

**NON-REVENUE WATER MANAGEMENT
(LEAKAGE CONTROL)**

Oct. 20, '97 - Dec. 22, '97, 8 participants

上水道無収水量管理対策

J-97-03311

- 1. PURPOSE** The purpose of this course is to provide engineers who are presently engaged in the field of waterworks with comprehensive knowledge of non-revenue water management, focusing on leakage control.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures, observations and practices. The practical training is to be conducted at Technical Training Center of Nagoya Waterworks Bureau. The main themes are: (1) open seminar (2) leakage detection and repair (3) leakage prevention measures (planning, design, construction, maintenance) (4) metering system (5) mapping management (6) water charges (7) countermeasures for natural disasters
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) currently engaged in the field of waterworks for more than five years (3) between 27 and 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) Waterworks Bureau, City of Nagoya (3) other public institutions and private enterprises
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

**OPERATION AND MAINTENANCE OF
SEWERAGE FACILITIES**

Aug. 11, '97 - Oct. 13, '97, 6 participants

下水道維持管理

J-97-03158

- 1. PURPOSE** The course is designed for technical administrative officials engaged in providing sewerage works in developing countries. The purpose of this course is to give them training in the maintenance of sewers and wastewater treatment plants, utilization of resources (i. e., treated wastewater and sludge), and control of water pollution due to industrial wastewater, and thereby to improve their capability of managing and carrying out sewage works.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on practice and exercise concerning operation and maintenance of sewerage facilities. It mainly deals with: (1) basic concept of sewerage system (2) maintenance of sewers (3) management of wastewater treatment plants (4) utilization of treated wastewater and sludge (5) controlling water pollution due to industrial wastewater
- 3. QUALIFICATION OF APPLICANT** (1) be a university graduate or equivalent in this field, and have more than three years of practical experience (2) be a senior technical officer in charge of sewage works in central or provincial government, or in local bodies (3) be a under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Sewerage Bureau, City of Sapporo

**SEWERAGE TECHNOLOGY FOR
STORMWATER DRAINAGE**

Aug. 25, '97 - Nov. 29, '97, 6 participants

都市排水

J-97-03325

- 1. PURPOSE** The purpose of this course is to offer technical administrative officers an opportunity to acquire knowledge and technological know-how on sewerage system improvement (basic planning, designing, construction, and maintenance), with emphasis on rainwater drainage works in urban areas, and hence contributing to the improvement of the expertise of the leading administrative officers in this field, and the effective execution of sewerage system improvements in participating countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on laboratory experiments and introduction of Japanese experience. The main themes are: (1) introduction to sewerage system (2) urbanization and urban drainage (3) improvement of urban sewerage system and countermeasures against stormwater (4) designing and construction of urban drainage facilities (5) maintenance of urban drainage facilities (6) improvement of urban infrastructure
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or those with equivalent technical qualifications in this field, and have five or more years of practical experience (2) between 30 and 40 years of age (3) technical administrative officers in charge of sewage works in the government or government-affiliated organizations
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Osaka Sewerage Works Bureau, Osaka Municipal Government (3) Osaka City Sewerage Engineering Association
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks.

**LIVING ENVIRONMENTAL PROTECTION
TECHNIQUE**

Apr. 21, '97 - Aug. 8, '97, 8 participants

生活環境保全技術

J-97-03196

- 1. PURPOSE** The knowledge and technology of monitoring and surveying the living environment are necessary for taking measures for environmental problems. Training will be carried out at the fields in Hiroshima Prefecture to help the improvement of living environment, disseminate the knowledge and technology, promote protection of local environments and contribute to the preservation of global environment.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on workshop practice, laboratory experiments and final report presentation and discussion by participants besides lectures and observation. It mainly covers: (1) knowledge and technique of monitoring and survey based on analytical methods including continuous analyzer and simple methods in the fields of air quality, water quality, noise and wastes (2) environmental information management such as analysis, data processing including remote sensing data processing, forecast, simulation, landscape montage (3) countermeasures for problems in living environment such as environmental impact assessment, environment management system, environmental education (4) living environmental pollution control technology in the pollution source
- 3. QUALIFICATION OF APPLICANT** (1) senior technical staff presently directly engaged in the environmental administration in the national and local governmental or related public organizations (2) more than three years experience in the field of environmental protection (3) university graduate or equivalent (4) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Hiroshima Prefectural Health and Environment Center (3) Hiroshima International Centre
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

URBAN SOLID WASTE MANAGEMENT

Aug. 5, '96 - Nov. 17, '96, 8 participants

都市廃棄物対策

J-97-03155

- 1. PURPOSE** The purpose of the course is to contribute to the improvement of public health in participating countries by training personnel to take leadership and middle management roles in planning and implementing waste management programs in their own countries. This will be accomplished by having participants learn in detail about waste management in big Japanese cities. They will also learn about the special characteristics of urban waste management programs while acquiring comprehensive knowledge on waste management.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of the Japanese experience. The main themes are: (1) outline of waste management (2) outline of regional administration (3) economics and measures to counteract pollution (4) domestic waste management (5) intermediate treat facilities (6) final disposal site (7) restrictions on industrial waste management
- 3. QUALIFICATION OF APPLICANT** (1) Engineers or administrative officials with at least three years of waste management experience or an equivalent level of specialized knowledge. Applications should also be limited to those who will continue working in the field of waste management after the training course. (2) University graduates having majored in analytical chemistry or microbiology, or those with equivalent technical knowledge (3) Under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Global Environment Centre Foundation (GEC) (3) Osaka City Environmental Management Bureau
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week.

TECHNOLOGY FOR PREVENTION OF WATER POLLUTION IN URBAN AREAS

May 12, '97 - July 13, '97, 5 participants

都市型水質汚濁防止検査技術

J-97-03293

- 1. PURPOSE** To help overcome water pollution problems in developing countries, this course is designed to contribute to the promotion of countermeasures against water pollution by comprehensively introducing water quality inspection technology and preventive measures against water pollution to engineers from these countries engaged in this field.
- 2. MAIN FEATURES OF CURRICULUM** This course has the top priority on analysis exercises, and consists of lectures, exercises and observation studies. Main features are as follows; (1) lectures-urban water pollution and its control of water pollution in Sapporo City; (2) practices-river water analysis, drinking water analysis, water system bacillus analysis, toxic substance analysis, acid rain analysis; and (3) observation-water supply and sewerage facilities, waste management facilities, industrial waste water processing facilities, environmental monitoring center, environmental education facilities, commercial facilities to prevent environmental pollution.
- 3. QUALIFICATION OF APPLICANT** (1) engineer of an environmental pollution analysis institution of a central or a local government or technical official of a department concerning environmental pollution administration (2) university graduate or equivalent with over 3 years of experience (3) between 25 and 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Sapporo City Institute of Public Health

COMPREHENSIVE WASTE MANAGEMENT TECHNIQUES

Aug. 18, '97 - Nov. 16, '97, 8 participants

廃棄物処理総合対策技術

J-97-03308

- 1. PURPOSE** The knowledge and technology of managing and treating waste are necessary for taking measures for pollution of waste. Training will be carried out at the fields in Hiroshima Prefecture to help the improvement of waste management, to disseminate the knowledge and technology and to contribute to the solution of waste issues in the developing countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on workshop practice, laboratory experiments and final report presentation and discussion by participants besides lectures and observation. It mainly covers: (1) basic knowledge and technique for the management plan, collection, transport and disposal of the waste (2) management for location of waste treatment facilities (3) technique for the test and analysis concerning with waste disposal (4) information and technique for reduction of the waste and recycling of resources.
- 3. QUALIFICATION OF APPLICANT** (1) senior technical staff presently directly engaged in the administration of waste management in the national and local government, or related public organizations (2) more than three years experience in the field of waste management (3) university graduate or equivalent (4) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Hiroshima Prefectural Health and Environment Center (3) Hiroshima International Centre
- 5. REMARKS** A compulsory 50 hour-Japanese language course will be conducted prior to the technical training.

ROAD CONSTRUCTION ENGINEERING

July 14, '97 - Sep. 11, '97, 5 participants

道路技術者養成

J-97-03294

- 1. PURPOSE** This course is designed for middle level technical officials who are concerned with road administration and projects in the developing countries. The purpose of this course is to introduce road construction engineering technologies as an indispensable infrastructure for activation and development of land and industries, and thereby to contribute to promotion of national land development.
- 2. MAIN FEATURES OF CURRICULUM** (1) design and construction of roads; (2) design and construction of road structures and bridges, (3) maintenance and management of roads.
- 3. QUALIFICATION OF APPLICANT** (1) middle level technical official concerned with road administration or projects, having over 3 years but under 8 years of experience, (2) between 25 and 35 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Construction Bureau, City of Sapporo

ROLLING STOCK MAINTENANCE AND MANAGEMENT

Aug. 12, '97 - Oct. 22, '97, 8 participants

鉄道車両管理

J-97-03332

- 1. PURPOSE** The purpose of the course is to contribute to the development of railway and modernization of rolling stocks management in the developing countries through providing a wide range of knowledge and techniques about maintenance, management and manufacturing of the rolling stock in Japan as well as introducing various kinds of Japanese railroad traffic systems to the participants.
- 2. MAIN FEATURES OF CURRICULUM** (1) Outline of railway in Japan (2) An introduction to rolling stocks (3) Rolling stock maintenance (4) Operation planning (5) Security system and accident prevention (6) Manufacturing of rolling stocks and related parts (7) Various type of railroad traffic systems
- 3. QUALIFICATION OF APPLICANT** (1) have been engaged in rolling stock engineering for more than two years with more than seven years of practical experience in the field of railway engineering (especially E.M.U. or E.L. rolling stock engineering) (2) under 40 years of age (3) university/college or equivalent technical school graduate
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Railway Bureau, Ministry of Transport (3) Japan Railway Group (JR) (4) Japan Overseas Rolling Stock Association (JORSA) (5) Japan Association of Rolling Stock Industries (JARI)
- 5. REMARKS** This course is designed mainly for EL or EMU types of rolling stock.

