Steel Corporation
- 5) Mitsubishi Kasei Corporation, Ltd.
- 6) Shinnippon Nondestructive Inspection Co., Ltd.

### TEXTILE MACHINERY INDUSTRIES II - 繊維機械工業 II

### 1. PERIOD

September 3, 1992 to October 30, 1992 (2 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

### QUALIFICATIONS

- be university graduates (preferably B. S. in Textile Engineering) or equivalent academic achievements with the managerial experience of at least five (5) years in production,
- be presently engaged in the production of Textile Goods, 2)
- between 27 and 40 years of age, 3)
- good working knowledge of English. 4)

### 4. DESCRIPTION OF TRAINING

- Lectures and practical training 1)
  - Textile industry in economical viewpoint
  - Fiber testing method
  - Spinning & weaving, warping & sizing, winding, and dyeing & finishing machines
  - Spinning & weaving plants
  - Production control
- Observation tours

### **FACILITIES AND INSTITUTIONS**

- Toyoda Automatic Loom Works, Ltd. 1)
- Aichi Prefectural Textile Research Centres 2)
- REMARKS 6.

## INSPECTION AND TESTING TECHNIQUES FOR TEXTILE PRODUCTS

繊維製品検査技術

#### 1. PERIOD

January 11, 1993 to March 21, 1993 (2.5 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

### QUALIFICATIONS

Applicants should:

- belong to Government Inspection Organizations or Public Inspection Institutions
- be college graduated or equivalent 2)
- have occupational experience of more than 3 years 3)
- be between 25 and 40 years of age 4)
- have good working knowledge of English 5)

#### **DESCRIPTION OF TRAINING**

- 1) Lectures
  - Introduction to the Export Inspection System
  - Introduction to the Household Goods Quality Labelling Law (by III)

  - Introduction to the Consumer Product Safety Law Introduction to the Law for the Control of Household Products Containing Harmful Substances Explanation of information on quality required in the trading
- Lectures and Practical Training
  - Technical transfer (fundamental techniques) of inspection and testing for the above Fabrics (include knitting fabric)
    - \* Sewing products
  - Introduction of techniques in using general type of testing equipment
- Visit to the manufacturers related to this course

### **FACILITIES AND INSTITUTIONS**

- International Trade and Industry Inspection Institute, Ministry of International Trade and Industry 1) (IIII)
- Japan Synthetic Textile Inspection Institute Foundation 2)
- Japan Spinners Inspection Foundation 3)
- 4) Japan Knitting Inspection Institute Foundation
- Japan Sewing Goods Inspection Foundation 5)
- Tokyo International Centre (Hatagaya), JICA

### WOOD BASED MATERIALS APPLICATION TECHNOLOGY

木質材料高度 利用技術

### 1. PERIOD

August 20, 1992 to December 10, 1992 (4 months)

### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

### QUALIFICATIONS

- 1) University graduates or equivalent
- Occupational experience of more than S years in the field of wood industry, belonging to a governmental organization
- Under 40 years of age 3)
- Proficent in spoken and written English.

### DESCRIPTION OF TRAINING

- Lectures and Observation
  - Silviculture and Timber Production
     Utilization of Wood Resources

  - Production Technology of Improved Wood
  - Wood Materials and Surface Finishing Wood Materials and Adhesives

  - Research of Wood Technology
- 2) Practical Training (4 days)

### 5. FACILITIES AND INSTITUTIONS

- Nagoya Regional Forest Office, Forestry Agency
- Universities and public institutes 2)
- Related industries

# CERAMICS DEVELOPMENT TECHNOLOGY

**陶磁器開発・活用技術** 

#### 1. PERIOD

April 16, 1992 to October 30, 1992 (7 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

### 3. QUALIFICATIONS

- be university graduates or the equivalent, and have more than three (3) years practical experience at educational or research institutions related to ceramics,
- be working at the ceramic manufacturing plant as an engineer or institutions of ceramic R & D as a resercher, and not be craftsmen,
- 3) be between twehty-five (25) and forty (40) years of age,
- 4) be proficient in spoken and written English. Experience has shown that many participants find themselves unable to make progress in their training because of the inadequate knowledge of English,
- 5) be in good health, both physically and mentally, to undergo the course of training. Pregnancy is regarded as a disqualifying condition for participation in the training.

### 4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Raw materials
  - Preparation of bodies
  - Glaze
  - Screen printing (transfer paper)
  - Firing
  - Related to pottery & porcelain wares
  - Other subjects
- 2) Observation tours

### 5. FACILITIES AND INSTITUTIONS

- 1) Government Industrial Research Institute, Nagoya
- 2) Tajimi City Pottery Design and Technical Centre
- 3) Institute for Comparative Pottery, Chukyo Junior College
- 4) Ceramic Industries

#### PACKAGING ENGINEERING 包装技術

#### PERIOD

August 25, 1992 to October 18, 1992 (2 months)

NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

### 3. QUALIFICATIONS

- Packaging engineers directly engaged in package industry at present
- University graduates or its equivalent 2)
- Experience for more than 3 years in the relevant field 3)
- Good working knowledge of English 4)
- Under 40 years of age

### 4. DESCRIPTION OF TRAINING

- 1)
- Packaging Materials

   Corrugated boards and boxes
  - Paperboard containers and printing
  - Treated papers and cellulose films
  - Plastic films
  - Plastic containers
  - Metal cans
  - Glass bottles
- \* 2) and 3) are optional subjects.
- Transport Packaging Techniques
  - Packaging plan
  - Transport packaging and wooden boxes

  - Outer packaging and its machines
     Testing Methods and equipments
     Packaging standardization
- Consumer Packaging Techniques

   Automation in Packaging operations and machines

   Moisture-proof and gas-barrier packaging

  - Packaging design (graphic)
  - Safety and sanitation in packaging
  - Food packaging techniques
- Technical Visit and Practical Training

### **FACILITIES AND INSTITUTIONS**

- 1) Japan Packaging Institute (JPI)
- 2) Tokyo International Centre (Hatagaya), JICA

# ADVANCED INDUSTRIAL TECHNOLOGY 產業技術研究

#### 1. PERIOD

August 31, 1992 to July 29, 1993 (11 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

### 3. QUALIFICATIONS

- 1) University graduates in the field of industrial science and technology
- 2) Occupational experience of more than 3 years as a researcher
- 3) Over 25 and under 35 years of age
- 4) Sufficient command of spoken and written English

### 4. DESCRIPTION OF TRAINING

1)	Orientation to laboratories . Introduction of laboratories t	o which participants a	re assigned according t	. 1 week o their individual study
	subjects.			

2)	Individual studies	y by	the following 11 institutes.	weeks Applicants should
	select I subject out of them.		1	A STATE OF THE STA

National Resaerch Institute of Metrology 3 subject	ts
- Mechanical Engineering Laboratory	ŧŝ
- National Chemical Laboratory for Industry	ts
- Fermentation Research Institute	ιs
Research Institute for Polymers and Textiles	ts
- Geological Survey of Japan	τ
- Government Industrial Development Institute, Hokkaido 2 subject	ts
- Government Industrial Research Institute, Tohoku 1 subject	:t
- Government Industrial Research Institute, Nagoya 2 subject	ts
- Government Industrial Research Institute, Osaka 4 subject	ts
- Government Industrial Research Institute, Chugoku 1 subject	t

### 5. FACILITIES AND INSTITUTIONS

- 1) Japan Industrial Technology Association
- 2) Agency of Industrial Science and Technology (AIST)
- 3) Tsukuba International Centre, JICA

# ENERGY

### ENERGY CONSERVATION 省エネルギー

#### 1. PERIOD

October 13, 1992 to December 3, 1992 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Thirteen (13)

### 3. QUALIFICATIONS

- be university/college graduates or equivalent and be presently employed in government, governmental institutions, industrial associations, or companies,
- be presently engaged in work in the energy field or expected to be engaged in such work after returning to the country,
- 3) Good working knowledge of English.

#### **DESCRIPTION OF TRAINING**

- Lecture The Aller W 1)
  - Energy Situation in Japan
  - Energy Conservation in Major Industries
     Energy Management in Industry
     Technology Development
- Practice : 2)
  - Energy Management in Industry
- Presentation
  - Energy Conservation Promotion of Model Factory
  - Country Report
- Observation
  - Successful Cases of Energy Conservation
  - -- Energy Conservation Equipment Manufacturer

### 5. FACILITIES AND INSTITUTIONS

- Energy Conservation Center, Japan (ECC) 1)
- Agency of Natural Resources and Energy, Ministry of International Trade and Industry 2)
- Tokyo International Centre (Hatagaya), JICA

### ENERGY MANAGEMENT エネルキ

#### PERIOD

January 25, 1993 to June 11, 1993 (5 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ninc (9)

### QUALIFICATIONS

- 1) be university graduates or equivalent
- be those who have energy management experience or will be in charge of energy management in the near future
- be not more than 35 years old
- have a sufficient command of spoken and written English 4)
- be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the training.

### DESCRIPTION OF TRAINING

- Lectures
  - Introduction of Energy Management

  - Basic ThermodynamicsBasic Automatic Control
  - Heat Balance
  - Energy system for Environmental Pollution Control
  - Basic theory of Electricity

  - Methodology of Energy Conservation
     Energy Conservation Measures for Industrial Furnaces
- Practical Training
  - Automatic Control
  - Heat Measurement
  - Basic theory of Electricity
  - Methodology of Energy Conservation
- 3) Plant Visits and Observation Tours

### **FACILITIES AND INSTITUTIONS**

- Kyushu International Training Association
- Kyushu Institute of Technology 2)
- Fukuoka Industrial Technology Centre 3)
- Related Industries

### HYDRO-ELECTRIC POWER ENGINEERING II (Civil Engineering) 水力発電Ⅱ

#### PERIOD

May 5, 1992 to June 20, 1992 (1.5 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

### QUALIFICATIONS

- be civil engineers who are presently employed at governmental institutions or private companies in the field of hydro-electric power supply,
- be technical college graduates or equivalent and have more than five (5) years and less than ten (10) years of practical experience,
- have sufficient command of spoken and written English. 3)

#### **DESCRIPTION OF TRAINING**

- Lectures:

  - Japan's Electric Power Industry
     Orientation for EPDC's Programme
  - Construction Record Films
  - Present Situation and Future Prospect of EPDC
  - Planning of Power System
  - Operation and Maintenance of Hydro-electric Power Plant
  - Design and Construction of Hydro Power Station, Substation facilities
  - Operation and Maintenance of Hydro-electric Power Plant
  - Cavern Analysis Design of Civil Facility by CAD
  - Others
  - - Central Load Dispatching Control Office
    - Hydro-electric Power Station

    - Engineering & Research Institute
       Sea Water Pumped Storage Project
    - Others

#### **FACILITIES AND INSTITUTIONS**

- Japan Electric Power Information Center, Inc. 1)
- Electric Power Development Co., Ltd.
- Agency of Natural Resources and Energy, Ministry of International Trade and Industry (MITI) 3)
- Tokyo International Centre (Hatagaya), JICA

### OPERATION AND MAINTENANCE OF COAL-FIRED THERMAL **POWER PLANTS**

#### 1. PERIOD

September 29, 1992 to November 24, 1992 (2 months)

#### NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

### QUALIFICATIONS

- 1) Technical college graduates or equivalent, majored electric/mechanical engineering
- 2) Qualified in their respective fields (Electrical and mechanical engineering in operation and maintenance)
- 3) Occupational experience of more than 7 years
- 4) Between 30 and 40 years of age
- Good command of spoken and written English

#### **DESCRIPTION OF TRAINING**

- 1) Lectures and practical training

  - Japanese electric power development policy
     Operation and maintenance of coal-fired thermal power station
  - Simulation training
  - Countermeasures for environmental preservation
- Observation tours

  - Various types of power station
     Coal-fired thermal power stations
  - Manufacturers of equipment related to Coal Fired Thermal Power Industry

### **FACILITIES AND INSTITUTIONS**

- 1) Japan Electric Power Information Centre, Inc.
- Electric Power Development Co., Ltd.

### NUCLEAR POWER GENERATION 原子力発電

#### PERIOD

January 11, 1993 to March 18, 1993 (2 months)

### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

### 3. QUALIFICATIONS

- 1) University graduates or equivalent
- Be nuclear, electrical and/or mechanical engineers presently employed at governmental institutions
  or private companies in the field of electric power generation (preferably, nuclear power generation)
- 3) Occupational experience of more than 3 years
- 4) Be under 45 years of age
- 5) Good working knowledge of English

#### 4. DESCRIPTION OF TRAINING

- 1) Lectures
  - Introduction of Japan's nuclear power generation
  - General features of nuclear power plant
  - Construction
  - Operation/safety management
  - Nuclear fuel cycle
- 2) Visits and observation tours
  - Nuclear power stations
  - Manufacturing plants

### 5. FACILITIES AND INSTITUTIONS

- 1) Japan Electric Power Information Center, Inc. (JEPIC)
- 2) The Japan Atomic Power Company (JAPC)
- 3) Agency of Natural Resources and Energy, Ministry of International Trade and Industry
- 4) Tokyo International Centre (Hatagaya), JICA

### ELECTRIC POWER MANAGEMENT II 電気事業経営 II

#### PERIOD

September 10, 1992 to October 24, 1992 (1.5 month)

NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

### QUALIFICATIONS

- be manager-class engineers in electric power utilities with at least ten-year working experience or
- be between thirty-two (32) and fifty (50) years of age,. 2)
- have a sufficient command of spoken and written English, and 3)
- be in good health, both physically and mentally, to undergo the course of training.

### **DESCRIPTION OF TRAINING**

- 1) Lectures

  - Marketing Activities
     Planning of Electric Power Supply
     Planning of Electric Power Sourse Development
     Power System Operation

  - Personnal management and employee training
- 2) Observation tours

### FACILITIES AND INSTITUTIONS

- Japan Electric Power Information Centre, Inc.
- 2) Chubu Electric Power Co., Ltd.
- Agency of Natural Resources and Energy, Ministry of International Trade and Industry

### ELECTRIC POWER DISTRIBUTION ENGINEERING 配電技術

#### 1. PERIOD

August 25, 1992 to November 06, 1992 (2.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

#### 3. QUALIFICATIONS

- 1) Technical college graduates or equivalent
- 2) Qualified in respective fields
- 3) Professional experience of more than 5 years
- 4) Between 25 and 35 years of age
- 5) Good working knowledge of English

### 4. DESCRIPTION OF TRAINING

- 1) Lectures and practical training
  - Japan's electric power policy
  - Transmission, transformation and distribution lines
  - Design, construction and maintenance of transmission lines
  - Distribution facilities and work
  - Indoor and outdoor wiring, etc.

### 2) Observation tours

- Various types of power stations
- Various facilities related to power distribution
- Manufacturers of equipments related to power distribution

### 5. FACILITIES AND INSTITUTIONS

- 1) Agency of Natural Resources and Energy, Ministry of International Trade and Industry
- 2) Japan Electric Power Information Center, Inc.
- 3) Kansai Electric Power Co., Inc.

## COAL SCIENCE AND TECHNOLOGY 石炭資源開発・利用

#### PERIOD

September 28, 1992 to December 9, 1992 (2.5 months)

### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

#### 3. QUALIFICATIONS

- have three years' occupational experience or more in the field of coal science and technology
- be university graduates or equivalent academic background 2)
- have a sufficient command of spoken and written English 3)
- 4) be not more than 45 years of age
- be in good health, to undergo the course of training. Pregnancy is regarded as a disqualifying 5) condition.

### **DESCRIPTION OF TRAINING**

- 1) Lectures (basic & advanced)
  - Coal Geology
  - Coal Mining Engineering Coal Chemistry

  - Mechanical Engineering for Coal Utilization
     Environmental Engineering for Coal Utilization
- Experimental study 2)
- Observation
  - Coal mines and factories in Hokkaido, Tokyo (Tsukuba etc.) & Kyushu

#### **FACILITIES AND INSTITUTIONS**

- I) Hakozaki (Main) Camps, Faculty of Engineering and Faculty of Science, Kyushu University
- Institute of Advanced Material Study, Kyushu University

### COAL MINING AND PREPARATION 採炭・選炭技術

#### PERIOD

August 25, 1992 to November 1, 1992 (2 months)

#### NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

### QUALIFICATIONS

Applicants should:

- 1) be university or college graduates who have basic knowledge of coal mining or the equivalent,
- be mining, mining engineers, preparation engineers or other engineers concerned with coal mining industry who are presently employed at government institutions or private companies in the field of coal mining,
- have more than five (5) years of practical experience, 3)
- have a sufficient command of spoken and written English, 4)
- be between approximately thirty-five (35) and forty-five (45) of age, and
- be in good health, both physically and mentally, to undergo the course of training.

#### FACILITIES

The course will consist of the following:

- - Coal Mining History of Japan and Recent Technology
     Coal Policy of Japan
     General and Practical Technology of

  - Coal Mining Roadway Drivage Coal Preparation
- **Observation Tours**

Visits to:

- Main collieries Taiheiyo, Akabira and Ikeshima
- National Institute for Research and Environment
- Manufacturers of Related Equipments
- 3) Presentation of Country Report
- 4) Intensive Japanese Conversation Lesson (2 weeks)

#### **FACILITIES AND INSTITUTIONS**

Japan Technical Cooperation Center for Coal Resources Development (JATEC)

## NUCLEAR TECHNOLOGY 原子力基礎実験

#### PERIOD

May 14, 1992 to July 22, 1992 (2 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

## 3. QUALIFICATIONS

- be college graduates or university graduates who have majored in science or technology, or those who have equivalent technical knowledge,
- 2) be working or going to work in organizations concerned with nuclear technology fields,
- 3) have a sufficient command of spoken and written English, this item will be checked strictly,
- 4) be under forty (40) years of age

## 4. DESCRIPTION OF TRAINING

1) Lectures

 Basic Subjects: Nuclear Physics, Nuclear Chemistry, Radiation Physics, Radiation Chemistry, Radiobiology and Biological Effects, Radiation Measurement, etc..

 Radiological Protection: Principle of Radiological Protection, Safety Handling of Radioactive Substances, Radioactive Waste Management, etc..

c) Radiation and Radioisotope Application:
Radiation Sources, Isotope Production and Quality Control, Applications in Industry, Applications in Agriculture, etc..

d) Reactor Engineering:
General Concept of Nuclear Reactors, Type of Nuclear Reactors, Nuclear Fuels and Materials, Reactor Safety, Reactor Physics, Reactor Dynamics and Control, etc..

## 2) Laboratory Exercises:

a) Basic Experiments:

Beta-ray Measurements, Gamma-ray Spectrometry, Neutron Measurement etc..

 Radiation Monitoring: Gamma Exposure Survey, Air-borne Activity Measurement, Surface Contamination Measurement and Decontamination etc..

Radiation and Radioisotope Applications: Radiochemical Separation, Autoradiography, Gamma-ray Radiography, Neutron Radiography, Gamma-ray Spectroscopy, Activation Analysis etc..

d) Reactor Engineering: Control Rod Calibration, Reactor Operation

- 3) Practical Exercises
- 4) Observation

#### 5. FACILITIES AND INSTITUTIONS

- 1) Japan Atomic Energy Research Institute (JAERI)
- 2) Tokyo International Centre (Hatagaya), JICA

## SEMINAR ON NUCLEAR SAFETY AND REGULATION

原子力安全規制行政セミナー

#### 1. PERIOD

October 19, 1992 to November 15, 1992 (1 month)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

## 3. QUALIFICATIONS

- 1) Senior officers in charge of national nuclear safety regulation and control,
- 2) University graduates or equivalent with at least five years' experience in his/her job,
- 3) A sufficient command of spoken and written English.

## 4. DESCRIPTION OF TRAINING

- 1) Lectures
  - Nuclear Energy and Its Safety Administration

- Nuclear Safety Regulation in Japan

Safety Regulations on the Application of Radiation and Radioiotopes

Safety Regulations on the Research Reactors

- Safety Regulations of Nuclear Fuel Facilities and Transportations
- Safeguards and Physical Protection of Nuclear Materials in Japan
   Safety Regulation and Administration for Commercial Nuclear Power Plants in Japan
- Safety Regulation on the Management and Disposal of Radioactive Wastes
- Off Site Disaster Preventive Measures for Nuclear Power Plants
- 2) Observation and study tour
- 3) Presentation of Country Reports and Discussion

## 5. FACILITIES AND INSTITUTIONS

- 1) Nuclear Safety Bureau, Science and Technology Agency
- 2) Japan Atomic Industrial Forum
- 3) Tokyo International Centre (Hatagaya), JICA

## **GEOTHERMAL ENERGY (ADVANCED) 舳熱エネルギーアドバンス**

## PERIOD

August 17, 1992 to December 13, 1992 (4 months)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

## QUALIFICATIONS

- be JICA ex-participants who have successfully completed the "Geothermal Energy" Course held at Kyushu University
- or have been engaging in the field of geothermal energy development for three years at least 2)
- 3) be leading staff in their organization
- 4) be over twenty-five (25) and under fourty-five (45) years of age
- have a sufficient command of spoken and written English, 5)
- 6) be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifing condition.

## **DESCRIPTION OF TRAINING**

- Lectures (Compulsory)
  - Energy Demand and Supply in Japan
  - Fundamental Conception of Geothermal Development

  - Geothermal GeologyFluid Inclusion Studies
  - Hydrothermal Geochemistry
  - Geothermics and Geothermal System
  - Geothermal Hydrology

  - Isotope Geochemistry
     Economic Aspects of Geothermal Development
  - Direct Uses of Geothermal Energy
  - Thermodynamics
  - Heat Transfer
  - Chemical Analysis of Geothermal Fluids
  - Geochemical Exploration
  - Chemistry of Scale Formation
  - Assessment of Geothermal Resources
     Drilling Technology
     Geothermal Power Plant Engineering

  - Application of Pocket Calculator to Geothermal Reservoir Engineering
  - Fundamentals of Corrosion
  - **Environmental Problems and Countermeasures**
- Experimental study
- 3) Observation

## **FACILITIES AND INSTITUTIONS**

- Geothermal Research Centre, Faculty of Engineering, Kyushu University
- Hatchobaru Geothermal Power Station, Kyushu Electric Power Co., Inc.

# RADIOLOGICAL PROTECTION FOR RADIATION SAFETY OFFICERS AT NUCLEAR FACILITIES 放射線安全管理実務者

## 1. PERIOD

January 25, 1993 to March 3, 1993 (1 month)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

## 3. QUALIFICATIONS

- University graduates who have majored in science or technology, or those who have equivalent technical knowledge
- Radiation safety officers or related officers working for organizations or facilities concerned with nuclear energy or utilization of radioisotopes
- 3) Sufficient command of spoken and written English

#### 4. DESCRIPTION OF TRAINING

- 1) Lectures
  - A) Basic knowledge for radiation protection
  - B) Environmental monitoring, personal dosimetry and radiation measuring instruments
- Laboratory exercises Radiation measurement practice using ion chamber, GM counter, ZnS(Ag) counter
- Field exercises
   Maintenance and calibration of radiation monitoring instruments
- Observation tours

## 5. FACILITIES AND INSTITUTIONS

- 1) Power Reactor and Nuclear Fuel Development Corporation (PNC)
- 2) Tokai Works, PNC O-arai Engineering Centre, PNC
- 3) Tsukuba International Centre, JICA

## COMMERCE AND TRADE

## MEASURES FOR SMALLER INDUSTRIES II 中小企業対策『

## 1. PERIOD

January 7, 1993 to March 24, 1993 (3 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

## 3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Qualified in the respective fields
- 3) Professional experience of more than 5 years
- 4) Under 40 years of age
- 5) Good working knowledge of English

#### 4. DESCRIPTION OF TRAINING

- Lectures and discussions

   Japanese measures pertaining to promotion of small businesses, especially particulars of development of smaller businesses and practices in financing, grouping, structural improvement and managerial/technical guidance.
- 2) Observations
- 3) Study trips

## 5. FACILITIES AND INSTITUTIONS

International Cooperation Service Center (ICSC)

## No. 244 CONSULTANCY SERVICE FOR SMALL INDUSTRIES 中小企業診問

## 1. PERIOD

October 29, 1992 to March 6, 1993 (4.5 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

## 3. QUALIFICATIONS

- be such personnel assigned to business diagnostic services, management consultancy, and extension services at the organization dealing with development and promotion of small scale industries,
- 2) be university graduate or those who possess equivalent professional qualifications in this field. In addition, the basic knowledge to prepare financial statement of a business corporation is prerequisite condition for participation in this training course.
- have at least three (3) year experiences of such activities as mentioned above, having already undergon
  the basic training on business management,
- 4) between 30 and 45 years of age
- 5) good working knowledge of English.

## 4. DESCRIPTION OF TRAINING

- 1) Lectures and Discussions:
  - General knowledge & Techniques of Business Management
  - Techniques of Conducting Diagnosis
  - Status of Small Business in Japan
  - Japanese Governments Schemes for Small Business Promotion
- Observation tours

## 5. FACILITIES AND INSTITUTIONS

- 1) Aichi Industrial Research Association
- 2) Aichi Prefectual Small Business Guidance Center
- 3) Aichi Small Scale Enterprise Promotion Corporation

## PRODUCTION MANAGEMENT (THEORY & PRACTICE ON WORK IMPROVEMENT) 生產性向上技術

## 1. PERIOD

October 19, 1992 to March 6, 1993 (5 months)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

#### QUALIFICATIONS

- 1) Have more than 5 years' occupational experience in the field of Production management,
- be graduate from a faculty of engineering or have the equivalent academic background,
- 3) Have a sufficient command of spoken and written English,
- 4) Be under 40 years old,
- Be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as disqualifying condition for the participation in the training.

## DESCRIPTION OF TRAINING

- Lecture on basic subject to improve productivity and job improvement practices on factory floors.
  - Productivity and Control Techniques
  - Typical Organization of Japanese Companies
  - Factors Affecting Productivity
  - Production Management
  - Value Engineering
  - Industrial Engineering
  - Work Improvement
  - Plant Maintenance and Total Productive Maintenance
  - Single Arrangement and Poka-Yoke
  - Two-Day Improvement Activity
  - Quality Control and Statistical Methods
  - QC Circle Activity
  - Engineering Economy
  - SE/OR
  - Computer Utilization in Enterprize
  - CAD System.
  - Productivity Improvement Activity
  - Basic Production Planning
  - Employee Education
  - 20 keys (Items) to Workplace Improvement
     QC N-7 Tools etc.
- Field trips

## FACILITIES AND INSTITUTIONS

- 1) Kitakyushu International Training Association
- 2) Toto Co., Ltd.
- 3) Yaskawa Electric Mfg. Co.,
- 4) ASA Systems Inc.
- 5) Mishima Kosan Co., Ltd., etc.

## PRODUCTIVITY MANAGEMENT 実践的総合生產性向土

#### 1. PERIOD

May 11, 1992 to July 12, 1992 (2 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

#### 3. QUALIFICATIONS

- 1) nominated by their government in accordance with the procedures mentioned in IV-2 below
- officials presently in charge of plant management in manufacturing sector in central or provincial governments or in local bodies, with five (5) or more years of experience in this field
- 3) university graduates or equivalent
- 4) proficient in spoken and written English. Experience has shown that many participants find themselves unable to make progress in their training because of inadequate knowledge of English
- 5) over thirty (30) and under forty (40) years of age
- 6) in good health to undergo the course of training. Pregnancy is regarded as a disquali fying condition.

## 4. DESCRIPTION OF TRAINING

- 1) the plans for improvement of plant-level productivity.
- 2) the production management techniques and application methods.
- 3) the practical methods of quality control, cost control, and delivery time control.
- 4) the skills for improvement of overall plant operations for higher productivity.

## 5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Centre, JICA
- 2) Japan Productivity Centre

## SEMINAR SHIPBUILDING MANAGEMENT

## PERIOD

September 21, 1992 to November 27, 1992 (2 months)

NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

## QUALIFICATIONS

- 1) University graduates or equivalent
- 2) More than 8 years occupational experience in the field of management in the governmental, public or private organizations
- 3) Between 35 and 50 years of age
- 4) Good working knowledge of English
- Not serving as a military personnel 5)

## **DESCRIPTION OF TRAINING**

#### Lectures

- Outline of Shipbuilding Industries and Shipbuilding Management in Japan

  Present Situation of Shipbuilding
  - Industries
  - Shipbuilding Related Industries

  - Ship Classification Society
    Maritime Credit Corporation and Coastal Vessels
  - Introduction of Management Control
  - Specific Characteristics of Shipyard Management
- Shipyard Management and Control of b) **Business Activities** 
  - Control of New Order Conclusion
  - General Conception of Financial Management
  - **Business Fund and Profit Control**
  - Yard Facilities Procurement and Operation Fund
  - Planning, Operation and Control of Budget
  - Cost Accounting Control
  - Analysis of Shipyard Management
  - Evaluation of Business Activities

## **FACILITIES AND INSTITUTIONS**

- 1) Ministry of Transport
- Overseats Shipbuilding Co-operation Centre

Production Control in Shipyard c) Management

造船経営管理セミナー

- Significance, Role and Problems of Design Work
- Scheduling in Design Department
- Quality Control in Design Work Standardization
- Material Control
- Role of Production Department
- Safety Control
- Quality Control in Production
- Production Control and Scheduling
- Labor Management
- Total Quality Control Repair Job Site Control
- International Cooperation d)
  - **Example of International Cooperation**
  - **Economic Cooperation Fund**
- Announcement of Country Reports and Discussions

Observation and Study Tour The purpose of observation and study tour is to introduce participants systems of management and facilities of shipyards, and related industries.