RAILWAY ELECTRIFICATION PLANNING AND MANAGEMENT

Oct. 9, '97 - Dec. 21, '97, 7 participants

鉄道電化計画・管理

J-97-03314

- 1. PURPOSE** The purpose of the course is to provide participants, through lectures, discussions and observations, with basic and comprehensive theories and the application of such theories to railway electrification in terms of planning, implementation, cost-effective operations, maintenance of equipment and management technology.
- 2. MAIN FEATURES OF CURRICULUM** This course is designed to introduce basic theories and know-how of railway electrification to those countries that are rather inexperienced in railway electrification. The following themes will be covered in the course. (1) various equipment for the electric traction to electrify a railway (2) a rough plan for an electric traction system (3) basic methodology for maintenance of electric traction equipment (4) accident prevention measures (5) technical trends in railway electrification (6) investment planning of railway electrification, its implementation and management
- 3. QUALIFICATION OF APPLICANT** (1) currently engaged, or expected to be engaged in the near future, in planning and management work for railway electrification (2) university graduate in electrical engineering and have more than five years of practical experience (3) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Railway Bureau, Ministry of Transport (3) Japan Railways Group (JR Group) (4) Railway Electrical Engineering Association of Japan
- 5. REMARKS** This course is organized for countries at the early stage of railway electrification.

RAILWAY SIGNAL, TELECOMMUNICATION AND INFORMATION SYSTEM ENGINEERING

Jan. 8, '98 - Mar. 29, '98, 7 participants

鉄道情報システム

J-97-03315

- 1. PURPOSE** The purpose of the course is to provide the participants with the knowledge of how to plan the installation of railway signals and telecommunications equipment through lectures and to introduce them to the workshops with recent manufacturing techniques, thereby cultivating leading signal engineers who can contribute to safe train operations.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly consists of lectures by railway companies and signal manufactures, so as to provide information from both users' and manufacturers' sides. The main topics in the course are as follows. (1) management (a) signal engineering in general (b) railway telecommunications in general (c) planning & development (d) maintenance (2) basics of electrical signal (a) switch point (b) track circuit (c) blocking system (d) interlocking (3) safety system and others (a) Relay Interlocking and Electronic Interlocking (b) ATS (Automatic Train Stop) and ATC (Automatic Train Control) (c) CTC (Centralized Traffic Control) (d) electronic token block system (e) railway traffic control system (f) dispatcher information system (g) railway telecommunication
- 3. QUALIFICATION OF APPLICANT** (1) railway signal engineering official with more than five years of practical experience (2) presently engaged or expected to be engaged in the near future, in planning and administration work in the field of signal engineering (3) university/college graduate or equivalent (4) not more than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Railway Bureau, Ministry of Transport (3) Japan Railway Group (JR) (4) Japan Association of Signal Industries (5) Signal Manufactures

SEMINAR ON AIRPORT ENGINEERING

Aug. 26, '97 - Oct. 16, '97, 10 participants

空港工学セミナー

J-97-03213

- 1. PURPOSE** The seminar is designed to contribute to upgrading technical knowledge and skill on airport engineering for engineers who mainly work in the areas of airport planning, airport construction, and maintenance of airport facilities.
- 2. MAIN FEATURES OF CURRICULUM** In this seminar, the emphasis is put on introduction of Japanese situation and systems and basic theories on airport planning and management. The major subjects are; (1) civil aviation in general (2) airports in general (3) airport planning (4) design and construction of airports (5) maintenance of airports
- 3. QUALIFICATION OF APPLICANT** (1) university graduate specialized in civil engineering or architecture or equivalent (2) currently employed by their government or by public authorities for civil aviation as airport engineer or be newly-appointed personnel who will manage airport civil engineering matters (3) have more than five years of occupational experience in the fields of airport civil engineering such as in airport planning, airport construction, or maintenance (4) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Civil Aviation Bureau, Ministry of Transport

SEMINAR ON FUTURE AIR NAVIGATION SYSTEMS (FANS) TECHNOLOGY

Feb. 17, '98 - Mar. 18, '98, 7 participants

将来航空法システム(FANS)技術セミナー

J-97-03337

- 1. PURPOSE** Toward 2010, ICAO (International Civil Aviation Organization) is promoting worldwide construction of the new system (CNS Systems) based on the FANS (Future Air Navigation System) concept. The purpose of this course is to contribute to the aviation safety in Asian and Pacific countries with striving for promotion of the new CNS Systems by providing participants with fundamental knowledge on FANS concept, including global coordinated plan and air navigation plan in Asian and Pacific region.
- 2. OBJECTIVES** (1) to understand the problems of current air navigation/air traffic control system, (2) to understand fundamental knowledge on FANS concept and transition planning toward the new system, (3) to be able to develop original master plan for each country's new CNS System
- 3. MAIN FEATURES OF CURRICULUM** Consist of lectures, discussions and observations. (1) Review of the problems in current system, (2) FANS related activities in ICAO, (3) Overview of the FANS, (4) Guidelines for Introduction of the new system, (5) Examples of introduction of the new system, (6) Observation of relevant facilities.
- 4. QUALIFICATION OF APPLICANT** (1) have more than 5 years' occupational experience in the field of current air navigation and air traffic control system, (2) experienced in designing the air navigation and air traffic control system, (3) under 40 years of age
- 5. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Civil Aviation Bureau, Ministry of Transport (3) Japan Radio Air Navigation Systems Association
- 6. No JAPANESE LANGUAGE CLASS**

GLOBAL SEISMOLOGICAL OBSERVATION

Oct. 27, '97 - Dec. 21, '97, x participants

グローバル地震観測

J-97-03276

- 1. PURPOSE** This course is designed to introduce up-to-date technologies and knowledge in the field of global seismological observation to the participants who are expected to play important roles in a global monitoring network on nuclear tests.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, practices and field studies. Subjects are shown below: (1) introduction: seismology and nuclear politics (2) global seismic network (3) instrumentation and observation practice (4) hypocenter location (5) data processing (6) analyses of teleseismic record (7) source mechanism (8) world seismicity (9) practice of discrimination of nuclear explosion (10) study tour
- 3. QUALIFICATION OF APPLICANT** (1) be university graduates or equivalent, with professional experience of more than three (3) years in the field of seismology; (2) be well versed in basic mathematics such as differentiation and integration; and (3) be under thirty-five (35) years of age
- 4. TRAINING INSTITUTIONS** (1) Tsukuba International Centre (TBIC), JICA (2) International Institute of Seismology and Earthquake Engineering (IISEE), Building Research Institute, Ministry of Construction
- 5. REMARKS** A compulsory intensive Japanese language course is to be conducted prior to the technical training for one week (25 hours).

EXECUTIVE'S SEMINAR ON PUBLIC WORKS RESEARCH AND DEVELOPMENT (ASIAN COUNTRIES)

Oct. 12, '97 - Oct. 23, '97, 8 participants

土木技術研究開発幹部セミナー(アジア諸国) J-97-03152

- 1. PURPOSE** This seminar is intended for executive engineers in leading posts to prepare and promote public works research and development in Asian countries. The purpose of this seminar is to improve executive personnel who can efficiently and properly contribute to implementation of infrastructure and public works, thus leading to development of each country.
- 2. MAIN FEATURES OF CURRICULUM** In this seminar, the emphasis is put on the report presentation, discussion in the field of public works, and study trip. It mainly covers; (1) presentation of Country Report (2) introduction and analysis of the current situation and problems of public works in developing countries and Japan (3) discussion on specific subjects (4) study trip
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent in the field of public works engineering (2) director general or equivalent high-ranking officials responsible for management or administration of public works in government or research institutions
- 4. TRAINING INSTITUTIONS** (1) Tsukuba International Centre (TBIC), JICA (2) Public Works Research Institute, Ministry of Construction

SEMINAR ON PUBLIC WORKS ADMINISTRATION IN REGIONAL GOVERNMENT

Sep. 1, '97 - Oct. 30, '97, 5 participants

地域土木行政セミナー

J-97-03290

- 1. PURPOSE** In developing countries, "sustainable development" is called for public works projects. Spread of technologies and promotion of competent people for sustainable development is a pressing need. This course is designed for the middle level engineers in civil works in developing countries. The purpose of this course is to introduce legislative systems, budgeting, execution systems, construction flow, environmental concerns, construction technologies and other topics by lectures, seminars and on-the-spot observation studies, and thereby to contribute to development of national land in developing countries.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, seminars, and observations. (Lecture) legislative systems, budget systems, execution systems, role allotment of the national and local governments, planning and construction flow concerning public work, and harmonization of the public works and environmental protection. (Seminar) Opinion exchanges between the lecturers and the trainees. (Observation) Observation of different kinds of public works facilities and construction sites.
- 3. QUALIFICATION OF APPLICANT** (1) middle level technical officials who are engaged in public works administration with more than five years of experience in this field, (2) under 40 years of age; (3) university graduate or equivalent
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Department of Public Works, Hokkaido Government

SOCIAL INFRASTRUCTURE DEVELOPMENT AND PLANNING

Aug. 18, '97 - Oct. 26, '97, 8 participants

社会資本整備計画

J-97-03326

- 1. PURPOSE** This course offers to those who belong to the government or government affiliated organizations of developing countries an opportunity to acquire the contemporary knowledge and techniques concerning the roles of infrastructure, methods and process of survey, analysis, and planning, through lectures, observations and group studies.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common subjects for all participants and group studies. It covers very broad technical fields; roads, railways, ports, water supply, sewage system, dams, and telecommunication in order for participants to obtain wide knowledge and technique to prepare comprehensive plans for the infrastructure. The main themes are: (1) introduction and social scheme of infrastructure development (a) development and economic effect of infrastructure in Japan, cultural climate and social infrastructure, Japanese overseas technical cooperation in infrastructure development (2) regional/urban planning (a) regional development, city planning, water supply system, sewage system, garbage management (3) highway, transport, telecommunication planning (a) road network, urban transport, railways (4) river/port planning (a) river improvement and management (water resources, flood control), port and harbour (5) case study (group discussion) on infrastructure development plans
- 3. QUALIFICATION OF APPLICANT** (1) university graduates or those who have equivalent educational qualifications preferably in the field of civil engineering, and have at least five years' experience in planning infrastructure development (roads, railways, ports, water supply and sewage systems, dams, telecommunication systems, etc) (2) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Engineering Affairs Management Section, Minister's Secretariat, Ministry of Construction (MOC) (3) International Affairs Division, Economic Affairs Bureau, MOC (4) Planning Department, Kinki Regional Construction Bureau, MOC (5) Japan Construction Training Center Foundation (JCTC)
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week.