## INVESTMENT PROMOTION SEMINAR (1) 投資促進セミナー(1) (Asian Countries)

## PERIOD

August 27, 1992 to September 30, 1992 (1 month)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Éleven (11)

#### QUALIFICATIONS

- University graduates or the equivalent
- Officials of governmental or semi governmental organizations, or equivalent position in economic promotion organizations with occupational experience of more than five (5) years
- 3) Under 40 years of age
- Good working knowledge of English

#### **DESCRIPTION OF TRAINING**

Lectures and Discussion

Purpose: To learn Japan's overseas investment promotion policy and measures with special relevance to the organizations conducting direct investment promotion.

Outline of Japan's Overseas Direct Investment

Japanese Government Action to Promote Overseas Direct Investment

Promotion for Overseas Direct Investment by other organizations Problems in the promotion of the overseas direct investment c)

Purpose: To analyze the problems hindering the international investment and search for the future

plans of incentives to improve direct investment to the participants' countries. Legislative Problems

· Improvement of Infrastructure

Managerial Problems in multinational Enterprises

2)

Purpose: To analyze present situation and incentive of the participants' countries and discuss the problems among participants tutored by the expert of global trade and investment problems

Investment incentives in participants' country

- Future programs in the promotion of the overseas investment to participants' country
- Observation Tours and Field Trips

## **FACILITIES AND INSTITUTIONS**

- 1) The World Trade Centre of Japan, Inc. (WTC)
- Tokyo International Centre (Hatagaya), JICA

#### INVESTMENT PROMOTION SEMINAR (2) 投資促進セミナー(2) (Latin American Countries) II (ラテンアメリカ諸国)[

#### PERIOD

October 22, 1992 to December 5, 1992 (1.5 months)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

#### QUALIFICATIONS

- 1) University graduates or the equivalent
- Officials responsible for administration of international investment in governmental or semigovernmental organizations or equivalents in economic promotion organizations with experience of more than 5 years.
- 3) Under 40 years of age
- Good working knowledge of English and typing skills

#### **DESCRIPTION OF TRAINING**

- 1) Lectures and discussions
  - Outline of Japan's Overseas Direct Investment and the Organizations Conducting Direct Investment
    - Ministry of International Trade and Industry (MITI)
    - The Export-Import Bank of Japan
  - Japanese Government Actions to Promote Overseas Direct Investment
    - JETRO's Activities
    - PAC (Project Arrangement Coordination Consulting) Program
    - Investment Consulting by the Export-Import Bank of Japan
  - Promotion for Overseas Direct Investment by Other Organizations
    - Private Banks
    - Local Governmental Body (Prefecture/city)
    - KEIDANREN (Japan Federation of Economic Organizations)
  - Problems in the Promotion of the Overseas Direct Investment
    - Japanese Financial Institutions and International Monetary Issues - International Economic Relationships and Cultural Differences
    - Personnel Management and Corporate Decision Making Working System in Japan Improvement of Infrastructure

    - Project Assessment
- Research Assignment Independent Research, Paper Presentation and writing (Theme: Selection of Potential Japanese 2) investors through direct interviews)
- Country Report 3) (Report Presentation/Discussion)
- Observation Tours and Field Trips) 4)

## **FACILITIES AND INSTITUTIONS**

- World Trade Center of Japan, Inc. (WTC) 1)
- Tokyo International Centre (Hatagaya), JICA 2)

#### REMAKRS

## No. 250

## TRADE PROMOTION SEMINAR (1) (Asian & Pacific Countries)

## 1. PERIOD

May 21, 1992 to July 4, 1992 (1.5 months)

#### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

## 3. QUALIFICATIONS

- 1) University graduates or the equivalent
- 2) Senior officials of governmental or semi-governmental organizations in their respective field with experience of more than 5 years
- Under 40 years of age 3)
- Good working knowledge of English

#### DESCRIPTION OF TRANINNG

- Lectures and discussions
  - I. Japan's trade promotion Past & present

Purpose: To learn the past Japanese Export Promotion Policy and measures with special relevance to their feasibility of application in participants' countries

- History of Japan's International Trade
- b) Japanese enterprises' effort to export
- c) Trade Insurance Export Insurance
- d) Trade Policy of Japan - Past & present e) Aid to Export-Import
- Japan External Trade Organization (JETRO)

  - Chamber of Commerce
  - Industrial Associations
  - Trade Financing support to overseas investment

## II. Japan as a Market

Purpose: To learn the present situation of the Japanese economy and trade, especially its characteristics as a target of export from participants' countries.

- Japan as a Market
- Personnel Management and Corporate Decision Making --- Working System in Japan b)
- Businessmen's advices for entering the Japanese Market
- International Economic Relations and Cultural Differences

## III. Country Report (Presentation/Discussion)

- a) Japanese Financial Institutions and International Monetary Issues
- b) Development of Trade Relationships Japan, Asia and Pacific Nations

## IV. Country Report (Presentation/Discussion)

Purpose: To analyze present situation of the participants' countries and discuss the problems among participants tutored by the expert of each country

#### 2) Assignment

Thesis preparation and writing

Title: My Private View on Trade Promotion Measures/Policies of My Own Country

3) Observation tours and Field Trips

## 5. FACILITIES AND INSTITUTIONS

- The World Trade Centre of Japan, Inc. (WTC) 1)
- Tokyo International Centre (Hatagaya), JICA

## No. 251

## TRADE PROMOTION SEMINAR (2) 貿易振興セミナー(2) (African Middle-East & Carribean Countries) II (アフリカ・中近東・カリブ諸国) [

## PERIOD

January 7, 1993 to February 20, 1993

NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

## QUALIFICATIONS

- University graduates or the equivalent 1)
- Officials of governmental or semi-governmental organizations in their respective fields with more than 5 years of practical experience in the administration of international trade.
- Under 40 years of age
- Good working knowledge of English and typing skills

## **DESCRIPTION OF TRAINING**

- 1) Lectures and discussions
  - Japanese Export Promotion (in the past)

     History of Japan's International trade

     Japanese Enterprises, Effort to Export

    - Trade Insurance-Export Insurance

    - Trade Financing
      Administrative Guidance
      Aid to Export (Chamber of Commerce and Industry, Industrial Associations)
  - Japan as a Market-1
    - Import activities of JETRO
    - Japanese Companies and Business Society
       Personnel Management in Japan

    - Decision Making System in Japan
  - Japan as a Market-2
    - Marketing in Japan
    - -- International Marketing
    - Opening a Market
- Research Assignment Independent Marketing Research, Paper Presentation and Writing
- Country Report (Report Presentation/Discussion)
- Observation tours and Field Trips

## **FACILITIES AND INSTITUTIONS**

- The World Trade Centre of Japan, Inc. (WTC) 1)
- Tokyo International Centre (Hatagaya), JICA

## FOREIGN TRADE PRACTICE FOR LEADERS

## PERIOD

September 1, 1992 to December 3, 1992 (3 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eleven (11)

## 3. QUALIFICATIONS

- 1) University graduates or equivalent with occupational experience of more than 3 years
- Leading officers in administration of foreign trade 2)
- 3) No less than 26, and not more than 40 years of age
- Good working knowledge of English

## **DESCRIPTION OF TRAINING**

Lecture and practical training

- Theory, policy and structure of trade
- Business practice of trade transaction
- Function and system of customs
   Export insurance and inspection of export and import goods
- Foreign exchange and foreign trade finance
- Marine insurance - Transportation
- Dispute and settlement
- Communication

## **FACILITIES AND INSTITUTIONS**

- 1) Kobe International Association
- 2) Hyogo International Centre, JICA
- The Kobe Chamber of Commerce and Industries 3)
- 4) Kobe University
- 5) Kobe Customs House, Ministry of Finance

## No. 253 INTELLECTUAL PROPERTY RIGHTS IN TECHNOLOGY TRANSFERS

国際知的財産権

1. PERIOD

July 9, 1992 to October 10, 1992 (3 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

## QUALIFICATIONS

- Senior administrators directly in charge of registration intellectual property rights or the related field in their Governments,
- Professional experience of at least 5 years, 2)
- University graduates from the department of law, 3)
- 4) Good health both physically and mentally,
- Under 40 years of age, 5)
- Good working knowledge of English

## 4. DESCRIPTION OF TRAINING

Lectures, discussions, practical training

Industrial development and trade policies in Japan

- Intellectual properties and contracts

- Intellectual properties and contracts
  Legal problems related to international trade and technology transfer
  Japanese legal system on technology trade
  Patent act, utility model act, design act, patent act, copyright act, act providing special provisions for registration of program works, act concerning the layout of a semiconductor integrated circuit
  Practical exercises of entering into technology contract in international trade
- Observations and study tours

- Status quo of technology contracts in Japan

- Observations and case studies at private companies in various fields

## **FACILITIES AND INSTITUTIONS**

Kyoto Comparative Law Center

# TOURISM

#### PERIOD

October 5, 1992 to November 22, 1992 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED Eighteen (18)

#### 3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Occupational experience of more than 3 years
- Presently engaged in tourism promotion activities in public tourist organizations
- Between twenty five (25) and thirty five (35) years of age 4)
- 5) Good working knowledge of English

## DESCRIPTION OF TRAINING

- 1) Lectures
  - a) Japanese Tourism Policy and Administration

     Government Policy and Measures

     Tourism Laws and Regulations

- Official Development Assistance
- b) Japanese Tourism Industries and Their Activities

- Travel Agency Business
   Hotel and Ryokan (Japanese-style Hotel) Business
- Tourist Guide Business
   Transportation Business (Airline Business, Cruise Business, etc.)
- c) Japanese Inbound Promotion Activities by NTO
- d) Promotion Activities towards Japanese Travel Market

   Basic Characteristics of Japanese Travel Market

   Promotion Activities by Foreign NTO
- Presentation and Discussion of Country Report
- 3) Observation and Study Tour

## **FACILITIES AND INSTITUTIONS**

- 1) Tourism Department, Ministry of Transport
- International Tourism Development Institute of Japan (ITDIJ)
- Tokyo International Centre (Hatagaya), IICA 3)

# HUMAN RESOURCES

## INTENSIVE JAPANESE LANGUAGE (A) 日本語専修(A)

## PERIOD

October 22, 1992 to April 25, 1993

NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

## QUALIFICATIONS

- be presently engaged directly or indirectly in JICA's cooperation programme, 1)
- be under thirty (30) years of age,
- have a sufficient command of both spoken and written English, and 3)
- be in good health, both physically and mentally, to undergo the course of training. Pregnancy is regarded as a disqualifying condition for the participation in the course.

## **DESCRIPTION OF TRAINING**

- Elementary lessons Book 1 ~ 3
  - Writing practice
  - Pronunciation
  - Vocaburary
  - Basic grammer
- Intermediate lessons Book 4 ~ 5
  - Strengthening and enlarging conversation skills
     Strengthening reading and comprehension skills
     Training for composition skills
- Speech contest
- Field trip
- Final production 5)

## FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

## INTENSIVE JAPANESE LANGUAGE (B) 日本語専修(B)

## PERIOD

September 24, 1992 to May 24, 1993

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

## QUALIFICATIONS

- be presently engaged directly or indirectly in JICA's cooperation programme,
- be under thirty (30) years of age, 2)
- have a sufficient command of both spoken and written English, and 3)
- be in good health, both physically and mentally, to undergo the course of training. Pregnancy is regarded as a disqualifying condition for the participation in the course.

## DESCRIPTION OF TRAINING

- Elementary lessons Book 1 ~ 3
  - Writing practicePronunciation

  - Vocaburary
  - Basic grammer
- 2) Intermediate lessons Book 4 ~ 6

  - Strengthening and enlarging conversation skills
     Strengthening reading and comprehension skills
     Training for composition skills
     Practical training for conversation and composition skills
- Speech contest
- Field trip 4)
- Final production

## **FACILITIES AND INSTITUTIONS**

Okinawa International Centre (OIC)

## 1. PERIOD

May 14, 1992 to August 30, 1992 (4 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

## 3. QUALIFICATIONS

- 1) University graduates or equivalent
- Having one (1) to three (3) years of experience in media production for educational/instructional purposes
- 3) Under thirty-five (35) years of age
- 4) Proficient in spoken and written English

## 4. DESCRIPTION OF TRAINING

- 1) Basic photographing
- 2) Audio Production Methodology
- 3) Basic Slide Production
- 4) Slide Production Methodology
- 5) Sound Slide Production Methodology
- 6) Production of Multi Media Package
- 7) Multi Media Package Presentation
- 8) Observation Tour

## 5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

## VIDEO PRODUCTION (BASIC) ビデオ制作

## 1. PERIOD

September 10, 1992 to February 26, 1993 (3.5 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

## 3. QUALIFICATIONS

- 1) University graduates or equivalent
- Having two (2) to five (5) years of experience in video program production for educational/instructional purposes
- 3) Under thirty-five (35) years of age
- 4) Proficient in spoken and written English

## 4. DESCRIPTION OF TRAINING

- 1) Outline of Video (in comparison with other Audio Visual Media)
- 2) Basics of Video Material Production
- 3) Video Programme Production with Single Camera
- 4) A/B Roll Editing
- 5) Animation
- 6) Production of Multi-Media Package
- 7) Observation Tour

## 5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

## AUDIO VISUAL TECHNOLOGY 視聴覚技術

## 1. PERIOD

February 18, 1993 to June 6, 1993 (3.5 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

## 3. QUALIFICATIONS

- 1) University graduates or equivalent
- 2) Have two (2) to six (6) years of experience as the design and management personnel of audio visual media program
- 3) Be not more than forty (40) years of age
- 4) Have a sufficient command of spoken and written English

## 4. DESCRIPTION OF TRAINING

- 1) Lectures on basic theories of media communication and media strategy
- 2) Case study on audio misual media programs (Research)
- 3) Lecture and exercises on various AV media planning
- 4) Observation trip for the study of AV media utilization
- 5) Practical training on basic production skills of educational AV materials

## 5. FACILITIES AND INSTITUTIONS

Okinawa International Centre (OIC), JICA

## TRAINING SPECIALIST FOR SUPERVISORS (SEMINAR) II

監督者訓練専門家セミナー ||

## 1. PERIOD

May 25, 1992 to July 19, 1992 (2 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

## 3. QUALIFICATIONS

- 1) university graduate or equivalent
- a training specialist concerned with planning and conducting the training for foremen and other first line supervisors of manufacturing industries
- more than one year's working experience in the said field and expected to work in the same field in the future
- between 30 and 45 years of age
- 5) good working knowledge of English
- 6) in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for the participants in the course.

## 4. DESCRIPTION OF TRAINING

- 1) Lecture and Discussion
  - Outline of human resources development in Japan
     Purpose: To study economic, social and historical background, and present situations of human resources development in Japan
  - The Training for Supervisors in Japan
     Purpose: To study the methods of the training for supervisors and other in-plant training
- 2) Observation Tour
- 3) Country reports presentation

## 5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Centre, JICA
- 2) Human Resources Development Bureau, Ministry of Labour

# TRAINING MANAGEMENT IN VOCATIONAL TRAINING INSTITUTIONS (SEMINAR) 職業訓練管理セミナー

## 1. PERIOD

August 24, 1992 to October 18, 1992 (2 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

## 3. QUALIFICATIONS

- Presently engaged in management of a vocational training institution and be expected to work in the same field in future
- 2) Between 30 and 50 years of age
- 3) Good working knowledge of English
- In good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for the participants in the seminar.

## 4. DESCRIPTION OF TRAINING

- ) Lecture and Discussion
  - Human Resources Development in the field of Vocational Training
  - Management and Administration of Vocational Training Institution and Facilities
- 2) Country reports presentation
- 3) Observation Tour

## 5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Centre, JICA
- 2) Human Resources Development Bureau, Ministry of Labour.

## No. 262

## HUMAN RESOURCES DEVELOPMENT ADMINISTRATION (SEMINAR)

職業能力開発行政セミナー

#### 1. PERIOD

November 9, 1992 to December 17, 1992 (1.5 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Fifteen (15)

## 3. QUALIFICATIONS

- A director of the department in a central office or equivalents, presently engaged in the human resources development administration
- 2) Between 35 and 50 years of age
- 3) Good working knowledge of English
- 4) In good health both physically and mentally to undergo the seminar. Pregnancy is regarded as a disqualifying condition for participants in the seminar.

## 4. DESCRIPTION OF TRAINING

- 1) Lecture & Discussion
  - Outline of human resources development administration in Japan
    - Purpose: To study the human resources development administration and its peripheral methods.
  - Outline of contemporary labour situation in Japan
    - Purpose: To study economic, social and historical background, and present situations of human resources development administration in Japan
- 2) Observation Tour
- 3) Country Reports Presentation
- 4) Comprehensive study

## 5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Centre, JICA
- 2) Human Resources Development Bureau, Ministry of Labour

## No. 263

## HIGH TECHNOLOGY RESEARCH ハイテク・リサーチ

- [A] Trial Construction of CAI Ware for Electronic Circuitry and Control Technics on a Target Machine of Micro-Robot Mouse
- [B] Calculation of the Potential and Electric Distribution in Conductive Materials

#### PERIOD

July 27, 1992 to February 21, 1993 (7 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

[A] Three (3), [B] Two (2)

## 3. QUALIFICATIONS

- be presently engaged in computer & electronic engineering field at university, research institute or vocational training college as a professor,
- 2) be graduates from the faculty of engineering at university or graduate school,
- 3) have at least five (5) years for Bachelor degree holder, three (3) years for Master degree holder of occupational experience in the field,
- 4) have a sufficient command of spoken and written English, or Japanese,
- 5) be not more than thirty-five (35) years of age,
- 6) [A] have appropriate knowledge on electronic circuitry, also BASIC language, C language and ASSEMBLA language, and be able to make programmes freely in these languages.
  - have appropriate knowledge on Partial Derivatives, also FORTRAN language and be able to make programmes freely in this language, and have some experiences on computer graphics.
- 7) have specific knowledges on the theme mentioned and be able to study of his own accord.

## 4. DESCRIPTION OF TRAINING

- 1) Research
- 2) Report making
- 3) Study Tour

## 5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Centre, JICA
- 2) The Institute of Vocational Training (IVT), Ministry of Labour

#### REMARKS

There will be an intensive Japanese language course, conducted prior to the technical training (1 month, 100 hours)

## No. 264-1

# VOCATIONAL TRAINING INSTRUCTORS (ELECTRICAL ENGINEERING) II

職業訓練指導員(電気工学)I

## PERIOD

June 8, 1992 to March 21, 1993 (10 months)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

## QUALIFICATIONS

- Be presently engaged in electrical engineering field at university, research institute or vocational training centre as professor, engineer or teacher
- Be university graduates with three (3) years of occupational experience in this field 2)
- Between 25 and 40 years of age 3)
- Good working knowledge of English 4)

## DESCRIPTION OF TRAINING

- Lecture on Specialized Subject
  - Theory of Electrical Machinery
  - Designing Electrical Machinery

  - Illumination Engineering
     Power Electronics and Control of Servomotors
     Introduction to Computer Programming

  - Electrical Measurement
  - Electrical Power Engineering
  - General Concept of Automatic Control

  - Design of Wiring Works
     Electrical Wiring Construction
- Practical Training in Private Firms 2)
- Factory Observation and Field Trip 3)

## **FACILITIES AND INSTITUTIONS**

- Hachioji International Training Centre, JICA 1)
- The Institute of Vocational Training, Ministry of Labour

## REMARKS

There will be an intensive Japanese Language Course (1 month, 125 hours), conducted prior to the the technical training.

## No. 264-2

## **VOCATIONAL TRAINING INSTRUCTORS (ARCHITECTURAL ENGINEERING)**

職業訓練指導員(建築工学)

## PERIOD

June 8, 1992 to March 21, 1993 (10 months)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

#### QUALIFICATIONS

- Be presently engaged in architectural engineering field at university, research institute or vocational training centre as a professor, engineer or teacher
- Be university graduates with three (3) years of occupational experience in this field 2)
- Between 25 and 40 years of age 3)
- Good working knowledge of English

## **DESCRIPTION OF TRAINING**

- Lecture on Specialized Subject

   History of Architecture

  - Building Legislation
    Indoor Environmental Engineering

  - Building Materials
    Reinforced Concrete Engineering
  - Building Equipment
  - Wooden Construction Methods
  - Architectural Presentation Techniques
  - Building Construction and Management
  - Building Construction
  - City Planning
- Practical Training in Private Firms
- Factory Observation and Field Trip

## 5. FACILITIES AND INSTITUTIONS

- Hachioji International Training Centre, JICA
- The Institute of Vocational Training, Ministry of Labour

There will be an intensive Japanese Language Course (1 month, 125 hours), conducted prior to the technical training.

# No. 264-3

# VOCATIONAL TRAINING INSTRUCTORS (ELECTRONIC ENGINEERING) II

職業訓練指導員(電子王学)||

#### PERIOD

June 8, 1992 to March 21, 1993 (10 months)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

#### QUALIFICATIONS

- Be presently engaged in electronic engineering field at university, research institute or vocational training centre as professor, engineer or teacher,
- Be university graduates with three (3) years of occupational experience in this field
- 3) Between 25 and 40 years of age
- Good working knowledge of English

#### **DESCRIPTION OF TRAINING**

- Lecture on Specialized Subject 1)

  - TV EngineeringSemiconductor IC Technology

  - Electronic Computer
     Electronic Components
  - Electronic Circuits
  - -- Electronic Measurements
  - Automatic Control
  - Digital Electronic Circuits
  - Radiowave propagation and Antennas
- Practical Training in Private Firms 2)
- Factory Observation and Field Trip

### **FACILITIES AND INSTITUTIONS**

- Hachioji International Training Centre, JICA 1)
- The Institute of Vocational Training, Ministry of Labour

# REMARKS

There will be an intensive Japanese Language Course (1 month, 125 hours), conducted prior to the technical training.

# **VOCATIONAL TRAINING INSTRUCTORS** (MECHANICAL ENGINEERING FOR INDUSTRY)

#### PERIOD

職業訓練指導員(産業機械工学)

June 8, 1992 to March 21, 1993 (10 months)

#### NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

#### QUALIFICATIONS

- be presently engaged in automotive engineering field at university, research institute or vocational training centre as professor, or teacher,
- 2) be university graduates with at least three (3) years of occupational experience in this field,
- have a sufficient command of spoken and written English, 3)
- be not less than twenty-five (25), and not more than forty (40) years of age

#### **DESCRIPTION OF TRAINING**

- Lecture on Specialized Subject
  - Internal Combustion EnginesStrength of Material

  - Refrigeration and Heat Transfer

  - Automotive Engineering
     Thermodynamics and Heat Transfer
     Elements of Welding Procedure

  - Automotive Mechanism
  - Vibration Problems in Engineering
- Practical Training in Private Firms 2)
- 3) Factory Observation and Field Trip

# **FACILITIES AND INSTITUTIONS**

- Hachioji International Training Centre, JICA l)
- The Institute of Vocational Training, Ministry of Labour

There will be an intensive Japanese Language Course (1 month 125 hours), conducted prior to the technical training.

# No. 264-5

# VOCATIONAL TRAINING INSTRUCTORS (MECHANICAL ENGINEERING FOR PRODUCTION)

職業訓練指導員(生産機械工学)

# PERIOD

June 8, 1992 to March 21, 1993 (10 months)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

# 3. QUALIFICATIONS

- be presently engaged in mechanical engineering field at university, research institute or vocational training centre as professor, or teacher,
- be university graduates with at least three (3) years of occupational experience in this field, 2)
- have a sufficient command of spoken and written English,
- be not less than twenty-five (25), and not more than thirty-five (35) years of age

# DESCRIPTION OF TRAINING

- Lecture on Specialized Subject
  - Machining Technology
  - Die Engineering
  - Energy Beam Processing
    Precision Measurement
    Strength of Materials

  - Plastic Working
  - Design of Mechanical Element
  - Materials for Mechanical Engineering
  - N. C. Equipment
  - Material Testing
- Practical Training in Private Firms 2)
- Factory Observation and Field Trip

# FACILITIES AND INSTITUTIONS

- Hachioji International Training Centre, JICA 1)
- The Institute of Vocational Training, Ministry of Labour 2)

# REMARKS

There will be an intensive Japanese Language Course (1 month 125 hours), conducted prior to the technical training.

# No. 264-6

#### VOCATIONAL TRAINING INSTRUCTORS (PRODUCTS DESIGN AND WOOD WORK ENGINEERING) 職業訓練指導員(造形工学)

#### PERIOD

June 8, 1992 to March 21, 1993 (10 months)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

#### QUALIFICATIONS

- be presently engaged in industrial design engineering field at university, research institute or vocational training centre as professor, or teacher,
- be university graduate with at least three (3) years of occupational experience in this field, 2)
- have a sufficient command of spoken and written English, 3)
- be not less than twenty-five (25), and not more than forty (40) years of age, 4)

# **DESCRIPTION OF TRAINING**

- Lecture on Specialized Subject 1)
  - Materials for Woodworking, Gluing and Plywood
  - Design, Drawing and Furniture Construction
     Wood working System in Production
- Practical Training in Private Firms 2)
- 3) Factory Observation and Field Trip

# **FACILITIES AND INSTITUTIONS**

- Hachioji International Training Centre, JICA 1)
- The Institute of Vocational Training, Ministry of Labour

There will be an intensive Japanese Language Course (1 month, 125 hours), conducted prior to the technical training.

# SCIENCE AND CULTURE

# REMOTE SENSING TECHNOLOGY (FUNDAMENTAL)

リモート・センシング技術(基礎)

#### PERIOD

May 5, 1992 to July 9, 1992 (2.5 months)

#### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

# QUALIFICATIONS

- 1) be university graduates, or the equivalent with a fundamental knowledge of physics and mathematics,
- be researchers or engineers in remote sensing application fields, such as country planning, agriculture, forest management and mapping,
- 3) be preferably under thirty-five (35) years of age,
- have a sufficient command of spoken and written English

#### **DESCRIPTION OF TRAINING**

- Lectures
  - Remote Sensing Activities in Japan
    - Japanese Space Activities -
    - Overview of Remote Sensing Activities in Japan -
  - General Introduction
  - Basic Principles of Remote Sensing -

  - Basic Frinciples of Remote Sensing Remote Sensing, as a Tool for Agriculture Resource Management
     Remote Sensing Application in Geological Survey
     Japanese Ground Station for Earth Observation Satellites
     Data Processing of Meteorological Satellite

  - Image Processing System

  - Sensor & Platforms
    Outline of the Observation Satellites
  - Geometric Correction Theory and Technology
  - Global Monitoring Information
- Practice
  - Personal Computer System and Programming for Image Processing
     Geometric Correction Theory and Technology

  - Image Analysis with a Personal-Computer
  - Digital Image Analysis
- Ground Truth Investigation 3)
- Field Evaluation 4)
- 5) Report Making
- 6) Observation Tours
- Country Report Presentation 7)
- ISPRS COMMISION IV
  - International Symposium on Cartographic and Data Base Applications of Photogrammetry and Remote Sensing

# FACILITIES AND INSTITUTIONS

Remote Sensing Technology Center of Japan (RESTEC)

# ENZYME TECHNOLOGY 酵素工学

# 1. PERIOD

April 9, 1992 to October 5, 1992 (6 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

# 3. QUALIFICATIONS

- Master's degree or bachelor's degree with as much academic knowledge and technical experience as the former, and have majored in chemistry, biochemistry, agricultural chemistry, food chemistry or applied microbiology
- 2) Three (3) or more years of experience in fermentation technology or enzyme technology
- 3) Between 25 and 35 years of age
- 4) Good working knowledge of English

# 4. DESCRIPTION OF TRAINING

- Lectures and experimental training
  - Purification of enzymes
  - Properties of enzyme
  - Study of enzymes
  - Application of enzymes
  - Individual Study
- 2) Observation tours

# 5. FACILITIES AND INSTITUTIONS

Osaka Municipal Technical Research Institute (OMTRI)

# MEDICAL AND BIOLOGICAL APPLICATION OF RADIATION AND RADIOISOTOPES (NUCLEAR MEDICINE) アイソトープ・放射線の医学・生物学利用

# 1. PERIOD

August 25, 1992 to October 4, 1992 (1.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

#### 3. QUALIFICATIONS

- 1) be licensed physicians authorized by their governments
- 2) be under forty (40) years of age, and have clinical experience in nuclear medicine,
- be engaged in the same field after returning to their countries (Both governmental and non-governmental employees can be applicants.).