URGENT DISASTER RESTORATION SYSTEM

Oct. 6, '97 - Dec. 19, '97, 8 participants

緊急災害復旧システム

J-97-03301

- 1. PURPOSE** The purpose of this course is to provide technicians who are engaged in infrastructure maintenance with comprehensive knowledge and techniques on the restoration system from disasters and reconstruction methods, and thereby to contribute to the establishment of the restoration system in developing countries.
- 2. MAIN FEATURES OF CURRICULUM** This course includes lectures and practices on (1) the outline of the great Hanshin earthquake, (2) mechanism of earthquake disaster, (3) aseismic technology, (4) predicting earthquakes, (5) mechanisms of ordinary disasters in rivers and roads, (6) disaster prevention plan, (7) disaster-prevention-city plan, (8) activities at the initial stage and rescue system, (9) evacuation measures, (10) protection of lifeline, (11) communication at the time of disasters, (12) disaster prevention, (13) disaster rescue method and its application, (14) administrative work of reconstruction for restoration, and (15) group research (disaster restoration plan)
- 3. QUALIFICATION OF APPLICANT** (1) technical executive officials who are engaged in civil engineering (2) have more than 7 years' experience (3) between 30 and 39 years of age (4) university graduate and equivalent (5) civil engineer
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Japan Construction Training Center Foundation (JCTC)

ENVIRONMENTAL ASSESSMENT IN INFRASTRUCTURE DEVELOPMENT

May 5, '97 - July 19, '97, 8 participants

社会資本関連環境影響評価

J-97-03184

- 1. PURPOSE** To contribute to harmony of development and environmental preservation in participating countries by training infrastructure development engineers in the techniques required in environmental assessment, assessment of effects on environment, measures for environmental preservation, etc. for minimizing the effects of infrastructure development on environment, maintaining favorable environment for the people, and for preserving nature.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, observations, group studies, and study tours as follows. (1) regional plans (2) environmental plans (3) environmental assessment (4) environmental projections (5) environmental preservation measures (6) assessment of effects on environment * Under the word "Environment", this course deals with water quality, noise, vibration, air quality, animals and vegetation
- 3. QUALIFICATION OF APPLICANT** (1) university graduate in civil engineering or equivalent (2) five or more years of experience in infrastructure development administration (3) under 40 years old in age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Engineering Affairs Management Section, Minister's Secretariat, Ministry of Construction (MOC) (3) International Affairs Division, Economic Affairs Bureau, MOC (4) Planning Department, Kinki Regional Construction Bureau, MOC (5) Japan Construction Training Center Foundation (JCTC)
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week.

URBAN GREENERY AND PARK ADMINISTRATION

Aug. 25, '97 - Nov. 9, '97, 6 participants

都市緑化行政

J-97-03154

- 1. PURPOSE** The course is intended for administrators in participating countries who are responsible for promoting projects to increase greenery and park constructions in the cities. It will include study of governmental policies and technical issues related to increasing urban greenery, preserving existing green spaces, city parks, natural parks and recreational facilities. Basic knowledge and experience necessary for the participants to respond in an informed manner to policy proposals and decisions will also be covered. The overall aim of the course is to upgrade the technical abilities of the leading governmental administrators and thus enabling them to contribute to the improvement of the living environment in developing countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of Japanese experience and basic theories of greenery in city-planning and park administration. The main themes are: (1) creation of green space (a) policies of urban design with flowers and greenery, planning and design of planting, planning and policies of parks and green spaces (2) preservation and conservation of green spaces (a) national parks, Japanese gardens
- 3. QUALIFICATION OF APPLICANT** (1) planning of supervisory administrators responsible for over-all urban greenery and park development with practical experience of at least seven years (2) under 40 years of age (3) university / college graduate or equivalent
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Osaka International House Foundation (3) Public Works Bureau, Osaka Municipal Government
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week.

PLANNING FOR THE DEVELOPMENT OF URBAN FACILITIES

Sep. 1, '97 - Nov. 7, '97, 8 participants

都市施設整備計画

J-97-03195

- 1. PURPOSE** The course is designed to train urban planning officers and engineers to be leaders in the field of urban facilities planning. This is accomplished through special training programmes which teach techniques for the planning of roads, water works, public space, etc. in the medium sized City of Obihiro (i. e. population: 170,310, area: 618.94 km², population density: 275/km²).
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of Japanese experience and basic theories of urban planning including planning presentation by participants. The main themes are: (1) road and traffic facilities (2) public space; parks, green area (3) service facilities and treatment plants; waterwork, electricity, gas services, sewage and filth treatment plant and waste disposal (4) waterway; rivers and dams (5) facilities for education and culture; schools.
- 3. QUALIFICATION OF APPLICANT** (1) engineer or administrative officer who is presently engaged in planning for urban facilities and has experience in this field more than five years (2) over 25 and under 45 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Northern Regions Center (NRC)

TECHNOLOGY FOR PREVENTION FROM PREMATURE DETERIORATION OF CONCRETE STRUCTURES

Jan. 5, '98 - July 1, '98, 5 participants

コンクリート構造物耐久性向上技術

J-97-03270

- 1. PURPOSE** The purpose of this course is to provide knowledge and information on prevention of premature deterioration of concrete structures in order to disseminate the technology in this field and to improve the durability of concrete structures in participating countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, discussions and observation trips: (1) method of corrosion investigation of existing ferroconcrete structures (2) basic engineering technique of concrete (material examination, mixing examination, etc.) (3) basic corrosion engineering technique (4) chemical analysis technology on quality of concrete (5) study on improvement of quality of concrete, material, and construction technique by using concrete material in respective countries (6) making a guideline about corrosion prevention of structures and improvement of durability.
- 3. QUALIFICATION OF APPLICANT** (1) technical officials in charge of construction of concrete structures or engineers who are engaged in research on concrete materials (2) have more than 5 years' experience (3) between 27 and 40 years of age (4) university graduates.
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) General Building Research Corporation.
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (25 hours).

GLOBAL MAPPING (ENVIRONMENT)

May 26, '97 - Aug. 10, '97, 5 participants

環境地図

J-97-03226

- 1. PURPOSE** This course is designed to introduce the significance and technical background of global maps covering the whole world in the standardized method based on international cooperation, and to upgrade administrative skills of surveying and mapping. The course emphasizes the importance of preparing environmental maps of uniform standards which cover a broad area, and expects participants to acquire the knowledge and technology necessary for preparing such maps.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, practices and discussions and observation. Main subjects of the curriculum are as follows: (1) outline of global mapping, (2) geographical information processing technology, (3) application of geographical information system, (4) digitalization of maps, (5) remote sensing, (6) survey law. Practices on (4), (5) and digital elevation model make up forty percent of the program.
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent, (2) more than seven years of experience in this field, (3) a section head or an equivalent of a national institute related to surveying and mapping, (4) under 40 years of age.
- 4. TRAINING INSTITUTIONS** (1) Tsukuba International Centre (TBIC), JICA, (2) Geographical Survey Institute (GSI), Ministry of Construction.

POSTAL OPERATION MANAGEMENT (FOR ISLAND REGIONS)

May 5, '97 - June 1, '97, 7 participants

郵便業務管理(島しょ地域)

J-97-03229

- 1. PURPOSE** This course is intended for participants from countries who are engaged in the management of mail in island regions. The status quo of Japan's mail system and its experience will be introduced aiming to contribute to solve various problems participating countries face.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures, case studies, field on-the-spot surveys. The main theme is: problems in the management of mail business in island countries and countermeasures. The subjects are as follows: (1) sorting of mail, (2) transportation, (3) collection and delivery, (4) contribution to the community, (5) sales activity, (6) personnel management.
- 3. QUALIFICATION OF APPLICANT** (1) more than five years' experience in postal service management, (2) over 35 and under 45 years of age, (3) university graduate or have equivalent educational qualification.
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) Postal Bureau, Ministry of Posts and Telecommunications (3) International Postal Research Center.

DIGITAL RADIO COMMUNICATION ENGINEERING

May 12, '97 - Aug. 8, '97, 7 participants

デジタル無線通信技術

J-97-03242

- 1. PURPOSE** The purpose of the course is to introduce to participants the basic and practical knowledge on digital radio communication engineering.
- 2. MAIN FEATURES OF CURRICULUM** The course will be conducted in the form of lecture, discussion, practical exercises and observation tour. The main themes are: (1) digital radio technology (2) satellite, mobile and rural communication technology (3) radio network design (4) administration technology (5) multi-media service
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent in telecommunication or electrical engineering (2) working for telecommunication administrations or common carrier organizations except broadcasting stations for at least 3 years (3) have experience of more than 1 year in the field of radio communication engineering (4) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA, (2) Suzuka Training Institute, NTF
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (55 hours).

INTERNATIONAL OPTICAL FIBER SUBMARINE CABLE SYSTEM ENGINEERING

Jan. 13, '98 - Mar. 20, '98, 7 participants

国際光海底ケーブル通信技術

J-97-03243

- 1. PURPOSE** The purpose of this course is to enable participants to acquire general knowledge of international optical fiber submarine cable system.
- 2. MAIN FEATURES OF CURRICULUM** The course mainly consists of lectures, discussions and observations. The main items covered in this course are as follows: (1) optical fiber communication (2) international optical fiber submarine cable system (3) planning of international optical fiber submarine cable system (4) maintenance (5) associated subjects (6) observation
- 3. QUALIFICATION OF APPLICANT** (1) university graduates in telecommunications and/or electrical/electronic engineering, or equivalent (2) persons with fundamental knowledge of optical fiber system and digital communications (such as digital transmission Principles of PCM, multiplexing, synchronization, etc.) (3) engaged in the field of international telecommunication services, and also currently engaged in or expected to be engaged in international optical fiber submarine cable system (4) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Kokusai Denshin Denwa Co., Ltd. (KDD) (3) KDD Engineering and Consulting, Inc. (KEC)

TELECOMMUNICATION STANDARDIZATION

Jan. 19, '98 - Mar. 15, '98, 8 participants

電気通信標準化技術

J-97-03244

- 1. PURPOSE** The purpose of this course is to introduce the participants to fundamental knowledge about the telecommunications standardization activities, by introducing Japanese experience and know-how such as the standardization structure, organization, up-to-date international ISDN services and technology.
- 2. MAIN FEATURES OF CURRICULUM** This course aims to present Japanese experience in telecommunications standardization, and covers: (1) administration (2) international standardization activities (especially in ITU) (3) standardization activities in Japan (4) previous trends of standardization activities (5) comprehensive study
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (telecommunications technology) (2) official engaged in the field of telecommunications (3) under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (2) Ministry of Posts and Telecommunications

INTERNATIONAL TELEPHONE COMMUNICATION (NETWORK MANAGEMENT AND OPERATION) ENGINEERING II

Jan. 13, '98 - Mar. 13, '98, 12 participants

国際電話通信技術 II

J-97-03335

- 1. PURPOSE** The purpose of the course is to contribute to the development of international telecommunications in developing countries through providing the participants who are engaged in designing and maintenance of the international telephone switching system with the knowledge and skills related to the international telephone communications such as telephone switching designing, maintenance, cable planning, network control and operation as well as introducing them to current technologies and services of the international telephone communication engineering.
- 2. MAIN FEATURES OF CURRICULUM** The outlines of the course are: (1) network planning theory (2) telephone/ISDN services and network construction (3) digital switching techniques (4) introduction to the other related techniques and new services, and (5) observations and practices
- 3. QUALIFICATION OF APPLICANT** (1) university graduate in telecommunications and/or electrical engineering or equivalent (2) have basic knowledge of computer and switching system technology, and currently engaged in or expected to be engaged in the field of establishment and maintenance of international telephone switching network (3) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Kokusai Denshin Denwa Co., Ltd. (KDD) (3) KDD Engineering and Consulting Inc. (KEC)