# 4. DESCRIPTION OF TRAINING

- 1) Lectures
  - Basic Nuclear Medicine
  - In Vivo Nuclear Medicine
  - Other Imaging Modalities, etc.
- 2) Clinical Study and Training
- 3) Study Tour

# 5. FACILITIES AND INSTITUTIONS

- 1) National Institute of Radiological Sciences
- Tokyo International Centre (Hatagaya), JICA
- 3) Nuclear Safety Research Association

# BIOTECHNOLOGY UTILIZING HIGHER PLANTS AND MICROORGANISMS

植物及び微生物を利用するバイオテクノロジー

#### 1. PERIOD

January 5, 1993 to May 23, 1993 (5 months)

#### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

#### 3. QUALIFICATIONS

Applicants should:

- be presently engaged in research work and have more than four (4) years of occupational experience in this field,
- 2) be university graduates or have the equivalent academic background,
- 3) have a sufficient command of spoken and written English,
- 4) be not less than twenty-six (26), and not more than forty (40) years of age,

#### 4. DESCRIPTION OF TRAINING

- 1) Lecture
  - a) General view on biotechnology General view on genetics General view on biology Structures and functions of genes Gene manipulation, etc.
  - b) Present situation of application of biotechnology
    General view on food chemistry
    General view on chemistry and technology
    of agricultural products
    General view on fermentation technology
    General view on pesticide science
    Screening and collection of plant genes
    Introduction to biological catalysts, etc.
- 2) Experiment and practice
  - Biotechnology utilizing microorganisms
     Screening of microorganisms from nature
     and their identification

- Breeding of microorganisms by artificial mutation
  Breeding of microorganisms by gene engineering
  Isolation of DNA and its manipulation
  Gene recombination and production of
- useful substances, etc.
  b) Biotechnology utilizing plants
  Plant tissue culture
  Plant cell fusion
  Virus-free cell culture and cell technology,
- Observation tour
   Sake brewing companies, sugar refinery companies, food companies in the traditional biotechnology field and factory-style plant producing companies, protected agricultural fields, gene banks, biotechnological produc

tion institutes, etc.

#### 5. FACILITIES AND INSTITUTIONS

- 1) Faculty of Agriculture, Kobe University
- 2) Biotechnology Laboratory, Hyogo Prefectural Agricultural Institute
- 3) Hyogo International Centre, JICA

# PRACTICE OF SCIENCE EDUCATION

#### PERIOD

June 4, 1992 to July 28, 1992 (2 months)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

#### 3, QUALIFICATIONS

- Presently have the promising position in science education field as a teacher of secondary school or researcher in institute/university/college
- 2) University graduates or have an equivalent academic background (14 years school career)
- Proficient in spoken and written English. Report shows that many participants find themselves unable to make progress in this training because of inadequate knowledge of English
- Not more than thirty five (35) years of age 4)
- In good health to undergo the training. Pregnancy is regarded as a disqualifying condition. 5)

#### **DESCRIPTION OF TRAINING**

- Lectures and Practical Training:
  - Basic Principle of Science
  - Practice Concerning Physics

  - Fractice Concerning Physics
     Practice Concerning Chemistry
     Practice Concerning Biology
     Practice Concerning Earth Science
     Practice Concerning Education Technology
     (Include County Concerting) (Include Computer Operating)
- Study Tour
- Typical Natures in Japan (Volcano, Hot Spring, Stalactite grottos, etc.) Educational Facilities

  - (Science museum, Automobile Factory, etc.)

#### 5. **FACILITIES AND INSTITUTIONS**

Hiroshima University

# MEDICAL TREATMENT

# TUBERCULOSIS CONTROL II 結核対策 II

#### 1. PERIOD

June 8, 1992 to October 11, 1992 (4 months)

#### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eighteen (18)

# 3. QUALIFICATIONS

- Medical officers who are engaged in the national tuberculosis control programme, preferably having, or going to have, a leading role in the programme, excluding those who are engaged in pure clinical work
- 2) A sufficient command of spoken and written English
- 3) Between 30 and 45 years of age
- In good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for the participants in the course.

# 4. DESCRIPTION OF TRAINING

- l) Lectures and practical training
  - Statistics
  - Epidemiology
  - General concept of tuberculosis
  - Basic science of tuberculosis
  - Preventive measures in the tuberculosis control
  - Diagnostic measures in the tuberculosis control
  - Curative measures in the tuberculosis control
  - Management of National Tuberculosis control programme
  - AIDS and TB control
  - WHO and its role in the tuberculosis control and research
  - Role of voluntary organizations and activities in the tuberculosis control programme
  - Primary Health Care
- Observation tours
   In the third country (Korea or Malaysia) and WHO collaboration (from October 12, 1992 to October 27, 1992)

# 5. FACILITIES AND INSTITUTIONS

- 1) Hachioji International Training Centre, JICA
- 2) The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association (JATA)

# 6. REMARKS

Japanese Language Course is arranged for two weeks.

#### TUBERCULOSIS CONTROL FOR ADMINISTRATIVE 結核対策指導者 MEDICAL OFFICERS

#### PERIOD

May 11, 1992 to June 28, 1992 (1.5 months)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

# QUALIFICATIONS

- Medical officers who are in charge of tuberculosis control programme of a certain administrative level, most preferably ex-participants of training courses in tuberculosis control with about 5 years field experience after the previous course
- 2) A sufficient command of spoken and written English
- 3) Between 35 and 55 years of age
- 4) In good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for the participants in the course.

# DESCRIPTION OF TRAINING

- Lectures, seminars, group discussions and workshops:

  Recent advances in TB control 1)

  - Progress and problems in the participants' National TB programmes

  - National TB epidemiology
     Evaluation of National TB programmes
- 2) Observation tours

#### 5. **FACILITIES AND INSTITUTIONS**

- 1) Hachioji International Training Centre, JICA
- The Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association (JATA)

# LABORATORY WORKS FOR TUBERCULOSIS CONTROL 結核対策細菌技術

#### PERIOD 1:

September 28, 1992 to February 14, 1993 (4.5 months)

#### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

#### QUALIFICATIONS

- Senior technicians or medical doctors who are responsible for the management of laboratory works in TB control program in the region/country
- Those who are responsible for the training of health personnel in laboratory works for tuberculosis 2)
- 3) Between 50 years and 26 years of age
- 4) Good working knowledge of English
- In good health both physically and mentally, to undergo the seminar. Pregnancy is regarded as a 5) disqualifying condition for participation in the course.

### DESCRIPTION OF TRAINING

Lectures and practical training

Tuberculosis control programme

- Role of laboratory works in tuberculosis control programme
- Accuracy control of laboratory examinations

Laboratory data control

- Present status and problems in the laboratory works in tuberculosis control programmes of participants countries
- Essential experiences as a leading bacteriologist on laboratory techniques and methods for turberculosis control
- Maintenance and manipulation of microscope and other laboratory equipments
- Principles of planning and establishment of bacteriological laboratories at various conditions
   Principles of training method of laboratory techniques

- Modern techniques useful for bacteriological laboratories for tuberculosis control
- Visits to laboratories and institutions
- Organization of laboratory services
- Observation tours 2)

#### **FACILITIES AND INSTITUTIONS**

- 1) Hachioji International Training Centre, JICA
- The Research Institute of Tuberculosis, Japan Anti-Tuerculosis Association (JATA)

### REMARKS

Japanese Language Course is arranged for three weeks.

#### CLINICAL ONCOLOGY II がん対策』

# 1. PERIOD

August 31, 1992 to November 29, 1992 (3 months)

# 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

#### QUALIFICATIONS

- Licenced physicians with occupational experience of more than 2 years in diagnosis and treatment of 1)
- 2) Under 35 years of age
- Engaged in the same field after return to the country 3)
- Good working knowledge of English 4)

# **DESCRIPTION OF TRAINING**

- Lectures and practical training

  Outline of cancer control in Japan
  - -- Fundamental research on cancer

  - Clinical Pathology
     Biochemistry and immunology
  - Endocrinology

  - Chemotherapy
     Diagnosis and treatment of cancer
- Observation tours

# **FACILITIES AND INSTITUTIONS**

- 1) National Cancer Center
- Tokyo International Centre (Hatagaya), JICA 2)

#### EARLY GASTRIC CANCER DETECTION AND RELATED DIGESTIVE TUMORS II 早期胃ガン診断 11

PERIOD

January 11, 1993 to March 11, 1993 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Sixteen (16)

# QUALIFICATIONS

- 1) Graduates of a medical college or the medical department of a university
- Practically experienced for more than 7 years, majoring in the diagnosis cancer, gastritis, ulcer and polyp of stomach and its adjacent region in the field of X-ray, endoscopy, biopsy, pathology 2)
- 3) Under 45 years of age
- Good working knowledge of English

#### **DESCRIPTION OF TRAINING**

- Lectures and practical training General radiology

  - EndoscopyHistopathology
  - Chemotherapy
  - Echography
  - Diagnosis of cancer of the liver
  - Diagnosis of cancer of the pancreas, gallbladder and case studies
- Observation tours

#### **FACILITIES AND INSTITUTIONS**

Foundation for Detection of Early Gastric Carcinoma

#### BLOOD TRANSMITTED DISEASES, (Special Reference to AIDS, ATL & Hepatitis) 血液由来感染症

#### PERIOD

June 22, 1992 to August 3, 1992 (1 month)

#### NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

#### QUALIFICATIONS

- have a license physicians' authorized by their government 1)
- to hold relatively senior position and be engaged in the field of BTD
- be not more than 40 years old
- have a sufficient command of spoken and written English\*
  - For an example, it is desirable to hold TOEFL (Test of English as a Foreign Language) score more than 500 points.

#### **DESCRIPTION OF TRAINING**

- Lectures (6.0 days)
  - AIDS & ATL
- Virology of HIV and HTLV-I Epidemiology and Control of AIDS
  - Clinical Features Diagnosis of AIDS
  - Treatment of AIDS
  - Epidemiology of ATL - Clinical Features and Diagnosis of ATL
  - Treatment of ATL
  - HTLV-I Associated Myelopathy (HAM)

  - Infection of HTLV-I by Blood Transfusion
     Maternal Transmission of HTLV-I to Child
  - HTLV-I and Related Disorders
  - AIDS in Japan and its Control
  - Hepatitis B and Hepatitis C

    - Virology of Hepatitis Pathology of Viral Hepatitis Vaccine and Viral Hepatitis

    - Viral Hepatitis
    - Clinical Features of Hepatitis B and C
    - Diagnosis of Hepatitis B
    - Epidemiology and Control of Hepatitis B and C

- Treatment of Hepatitis B
- Hepatitis C
- Liver Cirrhosis and Hepatoma
- 2) Special Lectures (0.5 day)
  - Communicable Disease Control Programme in the Area of International Cooperation
  - Discovery of ATL
- Practice (3.75 days) 3)
  - Screening of HTLV-I and HTLV-III Virus
  - Blood Morphology of ATL
  - HTLV-I Associated Myelopathy (HAM)
  - Hepatitis C
  - Screening of HBs-Ag, HBs-Ab, HC-Ab
- 4) Case Conference (0.25 day)
- 5) Field Trips (4.5 days)
- 6) Discussion and Group Study (4.0 days)

# **FACILITIES AND INSTITUTIONS**

- 1) Agency for Cooperation in International Health
- 2) Kumamoto National Hospital

# CLINICAL TRAINING FOR PATIENTS CARE OF INFECTIOUS DISEASES

感染症患者臨床研修

#### PERIOD

January 11, 1992 to March 31, 1992 (2.5 months)

# 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

#### 3. QUALIFICATIONS

- be licensed physicians authorized by their governments, and have clinical experience of more than
- have a sufficient command of spoken and written English,
- be between 27 and 32 years of age,

# DESCRIPTION OF TRAINING

- I) Lectures
  - National policy on infectious diseases control in Japan
  - Pharmaceutical administration
  - Vaccination System
  - General aspects of infectious diseases
  - Hospital-acquired infectious diseases
  - Disinfection, sterilization and aseptic procedure
  - Management of patients with infectious diseases Aseptic care in the field of nursing

  - Diagnostic examination of infectious diseases
  - Bio-clean room
  - Tuberculosis and leprosy control in Japan
  - Antibiotics, anti-viral and anti-fungal agents
  - Blood-borne diseases
  - Hepatitis
  - Sexually transmitted diseases (STD)
  - Isolation of patients
- Visit to other facilities

# **FACILITIES AND INSTITUTIONS**

- The National Medical Centre Hospital
- Tokyo International Centre (Hatagaya), JICA

# MANAGEMENT OF REAGENTS & CULTURE MEDIA IN

#### PERIOD

November 2, 1992 to April 18, 1993 (6.5 months)

### NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

#### QUALIFICATIONS

- be a medical doctor or have a baccalaureate on Pharmacology, Agriculture, and Biology and at the same time, a manager of miccle level or above. The work should be related to this training course.
- have a sufficient command of spoken and written English\*
- be not more than 45 years old
  - \*For an example, it is desirable to hold TOEFL (Test of English as a Foreign Language) score more than 500 points.