AGRICULTURE-RELATED INFORMATION PROCESSING

Jan. 19, '98 - Apr. 17, '98, 6 participants

農業分野における情報処理技術

J-97-03300

- 1. PURPOSE** The purpose of this course is to acquire computer operation skills of agriculture-related information network systems through experience of operating network systems, and thereby to apply them in the field of agriculture.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course: (1) theories on agricultural information (methods of information gathering, processing, and disposal); (2) introduction to computer networks; (3) introduction to programming (spreadsheets, Visual Basic, etc.)
- 3. QUALIFICATION OF APPLICANT** (1) engaged in agricultural administration in the government or other related institution, or engaged in agricultural improvement, and more than 3 years' experience; (2) university graduate or equivalent, with an interest in computers (and with keyboard-operating experience, either with typewriters or with word processors), and (3) between 25 and 40 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (HICO), JICA (2) Fujitsu Higashi-Hokkaido Systems Engineering, Ltd. (3) Northern Regions Center (NRC)

OISCA FARMERS DEVELOPMENT

Jan. 20, '98 - Dec. 19, '98, 12 participants

オイスカ農業者育成

J-97-03331

- 1. PURPOSE** The purpose of the course is to provide participants with theoretical and practical knowledge and techniques in the fields of crop production and agricultural machinery mainly through practical studies so that they can serve as agricultural leaders in their countries.
- 2. MAIN FEATURES OF CURRICULUM** In the course, the emphasis is put on lectures, practical training and field studies. The main themes are: (1) rice cultivation (2) vegetable cultivation (3) fruit cultivation (4) land improvement (5) land survey (6) investigations and trials (7) agricultural machinery
- 3. QUALIFICATION OF APPLICANT** (1) agricultural staff or those who are engaged in agriculture as progressive farmers with occupational experience of more than two years in their specialities (2) between 20 and 30 years of age (3) graduate of GCE 'O' Level (10 years education) or equivalent
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) OISCA Nishi-Nippon Training Centre (3) OISCA Shikoku Training Centre (4) OISCA Chubu-Nippon Training Centre
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted in parallel with the technical training and lectures at OISCA Training Centres for three months (378 hours).

FARMING TECHNOLOGY IN SLOPING AREAS FOR ENVIRONMENTAL CONSERVATION

Aug. 25, '97 - Oct. 18, '97, 5 participants

傾斜地域環境保全型農業

J-97-03215

- 1. PURPOSE** The purpose of this course is to transfer the technology of agriculture in mountainous regions through lectures, practices and observation, which Hiroshima Prefecture has long accumulated, and thus contributing to the promotion of agriculture and the environmental conservation of developing countries.
- 2. MAIN FEATURES OF CURRICULUM** The main themes are: (1) understanding the characteristics of the natural conditions of agriculture in sloping areas (2) cultivation and management techniques suitable to sloped land (irrigation and drainage, fertilizer application, soil management and pest control) (3) observation of the actual conditions in Hiroshima Prefecture (rice terrace, cultivation of *konjak* and fruit trees)
- 3. QUALIFICATION OF APPLICANT** (1) engaged in agricultural experiments, agricultural extension work, or agricultural administration (2) occupational experience of more than three years in the field of agriculture (3) university graduate or equivalent (4) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA, (2) Hiroshima Prefectural Agriculture Research Center, (3) Hiroshima International Centre
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

SEED PRODUCTION OF UPLAND CROPS

Apr. 7, '97 - July 21, '97, 7 participants

畑作物の種苗生産

J-97-03246

- 1. PURPOSE** The purpose of this course is to provide technical officials and technicians with advanced and scientific knowledge and techniques required for sound seed production and applied cultivation method on upland crops such as potato, beans and maize through lectures, experiments and practices. It also aims to contribute to the improvement of demand and supply situation of foods and the diversification of dietary habits in participating countries.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly covers the following themes, and the emphasis is put on technical experience and practice. (1) apical meristem culture (2) fundamentals of breeding (3) plant propagation in net house (4) elimination of diseased plants (5) diagnosis of disease (6) production of serum for disease detection (7) crop cultivation (8) seed production (9) propagation and extension of disease-free seeds (10) storage and usage of genetic resources
- 3. QUALIFICATION OF APPLICANT** (1) technical official and technician engaged in seed production and related works of upland crops with more than seven years experience (2) university graduate or equivalent (3) between 30 and 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (HICO), JICA (2) Tokachi Station, National Center for Seeds and Seedlings, Ministry of Agriculture, Forestry and Fisheries (3) Tokachi Agricultural Experiment Station, Hokkaido
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for seven days.

HORTICULTURE IN PROTECTED ENVIRONMENT

Sep. 15, '97 - Dec. 14, '97, 5 participants

施設園芸技術

J-97-03269

- 1. PURPOSE** Provide knowledge and information on plant production in protected environments, such as computer controlled greenhouses, in order to increase the production of specific cash crops in participating countries. The course introduces simple facilities and proper techniques which now draw much attention.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, discussions and observation trips: (1) outline of horticulture institution (2) basics of cultivation technique (3) basics of computer technique (4) information on botanical organisms (5) economy and management of horticulture
- 3. QUALIFICATION OF APPLICANT** (1) technicians who work in the agricultural laboratory (2) more than 3 years' experience (3) between 25 and 35 years of age (4) university graduates majoring in agriculture
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) College of agriculture, Osaka Prefecture University
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

INTRODUCTORY GENE MANIPULATION FOR AGRICULTURE

July 28, '97 - Nov. 30, '97, 8 participants

農業生産のための遺伝子操作技術

J-97-03214

- 1. PURPOSE** In the Developing Countries, the application of biotechnological methods to the agricultural sector is expected to be a solution to the many problems currently faced in this area. Through lectures and laboratory practice, course participants will learn the basics of gene manipulation technique and study *Agrobacterium*-based technology for selective breeding of plant cells.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on laboratory experiments. The main themes are: (1) culture of microorganisms (2) nucleic acid extraction and separation techniques (3) protein purification and antibody production (4) electrophoresis techniques of nucleic acid and proteins (5) transformation methods (6) DNA enzyme treatment techniques (7) detection and identification techniques for transformed products (8) DNA amplification by the PCR method (9) sequence analyses of nucleic acid and protein
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) researchers engaged in the field of agricultural products, and employees of governmental organizations in agricultural research (3) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) College of Agriculture, Osaka Prefecture University
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks.

INTEGRATED AGRICULTURE AND RURAL DEVELOPMENT THROUGH THE PARTICIPATION OF LOCAL FARMERS

July 1, '97 - Aug. 1, '97, 10 participants

農民参加による農業農村開発

J-97-03287

- 1. PURPOSE** Activation of rural areas is indispensable to achieve stabilization and improvement of agricultural production, thus to eliminate poverty in developing countries. This course is designed to train competent persons among those who will shoulder the development of rural areas aimed at improvement of rural communities, by incorporating methods for the advancement of communities and people, as well as knowledge and technologies related to general consolidation of rural areas, including improvement of circulation systems, reinforcement of farmers' organizations and utilization of the land and water resources.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, case studies on the concerned areas, on-the-spot training in rural districts, and observation studies at related facilities and general consolidated districts: (1) community development (introduction of cases for community development planning methods to establish organizations, promotion of participation of women in the development, agriculture and rural development projects with farmers' participation, (2) Rural development (water management, distribution planning, community environment development plan, domiciliation environment etc.), (3) improvement of Agricultural Production (farmland readjustment, land readjustment, agricultural management development plan, etc.), (4) maintenance and management methods (management of desolate lands and energy management for rural districts).
- 3. QUALIFICATION OF APPLICANT** (1) an administrator of local government with more than ten years of practical experience who is presently concerned with agriculture and rural developments (2) university graduate or equivalent (3) under fifty years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Japan Agricultural Land Development Agency

PRODUCTION DU RIZ

Feb. 23, '98 - Oct. 23, '98, 5 participants

米生産(仏語)

J-97-03278

- 1. BUT DE STAGE** Le stage a pour but, le transfert de connaissances de la riziculture pratiquée au Japon, aux stagiaires, et l'amélioration de leur niveau technique par le biais d'expérimentations pratiques. Ainsi ils pourront contribuer à l'amélioration de la production du riz dans leur pays, par la diffusion des connaissances techniques acquises au Japon.
- 2. NOMBRE DE PARTICIPANTS QUI SONT ACCEPTEE** Cinq (5) (Un participant d'un pays en principe)
- 3. PROGRAMME DE FORMATION** Les cours seront dispensés sous forme de conférence (25%), d'expérience, des travaux pratiques (50%), des observations (20%) et de présentation de rapport d'expérimentation.
- 4. QUALIFICATION DES CANDIDATS** (1) chargés des services de formation agricole ou de mise en valeur dans le domaine rizicole, (2) titulaire d'un diplôme universitaire ou équivalent (3) capables de parler et comprendre parfaitement le français (4) âgés de moins de 35 ans (5) avertis de l'expérience de riziculture plus de 3 ans
- 5. ORGANISME RESPONSABLE DU STAGE** Centre Internationale de Formation de Tsukuba (TBIC), JICA
- 6. AUTRE** En règle générale, la langue française sera utilisée au cours du stage, lorsque le cours sera donné en japonais, l'interprète francophone se présentera. Le cours intensif de langue japonaise est organisé avant le stage de formation, pour trois semaines (30 heures).

RICE CULTIVATION (ASIAN COUNTRIES)

Feb. 23, '98 - Oct. 23, '98, 9 participants

稲作(アジア諸国)

J-97-03281

- 1. PURPOSE** The purpose of the course is to introduce practical knowledge and techniques of rice production to the participants who are engaged in agricultural extension or training of farmers.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, practices, experiments and study tours. It mainly covers: (1) lecture (a) rice agronomy (b) rice physiology (c) plant protection (d) soil and fertilizer (e) rice breeding (f) agricultural extension (g) farm economy (h) farm machinery (i) land improvement (2) practice and experiment (a) field experiment on specific subjects (b) laboratory experiments (c) field practices (3) study tour (a) farm household survey (b) agricultural research stations (c) agricultural cooperatives (d) extension offices (e) industries related to agriculture
- 3. QUALIFICATION OF APPLICANT** (1) technical official presently in charge of extension service of rice or training on rice (2) university graduate or equivalent (3) over 26 and under 35 years of age
- 4. TRAINING INSTITUTIONS** Tsukuba International Centre (TBIC), JICA
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted along with the technical training for three weeks (50 hours).

UPLAND FARMING MANAGEMENT AND RESEARCH

Oct. 20, '97 - Dec. 20, '97, 10 participants

畑作管理研究

J-97-03349

- 1. PURPOSE** To enhance participant knowledge of dry field farming production technologies and provide an opportunity for them to evaluate the usefulness of such systems. The training will begin with lectures on and observations of dry land farming techniques and progress with emphasis on acquiring the skills required to use these technologies.
- 2. MAIN FEATURES OF CURRICULUM** (1) Theories on upland farming technology, agricultural cooperative unions, agricultural mutual aid associations, agricultural mechanization, land registration system, as well as joint enterprises; (2) Observation of agricultural extension offices, cooperative unions, manufacturers of agri-machinery, agricultural welfare institutions, and individual farmers; (3) Discussion: differences between agricultural development in Japan and other countries
- 3. QUALIFICATION OF APPLICANT** The ideal applicant will: (1) work in dry field farming with a government agency or related institution, or be involved in a relevant agricultural field, with 3 to 10 years of experience; (2) be a university graduate or the equivalent, and (3) be between 25 and 40 years of age
- 4. TRAINING INSTITUTIONS** City of Obihiro

AGRICULTURAL AND RURAL DEVELOPMENT

June 9, '97 - Aug. 28, '97, 5 participants

農業農村整備

J-97-03216

- 1. PURPOSE** This course is designed for specialists and civil engineers engaged in agricultural and rural improvement projects. The participants will be expected to learn civil engineering methods (e.g. planning and implementation techniques) related to the improvement of agricultural production infrastructure, through the study of relevant projects, such as the construction of dams for agriculture, irrigation and drainage systems, etc. This course is also designed to deepen knowledge of agricultural and rural improvement projects aimed at maintaining a stable food supply, based on case studies of past projects.
- 2. MAIN FEATURES OF CURRICULUM** This course will emphasize field observations in the Obihiro-Tokachi area (Hokkaido, Japan), which is regarded as one of the major sites of large-scale upland and dairy farming operations in Japan. It mainly covers the following subjects: (1) general systems of project implementation and civil engineering related to agricultural production infrastructure improvement projects (2) civil engineering technology focused on dam construction projects for agriculture and on irrigation and drainage systems (3) methods of improving the living environment in rural areas
- 3. QUALIFICATION OF APPLICANT** (1) be technical engineers with expertise in agricultural improvement projects, especially in agricultural-use dam construction projects and in irrigation and drainage systems for upland farming (2) have more than three years of practical experience (3) be at least 25 and no more than 45 years of age (4) be a university graduate or equivalent
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (HICO), JICA (2) Northern Regions Center, OBIHIRO International Center

AUTOMATION OF AGRICULTURAL MACHINERY (AGRI-MATION)

June 23, '97 - Oct. 2, '97, 7 participants

農業機械自動化技術

J-97-03261

- 1. PURPOSE** The purpose of this course is to provide agricultural engineers with an understanding of the principles and mechanism of farm machinery, to be able to develop, improve and repair farm machinery in their respective countries. Moreover, participants will acquire knowledge of fundamental technology for the agri-mation of farm machinery, which will aid computer-assisted research and development of agricultural machinery.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly covers the following themes: (1) farm machinery theory and practice (2) training in agri-mation based on an understanding of the improvements necessary in farming (3) computer programming (C-language) (4) training in relay control; programmable control; microcomputer (Z80) use; sensor use; pneumatic control; etc.
- 3. QUALIFICATION OF APPLICANT** (1) researcher, educational instructor and engineer engaged in improvement, development and research activities of farm machinery (excluding paddy farming) (2) have enough knowledge of operating computers (3) more than five years experience in the field of farm machinery (excluding paddy farming) (4) university graduate or equivalent (5) between 25 and 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (HICO), JICA (2) Northern Regions Center (NRC) (3) Obihiro City Industrial Technology Center

FOOD PROCESSING AND PRESERVATION TECHNOLOGY

Jan. 5, '98 - Mar. 27, '98, 7 participants

食品加工・保全技術

J-97-03309

- 1. PURPOSE** Appropriate processing and preservation technology is very useful to prevent the deterioration of agricultural raw products and processed foods. The basic knowledge and skills of food processing and preservation technology are provided to the participants, in order to develop the food industry as well as to increase farmers' income by producing value-added agricultural products.
- 2. MAIN FEATURES OF CURRICULUM** The curriculum of the course consists of lectures, laboratory practices and field studies, and covers the following issues: (1) quality evaluation of food stuff (2) food analysis (3) food processing using agricultural raw foods (4) food preservation of agricultural raw products and processed foods (5) field study at food processing factories. The participants are required to make report presentations and discussion at the end of the course.
- 3. QUALIFICATION OF APPLICANT** (1) senior technical staff presently engaged in research and development of quality control of processed foods (2) more than 3 years experience in the field (3) university graduate or equivalent (4) under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Hiroshima Prefectural Food Technology Research Center (3) Hiroshima International Centre
- 5. NOTES** The course mainly deals with following foods: rice, wheat, beans (cereals and beans), orange, grape (fruits), cabbage, and chinese leaf (vegetables).

SWINE PRODUCTION AND BREEDING TECHNOLOGY

Jan. 12, '98 - May 15, '98, 6 participants

豚育種・生産技術

J-97-03187

- 1. PURPOSE** The purpose of the course is to transfer the latest technology and knowledge of swine production and breeding technology in Japan to participating countries facing such necessities. It is designed to train leading technologists who can promote swine breeding, and ultimately contribute to the progress of animal industry.
- 2. MAIN FEATURES OF CURRICULUM** The course covers the whole range of swine breeding technology. The subjects are as follows: (1) new technology of swine breeding (2) feeding and management technology (3) disease and sanitary measures (4) artificial insemination technology using frozen semen (5) embryo transfer technology (6) meat analysis by scanning scope
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent academic background (2) have more than three years' occupational experience in the field of swine breeding at government institutes or universities (3) under 40 years of age (4) proficient in spoken and written English
- 4. TRAINING INSTITUTIONS** (1) Nihonmatsu Training Centre, JICA (2) National Livestock Breeding Center, Ministry of Agriculture, Forestry and Fisheries (MAFF)
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for 3 weeks.

FEED PRODUCTION AND UTILIZATION TECHNOLOGY FOR RUMINANT ANIMALS

Mar. 23, '98 - Aug. 20, '98, 6 participants

飼料生産・利用技術

J-97-03247

- 1. PURPOSE** The purpose of the course is to transfer advanced technology on forage production and utilization for cattle, through lectures and excursions. Participants will also acquire skills for improving forage situations while maintaining sustainability through practicals of various aspects of forage production and utilization including soil science, animal nutrition, etc.
- 2. MAIN FEATURES OF CURRICULUM** The course covers various aspects of forage production and utilization technology. The major subjects are as follows: (1) soil science, (2) soil analysis, (3) pasture establishment and management, (4) forage preservation, (5) forage analysis, (6) feed resources, (7) seed production, cleaning and processing, (8) breeding of pasture species, (9) ruminants nutrition, (10) biometrics, (11) basic personal computer operation
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent academic background, (2) currently engaged in the field of extension and/or research on forage production and utilization at government institutions with at least 5 years of experience in the job, (3) over 26 years and under 40 years of age, (4) proficient in spoken and written English
- 4. TRAINING INSTITUTIONS** (1) Nihonmatsu Training Centre, JICA (2) National Livestock Breeding Center, Ministry of Agriculture Forestry and Fisheries (MAFF)
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for three (3) weeks.

ADVANCED TECHNOLOGY FOR VETERINARY DIAGNOSIS

May 12, '97 - Nov. 23, '97, 6 participants

獣医バイオ診断技術

J-97-03150

- 1. PURPOSE** This course is organized to introduce to experienced veterinarians advanced technology required for the recent diagnosis and preventive methods of animal diseases on the basis of conventional techniques.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common subjects for all participants and individual training in the laboratory. Each participant is to take one of the following subjects for their individual training. The themes are: (1) bacterial genetics (2) bacterial plasmid (3) detection of bacterial antigen by immunological methods (4) antigenic analysis of protozoa (5) serodiagnosis of protozoan disease (6) parasite immunology (7) antigenic analysis of viruses (8) molecular virology (9) laboratory animals (10) immuno- and general pathology (11) diagnostic immunopathology (12) avian pathology (13) electron microscopy (14) pathophysiology using laboratory animals (15) clinical biochemistry (16) theriogenology (17) biological statistics (18) gene cloning and expression (19) PCR and RFLP analysis (20) immune cytology (21) molecular immunology
- 3. QUALIFICATION OF APPLICANT** (1) qualified veterinarian (2) presently engaged in research work with more than five years' of experience (3) over 25 and under 40 years of age in principle
- 4. TRAINING INSTITUTIONS** (1) Tsukuba International Centre (TBIC), JICA (2) National Institute of Animal Health (NIAH), Ministry of Agriculture, Forestry and Fisheries
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

DIAGNOSES AND CONTROL OF RABIES AND OTHER VIRAL ZOOSES

Jan. 12, '98 - Mar. 22, '98, 6 participants

狂犬病などのウィルス性人畜共通伝染病の診断法と予防法 J-97-03288

- 1. PURPOSE** This course is designed for veterinarians in Asian and African regions that are stricken by urban-rabies characteristically stricken. The purpose of this course is to introduce technologies concerning diagnosis and control of rabies and other viral zoonoses to the regions and to improve and promote the measures to counter such problems in the regions.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, practices, and observations of related institutions, aiming at an effective technical guidance from both the theoretical and practicable viewpoints: (1) lectures: (a) general introduction to viral zoonoses: (b) details of viral zoonoses and international epidemiology: (c) clinical, epidemiological diagnosis, laboratory diagnosis, vaccination, immunological technique and quarantine; and (2) practice (a) animal inoculation of rabies virus, tissue culture and virological diagnosis.
- 3. QUALIFICATION OF APPLICANT** (1) technical officer or research worker with more than three years' experience, who is presently concerned with research or any other activities in this field, (2) qualified as a veterinarian, (3) under 35 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Graduate School of Veterinary Medicine, Hokkaido University