#### DESCRIPTION OF TRAINING

- Basic Lecture (17.75 dyas)
  - Production of Antiserum, Antigen and Toxin Serological Diagnosis of Toxic Diseases

  - Quality Control of Antisera, Antigens and Toxins
  - Arrangement of Bacteriological Culture Media
  - -- Quality Control of Biological Products
  - Safety Control of Microbiological Experiments
  - The Use of Reagents for the Diagnosis of Infectious Diseases
  - Delivery System of Diagnostic Immunesera. Culture Media, Diagnostic Antisera and Other Reagents
  - Introduction of Bacteriology
  - Bacteriology
  - Virus
  - Antibiotics sensitivity test

  - Toxicity Test
    Food Hygenic Test
  - Water Hygenic Test

- Special Lecture (3.75 days)
  - Control of Infectious Diseases in the **Developing Countries**
  - Some Aspects on Recent Bacterial Infectious Diseases
  - Supply of Reagents for the Control of Infectious Diseases
  - Bacterial Toxins
  - Official Approval for Vaccine
  - Management of Reagents and Culture Media
- Practice (65 days)
  - Sterilization, Stains
  - Production of Antiserum for Laboratory Diagnosis (V. Cholera, E. Coli, Salmonella)
  - Drug Susceptibility Isolation and Identification of Bacteria
  - Isolation and Identification of Viruses, and Others
  - Production of Culture Media, Control of Reagents
  - Quality Control and Delivery of Reagents and Culture Media
- Group Discussion/Work, Free Discussion (4.25 days)
- Field Trips (10 days) 5)

# **FACILITIES AND INSTITUTIONS**

- Agency for Cooperation in International Health
- 2) Kumamoto Prefectural Institute of Public Health
- Kumamoto Municipal Institute of Public Health 3)
- 4) Kumamoto University Medical School
- The Chemo-Scro-Therapeutic Research Institute

# ADVANCED MICROBIAL DISEASES STUDY 上級微生物病研究

#### 1. PERIOD

September 3, 1992 to July 31, 1993 (11 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

#### 3. QUALIFICATIONS

- 1) Master's or doctor's degree holder or having equivalent knowledge in microbial diseases, or ex-participants the JICA Group Training Course in Microbial Diseases
- 2) Under forty-five (45) years of age
- 3) Good working knowledge of English

#### 4. DESCRIPTION OF TRAINING

The latest information and the most advanced techniques in the field of Microbiology, Virology, Parasitology, Molecular Biology, Genetic Engineering, etc. will be provided through individual study, practical training, observation and study tours. This course is intended for senior researchers of microbial diseases who have experience of at least 5 years in their specialized field.

# 5. FACILITIES AND INSTITUTIONS

Research Institute for Microbial Diseases, Osaka University

# PADIATRICS AND PEDIATRIC SURGERY 小児専門医療

#### 1. PERIOD

February 15, 1992 to June 20, 1992 (4 months)

# 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

# 3. QUALIFICATIONS

- 1) Licensed physicians authorized by their government
- Under 35 years of age, and have occupational experience of more than two years in pediatrics or pediatrics surgery
- 3) Engaged in the same field after return to their countries
- 4) A sufficient command of spoken and written English

#### 4. DESCRIPTION OF TRAINING

- 1) Lectures
  - a) General Pediatrics
  - b) Pediatrics
  - c) Pediatrics Surgery

(All participants are requested to have lectures on selected subjects in Pediatrics and Pediatrics Surgery irrespective of their own speciality.)

- 2) Clinical Training on Diagnosis and Treatment
- a) Basic Training
- b) Pediatrics
- c) Pediatrics Surgery

(All Participants are requested to select either Pediatrics or Pediatrics Surgery.)

# 5. FACILITIES AND INSTITUTIONS

- 1) National Children's Hospital
- Tokyo International Centre (Hatagaya), JICA

# SEMINAR ON POLIO ERADICATION, ITS THEORY AND PRACTICE (FOR PERSONS ENGAGED IN E.P.1) 中児麻痺根絶計画の理論と実際

#### 1. PERIOD

October 12, 1992 to November 30, 1992 (2 months)

# 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

#### 3. QUALIFICATIONS

- be a medical doctor and at the same time, a manager responsible for the national polio readication programme or a person of equivalent position
- have a sufficient command of spoken and written English
- be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the training.
- 4) be not more than 50 years old.

#### 4. DESCRIPTION OF TRAINING

- 1) Basic Lectures
  - Virology, Epidemiology, Pathology, Diagnosis and Clinical Features of Poliomyclitis
  - Quality Control of Polio Vaccine
  - Practice, Record and Analysis of Surveillance and its Feedback
- 2) Special Lectures
- 3) Symposium on Factors of Success in Polio Eradication Programme
- 4) Programme Management
  - Surveillance for Poliomyelitis Eradication
  - Polio Eradication Information Systems and Evaluation
  - Polio Eradication Programme and EPI in Brazil
- 5) Case Study
  - Analysis of History of the Past Eradication Programmes
  - Elements Needed for the Success of Polio Eradication Programme
- 6) Simulation of Field Action, Management of Field Programme
- Field Trips
  - The Chemo-Sero Therapeutic Research Institute, Kumamoto
  - Japan Poliomyelitis Research Institute, Tokyo
  - National Institude of Health, Tokyo
  - Research Institute for Microbial Disease, Osaka Univ.

### 5. FACILITIES AND INSTITUTIONS

- 1) Agency for Cooperation in International Health,
- 2) Education and Training Institute, Kumamoto Hospital,
- 3) Kumamoto University Medical School,
- 4) Chemo-Sero-Therapeutic Research Institute,
- 5) Department of Public Health and Hygiene, Kumamoto Prefectural Government

# TECHNOLOGY FOR NEONATAL AND INFANTILE SCREENING

新生児・乳児マス・スクリーニング検査技術

#### 1. PERIOD

November 19, 1992 to February 15, 1993 (3 months)

# 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

#### 3. QUALIFICATIONS

Applicants should

- be medical doctor or have a doctorate in medical science and also be planning to organize neonatal and infantile screening
- 2) have a sufficient command of both spoken and written English
- 3) be under 40 years of age
- be in good health, both physically and mentally, to pursue the study. Prognancy is regarded as disqualifying condition for participation in the course.

#### 4. DESCRIPTION OF TRAINING

- 1) Lectures
  - General remarks
  - Diagnosis and treatment
  - Testing methods
  - Quality control and quality assurance
  - Data processing by micro-computer
- 2) Practice
  - Inborn errors of metabolism
    - (phenyl ketonuria, homocystinuria, maple sylop urine disease, galactosemia)
  - Congenital hypothyroidism and congenital adrenal hyperoplasia
  - Neurobiastoma
- 3) Observations
  - Hokkaido University, Sapporo Medical College and National Sapporo Hospital in which diagnosis and treatment are conducted
  - Another screening centers in Japan

#### 5. FACILITIES AND INSTITUTIONS

Sapporo City Institute of Public Health

# **CLINICAL DENTISTRY** 菌学

# 1. PERIOD

April 20, 1992 to August 3, 1992 (4 months)

#### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

# 3. QUALIFICATIONS

- 1) be dentists who have three years' professional or academic experience or more in the field of academic institution, health administration or practice.
- 2) be presently engaged or expected to be working on their return in this line.
- 3) be not more than 40 years old.
- 4) have a sufficient command of spoken and written English.

#### 4. DESCRIPTION OF TRAINING

- 1) Dental Care Delivery System and Dental Public Health Service in Japan.
- 2) Dental Care for Children and Adolescent
- 3) Dental Caries
- 4) Periodontal Disease
- 5) Prosthetics
- 6) TMJ Arthrosis
- 7) Oral Cancer
- 8) Cleft Lip and Palate
- 9) Dental Materials and Clinical Practices in the Up-To-Date Dental Medicine
- 10) Advancement in Basic Dentistry
- 11) Supplementary Study at the Department of Applicant's Speciality
- 12) Presentation of Out-come Acquired by Each Participant through the Course

# 5. FACILITIES AND INSTITUTIONS

Faculty of Dentistry, Kyushu University

# MEDICAL RADIOLOGICAL TECHNOLOGY 医療放射線技術

#### PERIOD

January 7, 1993 to July 22, 1993 (7 months)

#### NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

#### QUALIFICATIONS

- University or college graduates or equivalent
- Experience of more than 2 years in radiography at medical organizations with fundamental knowledge of physiology
- 3) Under 35 years of age
- Good working knowledge of English

# **DESCRIPTION OF TRAINING**

- 1) Fundamental theories in radiography
  - Radiation physics

  - Photographic chemistry
     Medical X-ray engineering
     Radiation control and radiation measurement
  - Radiography techniqueRadiation picture

  - Computer
  - Radiation diagnosis
- Clinical practice on radiography.
- 3) Observations
- 4) Study trips

# **FACILITIES AND INSTITUTIONS**

- 1) College of Biomedical Technology, Osaka University
- Osaka University Hospital

#### PERIOD

October 28, 1992 to February 20, 1993 (4 months)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Eighteen (18)

# QUALIFICATIONS

- 1) University graduates or equivalent,
- Occupational experience of more than 5 years in their profession,
- 3) Be presently engaged in practices of clinical laboratory or radiology,
- 4) Under forty (40) years of age,
- 5) Good working knowledge of English

#### **DESCRIPTION OF TRAINING**

- 1) Japanese language
- 2) Joint Training
  - Introduction to medical science
  - Introduction to the team care system
- Training Curriculum for Clinical Laboratory Technology Group

  - Lecture on Basic Theory
    Observation on Quality Control, etc.
  - Lecture and Practice on various bacteria testing technology

Training Curriculum for Medical Imaging Technology Group,

- Latest Information on clinical imaging
   Quality control of clinical images
- Evaluation method of analogue imaging
- Latest clinical imaging equipment
- Radiology management
- Clinical Practice
- Maintenance and management of diagnostic equipment
- 4) Field Trip

# **FACILITIES AND INSTITUTIONS**

- Japan International Medical Technology Foundation 1)
- The Japan Association of Radiological Technologists Education Centre 2)
- Japanese Association of Medical Technologists 3)
- 4) Related Institutes

#### 1. PERIOD

January 26, 1993 to March 6, 1993 (1.5 months)

# 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

# QUALIFICATIONS

- be presently engaged in, or be candidates for the top management in hospital administration or government officials working in health services management
- be University graduates or have the equivalent academic background 2)
- have a sufficient command of spoken and written English

# **DESCRIPTION OF TRAINING**

- Lecture and Workshop

  - Hospital Administration
     Personnel and Labour management
     Medical Administration

  - Facilities Administration
  - Pharmacies Administration
  - Medical Evaluation
  - Nurse Administration
- 2) - Observation

### **FACILITIES AND INSTITUTIONS**

National Institute of Health Services Management

# FOOD MICROBIAL CONTROL 食品微生物検査技術

#### 1. PERIOD

January 5, 1993 to May 23, 1993 (5 months)

# 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

#### 3. QUALIFICATIONS

- 1) Research or technical officers presently engaged in food microbial control.
- University graduates or equivalents with occupational experience of more than 3 years in the field of food microbial control.
- 3) Under thirty-five (35) years of age.
- 4) Good working knowledge of English,

#### 4. DESCRIPTION OF TRAINING

- 1) Lectures . . . . . . . . 1 week
  - 1) Japanese Food Sanitation Law
  - 2) Microbial control
  - 3) Anaerobic bacteria
  - 4) Pathogenic bacteria
  - 5) Saprophytic bacteria
  - 6) Fungi
  - 7) Recent trend of regulation for marine and livestock products in Japan
- 2) Practice . . . . . . . . . . . . 12 weeks
  - 1) Basic techniques
    - (a) Staining of bacteria (Gram stain etc.)
    - (b) Preparation of culture medium
    - (c) Viable count of bacteria
    - (d) Viable count of coliform group in
    - drinking water
    - (e) Viable count of fungi and yeast
       (f) Viable count of lactic acid bacteria
    - (f) Viable count of lactic acid bacteria(g) Viable count of anaerobic bacteria

- Procedures for the isolation and identification of pathogenic microbes related to food-poisoning
  - (a) Salmonella
  - (b) Staphylococcus aureus
  - (c) Pathogenic vibrios
  - (V. parahaemolyticus, cholerac.)
  - (d) Campylobacter
  - (e) Clostridium perfringens
  - (f) Listeria monocytogenes
  - (g) Fungi and yeast
- Observation of private and public facilities related to food microbial control
- 4) Study Tours

#### 5. FACILITIES AND INSTITUTIONS

- 1) Hyogo International Centre, JICA
- Kobe Women's College of Pharmacy
- 3) Public Health Research Institute of Kobe City
- 4) Kobe Quarantime Station

# IMPORT AND EXPORT FOOD INSPECTION 輸出入食品検查技術

#### 1. PERIOD

August 18, 1992 to December 3, 1992 (3.5 months)

#### 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

#### 3. QUALIFICATIONS

- leading technical officers of import and export food sanitation of inspection who are university
  graduates and/or those who have equivalent practical experiences of food hygine inspection more
  than three (3) years in the field of international food trade.
- sufficient command of spoken and written English.
- 3) not more than forty (40) years of age.

# 4. DESCRIPTION OF TRAINING

#### Lecture

- Assessment of the problem of International Food Trade, and Promotion of Remedial Action and Formulation of Policy
- b. Legislative and/or Administrative Mechanism for Food Health Control
- c. Information System including system for Monitoring and Surveillance
- d. Development of Standard and Control Regulations
- e. Implementation of Control Technologies.
- f. Consultation and Cooperation between the Private and the Public Institute
- g. Training of Skilled Personnel
- h. Research and Development Studies to support Control Programmes

# 5. FACILITIES AND INSTITUTIONS

- a. Public Inspection Procedures
- b. Laboratory Inspections
  - 1 Microbiological Inspection
  - 2 Physico-Chemical Inspection

Field Observation and Study Tour

# MYCROTOXIN INSPECTION IN FOOD 輸出入食品マイコトキシン検査

#### PERIOD

February 18, 1993 to May 23, 1993 (3 months)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

#### QUALIFICATIONS

- technical officers or inspectors presently engaged in food inspection, 1)
- university graduates or those who have equivalent academic background and have practical experience of not less than three (3) years in the field of food inspection,
- sufficient command of spoken and written English,
- 4) not more than thirty-five (35) years of age,

# **DESCRIPTION OF TRAINING**

- Lectures
  - Food Santitation Law and Food Inspection
  - General view on mycotoxins b)
  - Introduction to fungi
  - Isolation and identification of fungi
  - Aspergillus flavus contamination of groundnuts and maize Fusarium contamination of wheat and maize e)

  - Sampling for mucotoxins
  - Analysis of mycotoxins
  - Control of mycotoxins
  - Analysis of food preservatives
- **Practices** 2)
  - Method of the isolation and identification of mycotoxins-producing fungi a)
  - Analysis of mycotoxins such as aflatoxins and Fusarium mycotoxins b)
  - Analysis of food preservatives
- Observation and field trips 3)

Government and private food inspection organizations, food processing factories.