CLINICAL TECHNOLOGY FOR VETERINARY DIAGNOSIS

Aug. 11, '97 - Nov. 16, '97, 6 participants

獣医技術 J-97-03291

- 1. PURPOSE** This course is designed for veterinarians from developing countries. The purpose of this course is to provide them with veterinary knowledge with emphasis on preventive sanitation for animal health care, and techniques of the diagnosis and treatment of illnesses, (i.e., guidance in food sanitation for maintaining the safety of foodstuffs from livestock, measures for the prevention of rabies and other virulent infectious diseases) and thereby to improve standards in the field of veterinary science in respective country.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, practices and observations. (1) livestock feeding management (2) internal medicine for animals (3) animal surgery (4) animal reproductive organs (5) prevention and extermination of mastitis in cattle (6) clinical pathology (7) food and environmental sanitation (8) animal protection and management, and prevention of rabies.
- 3. QUALIFICATION OF APPLICANT** (1) clinical veterinarians or veterinarians who work for central or local government (2) have more than five years' experience in this field. (3) university graduate with a degree of veterinary medicine or equivalent (4) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Hokkaido Veterinary Medical Association

LABORATORY DIAGNOSIS OF POULTRY DISEASES

Aug. 25, '97 - Mar. 5, '98, 6 participants

家禽疾病の診断技術 J-97-03193

- 1. PURPOSE** To improve sanitary control of poultry and to contribute to enhancement of the health of citizens in participating countries, through recognition of the importance of sanitary control of meat and poultry diseases and through acquisition of methods for laboratory diagnosis of poultry diseases appropriate for respective conditions in their countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on laboratory experiments. The main themes are: (1) basic procedures of contamination inspection of meat and in diagnosis of poultry diseases (microbiology, public health, pathology, immunology, medical science, internal medicine) (2) visual and microscopic bacteriological examination of infection development of hens experimentally infected by pathogens (3) study tour of poultry processing site (4) isolation and stabilization of pathogens of poultry diseases and in treatment of infected/contaminated meat
- 3. QUALIFICATION OF APPLICANT** (1) college or university graduates, or clinical laboratory technicians or diagnostic technicians in the relevant field (2) more than three years' experience in this field (3) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) College of Agriculture, Osaka Prefecture University
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for four weeks.

ADVANCED STUDIES ON PROTOZOAN DISEASES

Oct. 13, '97 - Sep. 20, '97, 10 participants

上級原虫病研究 J-97-03248

- 1. PURPOSE** The purpose of this course is to promote human resources in the research field of protozoan diseases in participating countries by improving the skills and the competence of participants who are primarily responsible to lay the foundation for the development of control measures against the diseases in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly covers the following themes. After lectures of common subjects, all participants are attached to one of the most fitted research laboratory such as the following fields in accordance with the purpose and speciality of each participant. (1) research field of Pathophysiology of Toxoplasma (2) research field of Hemoprotozoan and related infections (3) research field of African Trypanosomiasis (4) research field of Applied Immunogenetics (5) research field of applied molecular immunology and Embryology
- 3. QUALIFICATION OF APPLICANT** (1) Bachelor of Science or Master of Science Degree in Biology, Zoology or of a related field, or a graduate of Veterinary Medicine or Medical Science (2) Currently employed as a permanent member of either a private or public (including teaching) institution, and/or research laboratory of an agency (3) More than three (3) years of working experience at the above institution (4) Be under forty-five (45) years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (HICS), JICA (2) Research Center for Protozoan Molecular Immunology, Obihiro University of Agriculture and Veterinary Medicine
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for four weeks.

PRESERVATION TECHNIQUES OF MEAT AND MEAT PRODUCTS

Jan. 12, '98 - July 12, '98, 5 participants

食肉及び食肉加工品の保蔵技術

J-97-03298

- 1. PURPOSE** The purpose of this course is to provide lectures and practices (i.e., scientific overview and hygienic handling, techniques of meat processing and preservation), and thereby to contribute to improvement of meat products in quality.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course: (1) methods of livestock slaughtering and carcass grading, biochemistry of post-mortem changes in flesh; (2) acquire knowledge of levels of hygiene and types of additives in the stage of processing; (3) acquire processing and preservation techniques; and (4) have become knowledgeable of packaging materials used for meat products, and the special characteristics of those materials.
- 3. QUALIFICATION OF APPLICANT** (1) technologist of the food processing factory or scientist of the food institution who is presently involved in the planning of food processing (2) university graduates or the equivalent (3) between 25 and 40 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (HICS), JICA (2) Northern Regions Center (NRC)
- 5. REMARKS** A compulsory intensive Japanese course will be conducted prior to the technical training for four weeks (100 hours).

DEVASTATED FOREST RESTORATION TECHNIQUE

June 23, '97 - Oct. 24, '97, 8 participants

荒廃林地復旧技術

J-97-03157

- 1. PURPOSE** The knowledge and know-how of afforestation, tree planting, soil conservation, erosion and flood control, landslide prevention and hill side revegetation are necessary for the recovery and remedy of devastated forest areas, particularly deforestation and collapse of mountains. Training will be carried out at the fields in Hiroshima Prefecture to help the participants acquire the technology for the formation of sound forests and the conservation of local environments and to contribute to the creation and conservation of a comfortable earth environment.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures and practices which introduce forests and forestry in Japan, forestry and afforestation in Hiroshima Prefecture, as well as observation tours. It mainly covers: (1) planning mountainside foundation works (2) afforestation survey methods (3) planning stream works
- 3. QUALIFICATION OF APPLICANT** (1) more than three years of occupational and research experience in devastated forest restoration (2) university graduate or equivalent (3) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Forestry Department, Hiroshima Prefectural Government (3) Forestry Training Institute (FTI), Forestry Agency
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for 2 weeks (50 hours).

REFORESTATION PROMOTION LEADER

Sep. 2, '97 - Nov. 28, '97, 10 participants

森林造成指導者

J-97-03245

- 1. PURPOSE** The purpose of this course is to upgrade the planning ability of participants who are responsible for the promotion of reforestation in degraded forest land in each country, by introducing policies, techniques and countermeasures in Japan as well as discussing the problems which participating countries confront.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course: (1) outline of forestry and wood industry in Japan (2) forestry and forest products administration, systems and organizations in Japan (3) forestry techniques in Japan (4) forestry techniques development and extension in Japan (5) observation tours in several forestry regions (6) presentation and discussion on forestry in participating countries
- 3. QUALIFICATION OF APPLICANT** (1) be personnel in positions responsible for planning work in the central and local governmental forestry organizations (not be researcher of public organizations or instructor or professor of colleges/universities) (2) not more than 45 years of age (3) forestry universities/colleges graduates or equivalent with occupational experience of more than eight years in the field of forestry administration
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japan Overseas Forestry Consultants Association (JOFCA) (3) Forestry Agency

SUSTAINABLE MANAGEMENT OF MANGROVE ECOSYSTEMS

Sep. 4, '97 - Nov. 17, '97, 5 participants

持続可能なマングローブ生態系管理技術

J-97-03262

- 1. PURPOSE** The purpose of this course is for participants to acquire managerial technique for sustainable utilization of mangrove ecosystem by studying the characteristics of the ecosystem and by designing proper management plans. In this way, this course aims to contribute to the environmental conservation of the world.
- 2. MAIN FEATURES OF CURRICULUM** (1) understanding of mangrove ecosystems (2) effective utilization of mangrove ecosystems in the respect of resource production (3) survey of mangrove forest (4) re-production technology of mangrove ecosystems (5) extension method of techniques and making a technical report
- 3. QUALIFICATION OF APPLICANT** (1) be university graduate or equivalent, and be working presently in forest or mangrove field more than three years (2) be involved with mangrove management as a leader or a potential leader (3) not be more than 41 years old
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA, (2) International Society for Mangrove Ecosystems (ISME)

APPLICATION OF SYMBIOTIC MICROORGANISMS IN TROPICAL AGRICULTURE AND FORESTRY

Sep. 1, '97 - Dec. 14, '97, 5 participants

熱帯農林業における共生微生物の利用技術 J-97-03267

- 1. PURPOSE** The purpose of this course is to provide practical knowledge on identification, manipulation and inoculation techniques of microorganisms (especially of symbiotic), whose effective use can increase agricultural and/or forestry production in the tropics. The course also focuses on how laboratory instruments are used in this field, in order to contribute to sustainable development in the tropics through sound utilization of natural products.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, practices and observation trips: (1) function of symbiotic microorganisms in natural ecosystem (2) identification of symbiotic microorganisms (3) microorganism culture method (4) microorganism immobilizing technique (5) microorganism inoculation technique (6) carbonization technique and charcoal utilization
- 3. QUALIFICATION OF APPLICANT** (1) university graduates (preferably in agriculture, forestry or biology) or equivalent on higher qualification, and have been engaged in agricultural, forestry or microbiological research or education for over three years (2) under 40 years of age (3) university graduates
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) Biological Environment Institute, Kansai Environmental Engineering Center Co., Ltd.
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (45 hours).

NATURAL FOREST MANAGEMENT AND REGIONAL FORESTRY BY COMMUNITY PARTICIPATION

Aug. 18, '97 - Oct. 28, '97, 7 participants

天然林経営と住民参加による地域林業 J-97-03296

- 1. PURPOSE** The purpose of this course is to introduce systems and technologies of natural forest conservation, and thus contribute to the preservation of forest resources in developing countries. In addition, through the introduction of examples of methods of citizen-led forest creation and forest administration, the course will assist in the formulation of citizen-participatory regional forestry policies appropriate to the conditions of each country.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course: (1) forest administration, (2) natural forest conservation technology and construction of forest roads for the promotion of natural forest conservation; (3) the role of forest owners' cooperatives; (4) forestry education; (5) forest creation activities by citizen participation.
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in governmental or institutional forest administration, and at least five years' experience, (2) university graduate in forestry, or equivalent (3) under forty years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (HICO), JICA (2) Hokkaido Forestry Bureau, (3) Obihiro Regional Forest Office, Forestry Agency, (4) Hokkaido Government, (5) City of Obihiro
- 5. REMARKS** A compulsory intensive Japanese course will be conducted prior to the technical training for two weeks (50 hours).