#### **FACILITIES AND INSTITUTIONS**

- Hyogo International Center, JICA 1)
- Public Health Research Institute of Kobe City 2)
- Osaka Prefectural Institute of Public Health 3)

# SEMINAR ON PARASITE CONTROL ADMINISTRATION FOR SENIOR OFFICERS

寄生虫予防指導者セミナー

PERIOD

January 18, 1992 to February 14, 1992 (1 month)

NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

#### QUALIFICATIONS 3.

- Senior Level Administrators or Experts in Government or Private Sector in Charge of Parasite Control
- Medical or Other Related Professions 2)
- Under 55 years of age 3)
- 4) Working Knowledge of English

# **DESCRIPTION OF TRAINING**

- 1)
- Presentation and Discussion

   National Parasite Control Programme in Japan

   Parasite Control Activities by Voluntary Organization
- Country Presentation and Discussion
- 3) Presentation on the Epidemiological Aspect of Parasite Control
- Demonstration of the Examination Method for Mass Examination and Treatment 4)
- 5) Field Trip

# **FACILITIES AND INSTITUTIONS**

- 1) Japan Association of Parasite Control
- Tokyo International Centre (Hatagaya), JICA
- REMARKS

# NURSING ADMINISTRATION 看護管理

#### PERIOD

August 4, 1992 to December 20, 1992 (4.5 months)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

# QUALIFICATIONS

- Completed JICA Training Course in "Specialized Nursing" from 1986 to 1987, or "Advanced Nursing Study Course for Southeast Asian Nurses" from 1973 to 1987.
- 2) Presently engaged in nursing administration or expected to engage in future.
- A sufficient Command of spoken and written English and Japanese.

#### **DESCRIPTION OF TRAINING**

- Japanese Language
- Lectures
  - Health and welfare administration
  - Nursing administration in Japan
     Basic knowledge of administration
  - Development of creativity and nursing service administration

  - Hospital administration
     Principles of nursing administration

  - Personnel management
    Nursing service management
    Management of in-service education
- **Practical Training** 
  - Hospital administration
  - Nursing administration
- Study Tours

### **FACILITIES AND INSTITUTIONS**

The International Nursing Foundation of Japan (INFJ)

# 6. REMARKS

The course is conducted every other year.

## SPECIALIZED NURSING 專門看證

## 1. PERIOD

March 18, 1993 to December 20, 1993 (10 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

## 3. QUALIFICATIONS

Applicants should:

- 1) be completed the fundamental nursing education programme of three years or more
- 2) have an experience in nursing practice for five (5) years or more and desirably have experienced, at least for one year, in the field of the specialized nursing which the participant is to apply for.
- 3) be under thirty-five (35) years of age
- 4) have a sufficient command of spoken and written English
- 5) be in good health, both physically and mentally, to undergo the training course, Pregnancy is regarded as a disqualifying condition for participation in the course

## 4. DESCRIPTION OF TRAINING

The purpose of the course is to offer promising nurses in the developing countries an opportunity to acquire advanced knowledge & technology of specialized nursing (ICC/CCU, Public Health Nursing) through lectures & field studies (on the job training) so as to enhance the quality of nurses and eventually to contribute to needs in the area of human resourse development of the respective country.

## 5. FACILITIES AND INSTITUTIONS

- 1) The International Nursing Foundation of Japan
- 2) Tokyo International Centre (Hatagaya), JICA

## 6. REMARKS

Japanese Language Course is arranged for three months.

# CLINICAL NURSING 臨床看護実務

## PERIOD

August 20, 1992 to February 22, 1993 (6 months)

#### NUMBER OF PARTICIPANTS TO BE RECEIVED 2,

Five (5)

## QUALIFICATIONS

- 1) Certified staff nurse (head nurse and chief nurse are not applicable) who has more than five (5) years of experience
- 2) Under forty (40) years of age
- 3) Proficient in spoken and written English

## **DESCRIPTION OF TRAINING**

- Common Programmes
   Emergency Nursing I)

  - Observation
- Specialized Sub-Course Programmes

Applicants are requested to select one sub-course from four sub-courses below:

- a) Emergency Nursing Training
   Surgical Ward (Including OPD)
   ICU

  - CCU

  - Neurosurgery Emergency Room
- Internal Medicine Nursing Training
  - Cardiovascular System
  - Digestive System
  - Respiratory System
  - ICÚ
  - Medical Ward (Including OPD)
  - **Emergency Room**

- Surgical Nursing Training
  - Neurosurgery
  - Orthopedics
  - Operating Room

  - ICU Surgical Ward (Including OPD)
  - Emergency Room
- Maternal and Child Nursing Training
  - Obstetrics (Including NB)
  - Pediatrics
  - NICU - OPD
  - Emergency Room

## **FACILITIES AND INSTITUTIONS**

- Okinawa Prefectural Chubu Hospital
- Okinawa International Centre (OIC), JICA

## CARDIOVASCULAR DISEASES 循環器病対策

## PERIOD

August 6, 1992 to December 3, 1992 (4 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Seven (7)

## 3. QUALIFICATIONS

- 1) Lincensed physicians authorized by their governments
- 2) Under 35 years of age
- 3) Professional experience of more than 2 years in diagnosis and treatment of cardiovascular diseases
- 4) To be engaged in the same field after return to their countries
- 5) Good working knowledge of English

# 4. DESCRIPTION OF TRAINING

- 1) Lectures
- 2) Discussions
- 3) Observations
- 4) Practices of laboratory examinations in each department or division
- 5) Study tours

The participants will choose a department or division according to their interests and specialities to do studies on diagnosis and treatment in the respective department or division.

## 5. FACILITIES AND INSTITUTIONS

The National Cardiovascular Center, Ministry of Health and Welfare

## 6. REMARKS

# NATIONAL HEALTH ADMINISTRATION SEMINAR

## **PERIOD**

May 21, 1992 to June 21, 1992 (1 month)

#### NUMBER OF PARTICIPANTS TO BE RECEIVED 2.

Fourteen (14)

#### QUALIFICATIONS 3.

- Medically qualified top ranking administrators of the national government in charge of health administration, or the equivalents in public institutions
- In a position to participate in planning and deciding the national health administration policy 2)
- 3) Good working knowledge of English

## **DESCRIPTION OF TRAINING**

- 1) Lecture & Discussion

  - Health policy & Planning
     Health Resources Development Management

  - Community Health
     Infectious Diseases Control
  - Environmental Health & Hygienes
  - International Collaboration
- Observation Tours 2) Observe the actual health services in the community

# FACILITIES AND INSTITUTIONS

- Hachioji International Training Centre, HCA 1)
- Ministry of Health and Welfare 2)
- International Medical Foundation of Japan 3)

# PUBLIC HEALTH TECHNOLOGISTS 公衆衛生技術者

O Analysis of Organophosphorus Pesticides
O Analysis of Organochlorine Pesticides.
O Others

Air Pollution
O Laws and Regulations.
O Observation of Air Pollution Control Facilities

O Measurement of Wind Direction and Speed

O Laws and Regulation.
O Sampling of River Water, Marine Water, Factory

O Observation of Waste Water Treatment Facili-

ties.
O Analysis of pH, DO, COD, BOD, SS. Coli-form

O Assay of Antivenom (Antilethel Units, Anti-

hemorthagic Units, Antiswelling Units). Venomous Snake Control

O Ecological Surveys of Venomous Sankes.

O Stack Gas Sumpling and Measurement.
O Analysis of Dust and Sour.
O Analysis of Heavy Metals.
O Measurement of Noise and Vibration.

O Analysis of Ashestos

O Analysis of Acid Rain

O Others

O Others

body).

Water Pollution

O Analysis of Offensive Odors.

O Measurement of Radioactivity.

O Analysis of Pd, Cd, Cr, CN,
O Analysis of ilg, As.
O Analysis of Pesticide Residues.

O Analysis of PCB, O Analysis of N.P.MBAS.

Snakevenom and Antiversan O Fractionation of Snake Venom, O Experimental Productions of Antivenom (Immunization of Animals, Purification of Anti-

O Control of Venontous Snakes.

Analysis of Air Pollutants (SO, NO, CO, Oxidant, O-HC, SPM).

#### 1. PERIOD

June 18, 1992 to February 22, 1993 (8 months)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

## 3. QUALIFICATIONS

- University graduates or equivalent with occupational experience of more than three years 1)
- Presently engaged in research work as a laboratory technologist in the field of public health
- Be under forty-one (41) years of age
- Having sufficient command of both spoken and written English

## 4. DESCRIPTION OF TRAINING

- General Orientation 1)
- 2) Intensive Japanese Language
- Group Training Programme
  - Programme Orientation
  - General Introduction of Okinawa
  - Presentation
  - Study Tour

# 4) Individual Training Programme

- a) Infectious Disease
  - O Isolation and Identification of Enterobacteria and Vibrios
  - O Isolation, Identification and Scrological Tests of Leptospira. Isolation and Identification of Botulinus and Detection of Botuline.
  - O Isolation, Identification and Serological Exami-nation of Viral Diseases such as Japanese.
  - Enocphalitis, Influenza, Rubeita. Measles, Mumps, Hepatitis and HIV.
  - O Diagnostic Procedures for Bacterial Food Poisoning.
- Medical Zoology and Parasitology
  - Identification, Ecological Observation and Control of Mesquitoes.
  - Control of Maganies.

    Oldentification, Ecological Observation and Control of Flies.

    Identification, Ecological Observation and Control of Cockroaches.

  - O Identification, Ecological Observation and
  - Control of Lice and Fleas.
  - O Identification, Ecological Observation and Control of Nuisance Insects.
  - O Identification, Ecological Observation and
  - Control of Mices.
  - O Biological Evaluation of Water Pollution by
  - Benthos.

    O Laboratory Examination of Malaria, Fileria and Strongy loides stercolutis
- Food Chemistry
  O Laws and Regulations.
  O Observation of Food Sanitation Facilities.
  O Analysis of Artificial Colours.

  - O Analysis of Preservatives.
    O Analysis of Artificial Sweetners.

  - Analysis of Antioxidants.
     Analysis of Food Poisoning Substances (Affatoxin, Histamine, Volatile Amino).

    O Analysis of Toxic Heavy Metals.

## 5. FACILITIES AND INSTITUTIONS

- 1) Okinawa Prefectural Institute of Public Health
- Okinawa International Centre (OIC), JICA
- Water Pollution
- 6) Snake Venom and Antivenom
- Venomous Snake Control

## REMARKS

Applicants are required to select one subject from the training subjects listed below and specify first choice subject (and second choice, if any) in the A.2-3 or A-3 Form.

- Infectious Diseases
- 2) Medical Zoology and Parasitology
- 31 Food Chemistry
- Air Pollution

# SEMINAR ON HUMAN RESOURCES DEVELOPMENT IN PUBLIC 公衆衛生教育

PERIOD

January 11, 1993 to January 30, 1993 (19 days)

NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

#### 3. QUALIFICATIONS

Either one of the following items

- Director or dean of school of public health
   Chief of the educational courses/programs at school of public health
   Governmental officials who have responsibility for human resources development in public health
- Good working knowledge of English

# **DESCRIPTION OF TRAINING**

Lectures and studies

- Modern history of public health in Japan

- Public health personnels in health administration systems in Japan
   Human resources development in public health and the role of the Institute of Public Health in
- Human resources development and institutional capacity (special topic)
- -- International cooperation for appropriate technology transfer and human resources development
- Observation tours

## **FACILITIES AND INSTITUTIONS**

The Institute of Public Health, Ministry of Health and Welfare

Participants will be required to submit the country-report on the special topic mentioned above in advance.

## OCCUPATIONAL HEALTH 產業医学

## PERIOD

August 10, 1992 to December 12, 1992 (4 months)

# 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

## QUALIFICATIONS

- be medical doctors or university graduates with more than 3 years' professional or academic experience in the field of health occupational
- be presently engaged or expected to be working on their return in this field 2)
- be under 40 years old 3)
- have a sufficient command of spoken and written English

## **DESCRIPTION OF TRAINING**

- Lectures for Occupational Health
  - the General Principles of Occupational and Environmental Health Occupational Epidemiology and Biostatistics

  - Occupational Health in Agriculture
  - Occupational Diseases
  - Occupational Disorders due to Physical Factors
     Occupational Toxicology
     Work Physiology and Phychology
     Ergonomics and Management

  - Evaluation of Work Environment Control of Work Environment
  - Occupational Safety and Health Administration and Law
  - Occupational Health Services
- 2) Biostatistics and Data Management with Computer Course
- Two Weeks Elective Seminar Course
  - Some participants will be assigned to the special course on pneumoconiosis at the Rosai Hospital for Silicosis or assigned to departments in the UOEH according to their interests
- Country Report Presentation
- Observation Tours

## **FACILITIES AND INSTITUTIONS**

- 1) University of Occupational and Environmental Health, Japan
- 2) Keihai Rosai Hospital

# RESEARCH FOR TROPICAL MEDICINE 熱帯医学研究

## 1. PERIOD

January 18, 1993 to September 27, 1993 (8 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Five (5)

## 3. QUALIFICATIONS

- 1) be a medical doctors or graduates from a faculty of biology, pharmacy or agriculture,
- 2) or have at least three (3) years of occupational experience in the medical field
- 3) be more than 24 years old and under 40 years old
- 4) have a sufficient command of spoken and writted English
- 5) be presently engaged either in the Ministry of Health or medical research laboratory
- 6) be in good health, to undergo the course of training. Pregnancy is regarded as a disqualifying condition.

## 4. DESCRIPTION OF TRAINING

The course recommends an applicant to receive an intensive research training in a given department of the institute. Each department offers some conceivable research subjects on interest to the applicant. The applicants are allowed a free choice in the research subjects.

Although the training course includes the lectures, the majority of the course consists of the experimental basic research works under the guidance of the members of the institute.

The research subjects which are offered in 1991 by each department are as follows. The following subjects will be available in the course.

Pathology, Environmental Physiology, Parasitology, Virology, Bacteriology, Internal Medicine, Medical Entomology, Protozoology.

## 5. FACILITIES AND INSTITUTIONS

Institute for Tropical Medicine, Nagasaki University

## 6. REMARKS

# BIOLOGICAL PRODUCTS TECHNOLOGY 生物製剤技術

## 1. PERIOD

May 14, 1992 to March 29, 1993 (11 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

## 3. QUALIFICATIONS

- 1) College or university graduates or equivalent
- 2) Occupational experience of more than 3 years in developing and manufacturing biological products
- 3) under thirty-five (35) years of age
- 4) to be engaged in the same field after return to home countries
- 5) A good working knowledge of English

## 4. DESCRIPTION OF TRAINING

- 1) Lectures on vaccine manufacture and quality control in general
- Individual study including practical training in manufacture of a specified vaccine chosen by each
  participant
- 3) Observations and study tours

## 5. FACILITIES AND INSTITUTIONS

The Research Foundation for Microbial Diseases of Osaka University

Kan-onji Institute, The Research Foundation for Microbial Diseases of Osaka University

## 6. REMARKS

# MAINTENANCE ENGINEERING FOR MEDICAL EQUIPMENT

医療機器保守管理技術

## PERIOD

August 17, 1992 to September 20, 1992 (1 month)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

## QUALIFICATIONS

- University of electrical and electronic technology graduates or have the equivalent academic background
- 2) Have a personal experience of maintenance on X-ray equipment
- 3) Have thorough knowledge of two-pulse X-ray generation and combined radiographic devices
- Under forty (40) years of age 4)
- Have a sufficient command of spoken and written English

## **DESCRIPTION OF TRAINING**

- Lecture and Practice
  - Normal operation of conventional diagnostic X-ray apparatus
     Routine maintenance of diagnostic X-ray apparatus
     Troubleshooting and repairing of diagnostic X-ray apparatus
- Observation tour

## **FACILITIES AND INSTITUTIONS**

- Japan Association for the Advancement of Medical Equipments 1)
- Tokyo International Centre (Hatagaya), JICA

# SEMINAR ON EMERGENCY/DISASTER MEDICINE

救急・大災害医療セミナー

## PERIOD

September 3, 1992 to September 20, 1992 (0.5 month)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

## QUALIFICATIONS

- Executive doctor or administrator engaged in measures for emergency/disaster medicine and taking 1) leadership in emergency medical institutions or medical administrative organizations
- Good working knowledge of English-

## **DESCRIPTION OF TRAINING**

- 1) Participation in the 19th annual meeting of the Japanese Association for Acute Medicine
- 2) Lectures
  - The emergency medical service system in Japan
  - Health consequences of A-bomb radiation exposure
  - Epidemiology and response to
- Observations'
  - Japan Red Cross Medical Center Suita City Health Center

  - Suita Municipal Hospital
  - Osaka Prefectural Senri Critical Care Medical Center
  - Department of Traumatology, Osaka University
     Nippon Poison Information Center

  - Osaka Municipal Fire Department
  - Amagasaki Municipal Fire Department
  - Amagasaki Night/Holiday Clinic
- Discussions
  - Prehospital care
  - Disaster preparedness and response

## **FACILITIES AND INSTITUTIONS**

Japanese Association for Acute Medicine

# SEMINAR ON EVALUATION OF DRUG EFFICACY

医薬品の効果判定セミナー

## PERIOD

March 15, 1993 to June 28, 1993 (3.5 months)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Six (6)

## **QUALIFICATIONS**

- be a pharmacist or medical doctor and at the same time, a senior research worker, or a manager responsible for the evaluation of drug efficacy or a person of equivalent position.
- 2) have a sufficient command of spoken and written English.
- be in good health, both physically and mentally, to undergo the training. Pregnancy is regarded as a disqualifying condition for participation in the training.
- be not more than forty-five (45) years old.

## **DESCRIPTION OF TRAINING**

- **Evaluation of Traditional Medicine** 
  - Examination for Effective Substance
  - Separation and Analysis of Effective Substance
- Development of New Drugs
  - Screening test (Pharmacological and Toxicological studies)
  - Mechanism of actions
- Drug Disposition and Pharmacokinetic Analysis 3)
  - Drug Interaction
  - Drug Disposition in Disease State
- Dosage Forms and Administration
  - Improvement of Pharmaceutical properties
  - Design and Evaluation of Advanced Dosage Forms
- Hospital Pharmacy
  - Drug Information (Clinical Effects and Adverse Reactions)
     Clinical Pharmacokinetics
- Simulation of Field Action, Management of Field Programme 6)
- Field Trips
  - National Institute of Health, Tokyo
  - Taisho Pharmaceutical Co. Ltd., Tokyo

  - Takeda Chemical Industries, Osaka The Chemo-Sero Therapeutic Research Institute, Kumamoto
  - Panapharm Laboratories, Kumamoto

#### FACILITIES AND INSTITUTIONS 5.

- Agency for Cooperation in International Health 1)
- Education and Training Institute, Kumamoto Hospital 2)
- Faculty of Pharmaceutical Sciences, Kumamoto University 3)
- Kumamoto University Medical School 4)
- Kumamoto Prefectural Government 5)

#### PERIOD 1.

March 22, 1993 to November 28, 1993 (8 months)

NUMBER OF PARTICIPANTS TO BE RECEIVED Eight (8)

## 3. QUALIFICATIONS

- 1) have practical experiences of more than 3 years in health and hygiene work
- be between 30 and 40 years old
- 3) have a sufficient command of spoken and written English

## **DESCRIPTION OF TRAINING**

- 1) Lectures and Practical Training
  - Health and Medical Care System

  - Emergency Medical Care
     Data Processing Methods for Health Insurance Schemes in Medical Care
     Analysis of Disease Incidence
     Screening of Diseases (Early Detection and Treatment)

  - Measures for Infectious Diseases
  - Measures for Health Promotion
  - Rehabilitation
  - Planning for Improvement of Health in Communities
  - Methods of Developing Educational Media
- 2) Study Trip
- 3) Japanese Language (2 months)

## **FACILITIES AND INSTITUTIONS**

St. Mary's Hospital.

# SEMINAR ON THE CONTROL OF HEALTH HAZARDS IN THE MODERNIZING PROCESS OF AGRICULTURE AND RURAL AREA

農村近代化過程の健康障害対策セミナー

## PERIOD

October 5, 1992 to December 7, 1992 (2 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Nine (9)

## 3. QUALIFICATIONS

- be a medical doctor or a co-medical staff and, at the same time, a manager of middle level or above in the office or in the field with more than 5 years experiences. The work should be related to this training course.
- 2) be not more than 50 years old
- 3) have a sufficient command of spoken and written English

## 4. DESCRIPTION OF TRAINING

- 1) Basic Lectures and Practice
  - Modernization and Public Health in Rural Area
  - Importance of Health Policies and Primary Health Care in Rural Area
  - Problems on Agricultural Chemicals
  - Health Problems in the Modernizing Process of Agriculture and Forestry
  - Health Problems in Rural Area
- 2) Group Study and Discussion
- 3) Study Trip
  - Agricultural Field
  - Forestry Field
  - Saku Central Hospital
  - Kagoshima University
  - Kumamoto Prefectural Centre for Health and Preventive Medicine
  - Tamana Public Health Centre
  - Institute of Health Management, Kumamoto Prefecture Branch, Japan Red Cross
  - Kumamoto Kinoh Hospital

## 5. FACILITIES AND INSTITUTIONS

- 1) Agency for Cooperation in International Health
- 2) Kumamoto University
- 3) Kumamoto National Hospital
- REMARKS

# SEMINAR ON FAMILY PLANNING ADMINISTRATION FOR SENIOR OFFICERS II

家族計画指導者セミナーⅡ

#### PERIOD 1.

August 18, 1992 to September 12, 1991 (1 month)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Twelve (12)

## QUALIFICATIONS

- Be responsible high-ranking officials in administration, planning and implementation of the field programmes of governmental organizations or private/voluntary organizations for family planning
- 2) Have a sufficient command of spoken and written English
- 3) Between thirty-five (35) and fifty (50) years of age, and with more than 5 year experience in the field of family planning.

## **DESCRIPTION OF TRAINING**

Orientation and General Outline of Japanese Population/MCH/Family Planning 1)

Population and family planning

- Governmental MCH/family planning programme
- Non-governmental family planning programme
   Concept of family planning and strategies
   Community organization

- Presentation of Country Report 2)
- 3) Field Observation
  - Prefectural governmental office
    Prefectural health center

  - Municipal office
  - Community organizations
  - Hospital/institution
  - Primary school
- Summing-up Session

## **FACILITIES AND INSTITUTIONS**

Japan Organization for International Cooperation in Family Planning, Inc (JOICFP)

# SEMINAR ON COMMUNITY-BASED FAMILY PLANNING STRATEGY

家族計画組織活動セミナー

## PERIOD

May 11, 1992 to June 14, 1992 (1 month)

NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

#### 3. QUALIFICATIONS

- Officers who are directly involved and responsible for community-based family planning programmes including Information, Education and Communication (IEC) activities of government or voluntary organizations at the central or provincial level.
- 2) Between 25 and 50 years of age
- With sufficient command of spoken and written English

## **DESCRIPTION OF TRAINING**

- 1)
- Presentation and discussions

   Mother and Child Health / family planning
  - IEC strategies
- Field study 2)

# **FACILITIES AND INSTITUTIONS**

Japanese Organization for International Cooperation in Family Planning, Inc. (JOICFP)

# REMARKS

The course will be conducted in 1992

# WELFARE

## MENTAL RETARDATION 精神薄弱福祉

## 1. PERIOD

June 1, 1992 to November 29, 1992 (6.5 months)

# 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Eight (8)

## 3. QUALIFICATIONS

- be presently engaged in education and/or training of people with mentally retardation in special schools
  or facilities for them with more than three (3) years of occupational experience in the relevant field,\*
  be not medical doctors in hospital or professors in universities,
- 2) be university graduates or have the equivalent academic background
- 3) be not less than twenty-six (26) years, and not more than forty-five (45) years of age,
- 4) have a sufficient commend of spoke and written English.

## 4. DESCRIPTION OF TRAINING

- Japanese Language
- 2) General Overview
  - General Comments
  - Specific Topics including Observation
- Practice
  - General Practice
  - Special Practice
  - Study Tour

# 5. FACILITIES AND INSTITUTIONS

- Japan League for the Mentally Retarded (JLMR)
- Tokyo International Centre (Hatagaya), JICA

## 6. REMARKS

Japanese Language Course will be arranged for about two months prior to the course.

## PROSTHETIC AND ORTHOTIC TECHNICIANS

## PERIOD

July 20, 1992 to December 9, 1992 (5 months)

## 2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Four (4)

## 3. QUALIFICATIONS

- Be five years or more practical experience in the production of prosthetic and orthotic devices
- 2) Be expected to become leaders in this field
- 3) Have not studied a similar subject abroad before
- Be a sufficient command of spoken and written English or Japanese

## **DESCRIPTION OF TRAINING**

- Lectures
  - Basic Medicine
  - Introduction of Prosthetics and orthotics
  - Functional Anatomy
  - Disability and Indication of Prostheses and orthoses
  - Materials
- Practical training

  - B/K ProsthesisA/K Prosthesis
  - Upper Extremity Prosthesis
  - Upper and Lower Orthosis
- Study Tour

## FACILITIES AND INSTITUTIONS

- National Rehabilitation Center for the Disabled 1)
- 2) Hachioji International Training Centre, JICA

## REMARKS

There will be an intensive Japanese language course, conducted prior to the technical training (1 month, 100 hours).

## REHABILITATION OF PHYSICALLY DISABLED PERSONS

障害者リハビリテーション指導者( 専門家 )

## 1. PERIOD

September 15, 1992 to November 1, 1992 (1.5 month)

## NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

## QUALIFICATIONS

- be a rehabilitation expert with experience of more than three years, such as social worker, rehabilitation consular, therapist, vocational skill instructor, teacher, workshop manager, and trainer in other fields of rehabilitation for physically disabled persons (except medical doctors and nurses),
- 2) have a sufficient command of spoken and written English,
- be not less than twenty-five (25), and not more than forty (40) years of age, 3)
- be in good health to undergo the course of training. Applicants with disabilities must be independent in activities of daily living and in moving. (No attendant available.) Pregnancy is regarded as a disqualifying condition for participation in the course.

## DESCRIPTION OF TRAINING

- - Medical and Vocational Rehabilitation Services
  - Services for Disabled Persons Provided by Local Government
  - General School System and Special Education
  - Other Programmes
- Individualized Training

   Management of Sheltered Workshops

   Rehabilitation Social Work
- Observation Tour 3)
  - Services of Pretectural Government
  - The Sports Meeting of Disabled Persons

## **FACILITIES AND INSTITUTIONS**

- Japanese Society for Rehabilitation of the Disabled l)
- Tokyo International Centre (Hatagaya), JICA 2)

#### REMARKS 6.

# LEADERSHIP OF PHYSICALLY DISABLED PERSONS

障害者リハビリテーション指導者(身体障害者コース)

## PERIOD

October 26, 1992 to December 13, 1992 (1.5 month)

# NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

#### 3. QUALIFICATIONS

- be a physically disabled person who has been leader of organization of disabled persons or groups 1) with experience of more than three years,
- 2) have a sufficient command of spoken and written English,
- be not less than twenty-five (25), and not more than forty (40) years of age, 3)
- be in good health to undergo the course of training. Applicants with disabilities must be independent in activities of daily living and in moving. (No attendant available.) Pregnancy is regarded as a disqualify-4) ing condition for participation in the course.

## **DESCRIPTION OF TRAINING**

- 1) Lecture
  - -- Present situation of disabled persons in Japan
  - Service provided for the disabled in Japan
  - Disabled persons Movement
- Individualized Training
  - Disabled person's organizations
     Independent living activities

  - Disabled person's workshops.
- Observation Tour
  - Disabled person's activities in local cities
  - The Sports Meeting of Disabled Persons

## **FACILITIES AND INSTITUTIONS**

- 1) Japanese Society for Rehabilitation of the Disabled
- 2) Tokyo International Centre (Hatagaya), JICA

# No. 311 SPORTS INSTRUCTOR OF PHYSICALLY DISABLED PERSONS

身障者スポーツ指導者

1. PERIOD

October 5, 1992 to November 20, 1992 (1.5 months)

2. NUMBER OF PARTICIPANTS TO BE RECEIVED

Ten (10)

## 3. QUALIFICATIONS

- be a workshop manager or a rehabilitation expert with more than three years experience such as a social
  worker, therapist, trainer in the field of sports or rehabilitation for the physically disabled (except
  medical doctors and nurses). Special school teachers and the leading disabled athletes are applicable.
- 2) have a sufficient command of spoken and written English or Japanese
- 3) be not less than twenty-five and not more than forty years of age.

## 4. DESCRIPTION OF TRAINING

- 1) Social welfare and Rehabilitation System in Japan Lectures and Study Visits
- Sports for the disabled Lectures, Practicums and Study Visits
- 3) Discussions

# 5. FACILITIES AND INSTITUTIONS

Japanese Sports Association for the Disabled

6. REMARKS