FISHERY SCIENCE AND TECHNOLOGY

Mar. 23, '98 - June 26, '98, 5 participants

海洋漁業生産管理技術

J-97-03205

- 1. PURPOSE** The course aims to enhance the ability of those who are expected to contribute to sustainable development of coastal and offshore fisheries in participating countries by providing knowledge and skills of fishery production and management as well as marine resource survey and research techniques.
- 2. MAIN FEATURES OF CURRICULUM** The training programme consists of lectures, practical field work, discussions and study visits. The following subjects are covered in the course. (1) Japanese technology of fishery production and management (a) theory of fishery (b) fishery management (2) fishing gear and fishing methods applicable in participating countries (3) hydrography necessary for proper management of fishery grounds (a) marine ecology (b) resource analysis (4) fishing mechanics (a) measurement of located fish (b) development of resource quantity research methods (5) navigation (6) fishing boat management
- 3. QUALIFICATION OF APPLICANT** (1) be engaged in the planning or management of fishery production and marine research, (2) have five years' occupational experience (3) be between 25 and 40 years of age, (4) be university graduates or the equivalent.
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA, (2) National Fisheries University, Ministry of Agriculture, Forestry and Fisheries
- 5. REMARKS** A compulsory 75-hour Japanese language course will be conducted prior to the technical training.

SEMINAR ON FISHERY RESOURCE MANAGEMENT

Feb. 10, '98 - Mar. 29, '98, 5 participants

水産資源管理セミナー

J-97-03272

- 1. PURPOSE** The purpose of this seminar is to introduce various fishery resource management schemes, both traditional and modern, as well as knowledge on environmental protection and coastal community development. The seminar is designed for persons currently involved in fishery resource management.
- 2. MAIN FEATURES OF CURRICULUM** This seminar is comprised of a series of lectures and discussions. The lectures will cover introduction of fisheries resource management schemes and their evaluation from economic, biological, mathematical, political, sociological and anthropological viewpoints. In the discussions, participants will present their experiences in fishery resource management and discuss effective fishery resource management schemes based on knowledge gained during the seminar. The main lecture subjects are: (1) basic theory of resource management and examples of their application (2) stock assessment (3) modern fishery resource management schemes (4) traditional resource management scheme operating in local communities (5) stock enhancement (6) Fishery Law and regulations.
- 3. QUALIFICATION OF APPLICANT** (1) government official who is presently in charge of formulation or implementation of fishery resource management scheme with more than three years' occupational experience (2) an university graduate or equivalent (3) between 30 and 45 years of age
- 4. TRAINING INSTITUTIONS** Kanagawa International Fisheries Training Centre (KIUTC), JICA

SEMINAR ON PLANNING AND MANAGEMENT OF FISHING PORT FACILITIES AND MARKETING SYSTEM

June 24, '97 - Aug. 10, '97, 5 participants

漁港及び流通施設計画管理セミナー

J-97-03273

1. PURPOSE The purpose of this seminar is to provide comprehensive knowledge on the establishment of fish collection, distribution and marketing system laying emphasis on planning and maintenance of fishing port and other facilities as the core of the system.

2. MAIN FEATURES OF CURRICULUM In this seminar, emphasis will be placed on introducing Japanese fish collection, distribution and marketing systems and the functions of the fishing port and other facilities in these systems. A detailed knowledge of civil engineering associated with fishing port design and construction is not required. The main subjects are: (1) formulation of fishing port construction project (2) planning, management and administration of the fishing port (3) planning, management and administration of fish market and related facilities (4) fish marketing system (5) fishermen's organization (6) fishery statistics.

3. QUALIFICATION OF APPLICANT (1) university graduate or equivalent (2) government official engaged in planning and management of fishing port facilities and fish distribution system with more than three years' occupational experience (3) between 30 and 45 years of age

4. TRAINING INSTITUTIONS Kanagawa International Fisheries Training Centre (KIFTC), JICA

ENTERPRISE NETWORKING FOR REGIONAL DEVELOPMENT

Oct. 6, '97 - Nov. 24, '97, 6 participants

企業ネットワークによる地域開発

J-97-03233

1. PURPOSE The purpose of this course is to train the participants to learn the strategy of local industrial development through creating a system of enterprise networking within a region. The participants will be introduced to: (1) the significance of local industries in national economic development in Japan, (2) the methods of promoting local industries as a core of regional development and (3) the applicability of the concept of enterprise networking in participating countries.

2. MAIN FEATURES OF CURRICULUM The following major subjects will be covered in the course: (1) concept of local industries, (2) development of local industries in Japan, (3) various methods of creating enterprise networking, (4) role of local government in promoting enterprise networking, (5) role of private sector initiatives in maintaining and developing enterprise networking and (6) training materials which will emphasize field trips by which the participants will have ample opportunity to observe existing enterprise networking in metal processing and textile industries in Niigata Prefecture, Japan

3. QUALIFICATION OF APPLICANT (1) currently working on the planning or implementation of local regional industrial development projects and policy, and preferably under 40 years of age, (2) university graduate or equivalent, (3) good background in either industrial extension services or actual experience in business management.

4. TRAINING INSTITUTIONS (1) Tokyo International Centre (TIC), JICA, (2) International University of Japan (IUJ), International Association of Niigata Prefecture.

APPLICATION METHODS OF STANDARDIZATION AND QUALITY SYSTEM

Feb. 16, '98 - Mar. 22, '98, 6 participants

標準化・品質システム活用

J-97-03220

1. PURPOSE This course is designed to upgrade the skills of participants from ASEAN countries who are expected to transfer such methods as quality system based on ISO (International Organization for Standardization) 9000 Series, and TQM (Total Quality Management) which encourages quality improvement activities in their respective countries. Through such methods, the course aims to activate market economics as well as to promote international trade.

2. MAIN FEATURES OF CURRICULUM In this course, the emphasis is mainly to put on introduction of Japanese experience through practical lectures including case studies, various discussions, and factory visits. The main themes are: (1) philosophy of TQM, (2) motivation, (3) TQM methodology-adoption of SQC (Statistical Quality Control), QC (Quality Control) story, etc., (4) evaluation of TQM implementation, (5) model course programming.

3. QUALIFICATION OF APPLICANT (1) having occupational experience of at least 3 years in this field, and be engaged in the job of the same subject presently, (2) between the age of 30 and 45, (3) university graduates

4. TRAINING INSTITUTIONS (1) Osaka International Centre (OSIC), JICA, (2) Japanese Standards Association.

RESEARCH ON MEASUREMENT TECHNOLOGY AND STANDARD

Oct. 6, '97 - Aug. 1, '98, 5 participants

計測技術研究

J-97-03319

1. PURPOSE The purpose of this course is to upgrade the measuring techniques of researchers and technicians of metrological laboratory in developing countries through intensive lectures, laboratory work, and study trips so as to contribute to the establishment of measurement standard in those countries.

2. MAIN FEATURES OF CURRICULUM Participants are expected to gain fundamental knowledge of measurement as well as broad knowledge of the legal metrology system. Furthermore, the following will also be gained depending on the theme participants select: (1) "measurement techniques": ability to accomplish research (2) "measurement standard": ability to accomplish calibration of measurement standard. The course is comprised of a common programme for all participants and individual research training. (1) common programme: (a) lectures (4 weeks; outline of National Research Laboratory of Metrology, legal metrology system, fundamentals of metrology, measurement control, etc.) (b) study trips (two 1 week trips, total of 2 weeks) (2) individual training: (8.3 months; participants are to choose one theme out of six themes offered.)

3. QUALIFICATION OF APPLICANT (1) presently be a researcher or engaged in technical research work at governmental or semi-governmental organization with 3 years or more of experience. (2) university graduates or equivalent. (3) over 25 and under 40 years of age.

4. TRAINING INSTITUTIONS (1) Tsukuba International Centre (TBIC), JICA (2) National Research Laboratory of Metrology (NRLM), Agency of Industrial Science and Technology, Ministry of Trade and Industry

5. REMARKS A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

INDUSTRIAL PROPERTY FOR APEC ECONOMIES

Sep. 23, '97 - Nov. 22, '97, 20 participants

APEC工業所有権政策セミナー

J-97-03344

- 1. PURPOSE** Since countries in APEC region have been getting advanced in development of Industrial Property System comparing to other developing countries in these years, demands of higher level of technical supports for policy or legislation reform planning and system reinforcement of examination of Industrial Property have been also increased. Taking these circumstance into account, this course is designed to provide the participants who are engaged in policy planning in this field in those countries in APEC region with knowledge and skills for harmonious establishment and effective operation of Industrial Property.
- 2. OBJECTIVES** The attainable goal of the course is to have participants understand the operation of Industrial Property system by comparing the system between the Western countries and Japan as well as recognize the necessity of reinforcement of Industrial Property by introducing the infringement cases of the privilege for the development of policy planning in their countries.
- 3. MAIN FEATURES OF CURRICULUM** In principal, the course is organized by lectures, practices and observations on the following themes: (1) comparative theory of Industrial Property System (2) International Protection and present status of Industrial Property (3) well-known trade marks and correspondence to the illegal commodities (4) roles of patent information and its application (5) exercise of privilege (6) economic value of Industrial Property (7) infringement cases of Industrial Property.
- 4. QUALIFICATION OF APPLICANT** The applicants should: (1) be engaged in policy planning in the field of Industrial Property with more than 5 years experience. (2) be university graduates or equivalent (3) not less than 30 years old and not more than 55 years old
- 5. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) General Administration Department, Patent Agency (3) Japanese Institute of Invention and Innovation (JII)

INORGANIC MATERIALS AND TECHNOLOGY FOR ELECTRONICS INDUSTRY

Sep. 2, '97 - Dec. 15, '97, 5 participants

エレクトロニクス工業のための無機材料工学 J-97-03268

- 1. PURPOSE** The purpose of this course is to provide knowledge and information on inorganic materials and technology, which is the basis of electronic manufacturing industries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, discussions and observation trips: (1) outline of inorganic materials and technology (2) inorganic materials process (3) materials analysis and characterization (4) evaluation of materials (5) data processing experiments (6) specialized training
- 3. QUALIFICATION OF APPLICANT** (1) technical officers or researchers in the field of inorganic materials (2) have more than 3 years' experience (3) between 25 and 35 years of age (4) have a master's degree or the equivalent
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) Osaka Municipal Technical Research Institute
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (45 hours).

SEMINAR ON INDUSTRIAL STATISTICS

Oct. 28, '97 - Nov. 21, '97, 10 participants

産業統計セミナー

J-97-03241

- 1. PURPOSE** The purpose of this course is to provide participants engaged in statistics with general knowledge of industrial statistics, and to contribute to further statistical development in each country. (Industrial statistics: Economic statistics implemented within industries such as the manufactures and commerce, to be more specific, including Census of Manufactures, Census of Commerce, Current Survey of Production, Indices of Industrial Production and Input-Output Tables, excluding the statistics of population, agriculture, construction, service and international trade in a broad sense) *Commerce basically means domestic wholesale and retail trade
- 2. OBJECTIVES** (1) to acquire knowledge and technique as to planning, data collection, sample design, and publication, etc., regarding industrial statistics, (2) to acquire how to analyze statistics utilizing industrial statistics and how to operate personal computers, (3) to recognize the importance of industrial statistics which is internationally comparable. (including to acquire knowledge of construction of statistical database comparable among countries.)
- 3. MAIN FEATURES OF CURRICULUM** Mainly consist of lectures on the following items: (1) Outlines of industrial statistics (2) Various sorts of census surveys (manufactures and commerce) (3) Various sorts of current survey (production and commerce) (4) Enterprise based surveys (5) Various sorts of secondary statistics (Indices of Industrial Production and Input-Output Table, etc.) (6) Methods of analysis utilizing industrial statistics (7) Various sorts of classification (industrial classification, commodity classification, etc.) (8) Construction of statistical database (9) The importance of internationally comparable statistics (10) On-site observation of statistical practice, etc. (11) Industrial statistics of participants' countries (Presentation by participants, etc.).
- 4. QUALIFICATION OF APPLICANT** (1) be officers currently engaged in the field of industrial statistics, (2) have more than 5 years of occupational experience in this field, (3) over 25 years of age but under 40 years of age, (4) have a sufficient knowledge of basic mathematics
- 5. TRAINING INSTITUTIONS** (1) Research and Statistics Department, Minister's Secretariat, Ministry of International Trade and Industry (2) International Trade and Industry Statistics Association (3) Tokyo International Centre (TIC), JICA
- 6. No JAPANESE LANGUAGE CLASS**

ENERGY CONSERVATION AND RECYCLING TECHNOLOGY IN STEEL MAKING (ARC FURNACE AND CONTINUOUS CASTING CONTROL)

Oct. 27, '97 - Feb. 27, '98, 8 participants

省エネルギーサイクルによる製鋼技術 J-97-03312

- 1. PURPOSE** The purpose of this course is to provide engineers who are presently engaged in the field of electrical steel making with comprehensive knowledge of controlling arc furnace and continuous casting operations, with consideration of energy conservation and recycling.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures and observations. The main themes are: (1) steel material (2) electric arc furnace equipment and control units (3) electrical steel making and its control (4) continuous casting operation and computerized control (5) secondary refining technology (6) quality control (7) use of scrap materials (8) energy conservation
- 3. QUALIFICATION OF APPLICANT** (1) university graduate in metallurgical or mechanical engineering or equivalent (2) currently engaged in the field of electrical steel making for more than three years; preferably at steel making plants and not be academic researchers or technicians (3) under 35 years of age.
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) Aichi Steel Works, Ltd. (3) Chubu Steel Works, Ltd. (4) Daido Steel Co., Ltd. (5) Topy Industries Ltd. (6) other public institutions and private enterprises
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for three weeks (80 hours).

NON-DESTRUCTIVE INSPECTION TECHNIQUES

Feb. 23, '98 - July 3, '98, 8 participants

非破壊検査技術

J-97-03194

- 1. PURPOSE** The purpose of the course is to provide the indispensable principle and techniques of non destructive inspection method for quality assurance of industrial products, e.g. non destructive testing of castings, forgings, rolled steel products or weldments, so as to develop their own industry.
- 2. MAIN FEATURES OF CURRICULUM** In this course, theory of non destructive inspection techniques, the selection of proper inspection method according to the proposed use as well as the knowledge and skills of evaluating inspection results will be studied through lectures, practice and field trips. It mainly covers: (1) radiographic examination (2) ultrasonic test (3) magnetic particle examination (4) penetration test (5) eddy current examination
- 3. QUALIFICATION OF APPLICANT** (1) university graduate in engineering (2) engineer of governmental inspecting organization or related organization (3) experience of welding structures and castings, or will be engaged in inspection work including non-destructive inspection (4) between 25 years and 40 years old of age
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Kitakyushu International Techno-cooperative Association (3) Kyushu Institute of Technology (4) Fukuoka Industrial Technology Center
- 5. REMARKS** (1) A compulsory 25-hour Japanese language course will be conducted prior to the technical training.

WELDING TECHNOLOGY II

Apr. 7, '97 - Oct. 2, '97, 8 participants

溶接技術 II

J-97-03212

- 1. PURPOSE** In order to bring up well-qualified engineers who are able to manage welding construction and maintenance, the course provides theoretical and practical knowledge on welding technology.
- 2. MAIN FEATURES OF CURRICULUM** This course will be conducted in the form of lecture, practical exercises and factory observations. The main themes are: (1) welding processes and equipment (2) materials and their behaviours during welding (3) construction and design (4) fabrication, application engineering (5) fundamental practical operation (6) factory observation
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) welding engineer or researcher (3) occupational experience of more than three years (4) between 26 and 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) Japan Welding Engineering Society
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for three weeks (75 hours).

PLANT MAINTENANCE ENGINEERING (MIDDLE EAST, AFRICA)

May 5, '97 - Oct. 1, '97, 7 participants

プラントメンテナンス技術(中近東、アフリカ) J-97-03235

- 1. PURPOSE** The purpose of this course is to enhance the capability of maintenance managers or engineers of continuous process plants who intend to introduce a preventive maintenance system in a plant, or have already introduced the system but have problems in carrying out the system smoothly.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on the introduction of basic subjects of computerized maintenance management and techniques, as well as practical maintenance technology and effective maintenance management on the factory floor through plant visits. The course covers: (1) computers and their applications (2) maintenance of automatic control systems (3) metal fatigue and fractography (4) equipment inspection techniques (5) non-destructive testing (6) tribology and abrasion resistance (7) lubrication techniques (8) heat treatment and hard facing
- 3. QUALIFICATION OF APPLICANT** (1) engineer or manager with more than three years' occupational experience in the field of plant maintenance work (2) presently in charge of maintenance work in continuous process plants, such as iron and steel, oil refinery or chemical, cement plant, automotive plant, etc. (3) university graduate or equivalent (4) 45 years of age or less
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Kitakyushu International Techno-cooperative Association (3) Kyushu Institute of Technology (4) Nippon Steel Corporation
- 5. REMARKS** A compulsory 25-hour Japanese language course will be conducted prior to the technical training.

MECHANICAL SPARE PARTS FOR PLANT MAINTENANCE (DESIGNING, MANUFACTURING, TESTING AND MANAGEMENT)

May 26, '97 - Oct. 26, '97, 7 participants

プラント用機械保全部品

J-97-03277

- 1. PURPOSE** This training course is set up for plant maintenance managers or engineers in charge of spare parts control, procurement or manufacture of the parts. The purpose of the course is to enable participants to: (1) make out the plans, designs or documents necessary to order spare parts for the domestic manufacturer (2) develop their ability to instruct and control the quality, cost or delivery for the domestic parts manufacturer (3) develop their ability to improve parts for prolonging useful life or reclaim broken or damaged parts
- 2. MAIN FEATURES OF CURRICULUM** Participants will acquire the knowledge and techniques required for the domestic production or reclamation of spare parts. The main themes are: (1) basic subjects on machine parts and unit design techniques (2) systematizing inventory control of spare parts for repairs (3) analyzing the causes of machine parts breakdown (4) choosing proper materials as well as improving the materials by heat treatment or surface processing (5) improving parts design for longer life (6) preparation of technical specification for ordering spare parts and/or basic knowledge required for instructing parts manufacturers (7) techniques on reclaiming broken or damaged spare parts (8) applying computer to design and control of spare parts
- 3. QUALIFICATION OF APPLICANT** (1) have 5 to 15 years' occupational experience in the field of maintenance engineering (2) in charge of spare parts making, purchasing and controlling of spare parts (3) university graduate or the equivalent in mechanical engineering (4) between 27 and 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Kitakyushu International Techno-cooperative Association (3) Fukuoka Industrial Technology Center
- 5. REMARKS** A compulsory 25-hour Japanese language course will be conducted prior to the technical training.

D'ENTRETIEN ET DE REPARATION DE L'EQUIPEMENT DE CONSTRUCTION

Sep. 15, '97 - Dec. 14, '97, 8 participants

建設機械整備(仏語)

J-97-03280

- BUT** Le cours est destiné au personnel technique ayant les services d'entretien et de gestion des machines de construction dans les pays participants et vise à leur fournir les informations récentes de notre pays sur la spécialité concernée pour contribuer, finalement au développement technique des pays respectifs par l'assimilation technique.
- CARACTÉRISTIQUES DU COURS** Le présent cours se caractérise par le déroulement de stage à quelques constructeurs d'équipements de construction. Cela facilitera l'acquisition de connaissances sur l'entretien et la réparation des équipements de construction ainsi que la gestion de l'atelier de l'entretien. Théorie gestion de l'équipement de construction, heure-homme standard de réparation, coût de possession de l'équipement de construction, gestion de l'atelier, carburant et lubrifiant, inspection des pièces, soudure. Pratique moteur, système d'embrayage, convertisseur de couple, boîte des vitesses, bulldozer, chargeur, excavateur hydraulique, compacteur.
- CAPACITÉS DES CANDIDATS** (1) à présent engagés plus en possession de plus de trois ans d'expérience dans le domaine de l'entretien d'équipement de construction (2) âgés de plus de 25 ans et de moins de 35 ans (3) dotés d'une connaissance suffisante de la langue française
- INSTITUTION DU STAGE** (1) Hachioji International Training Centre (HITC), JICA ou Centre de Formation Internationale de Hachioji (2) Division de l'Équipement de Construction, Ministère de la Construction (3) Japan Construction Mechanization Association (JCMA) ou Association Japonaise de Mécanisation de Construction
- REMARQUES** Le cours s'effectuera en français ou par traduction du japonais en français.

MECANIQUE AUTOMOBILE VÉHICULES DIESEL (AUTOBUS, CAMIONS POIDS-LOURDS)

Jan. 5, '98 - Mar. 22, '98, 11 participants

バス・トラック整備技術(仏語)

J-97-03279

- BUT** Ce cours est destiné aux mécaniciens travaillant à l'entretien des autobus et des camions poids-lourd. Il vise à leur fournir les connaissances fondamentales sur le mécanisme et le fonctionnement des véhicules diesel par le cours théorique et les travaux pratiques, ainsi que les techniques de réparation et d'entretien.
- CARACTÉRISTIQUES DU COURS** Le présent cours se caractérise par l'acquisition des techniques d'entretien efficaces à travers les cours théoriques et les travaux pratiques pour chaque matière. A la fin de ce stage, les participants auront acquis les connaissances fondamentales sur les théories, les techniques de réparation et d'entretien ci-dessous concernant les autobus et les camions: moteur diesel et équipement périphériques, boîte des vitesses, pompe d'injection distributrice, freinage, essieux avant et arrière et différentiel, équipement électrique.
- CAPACITÉS DES CANDIDATS** (1) en possession de plus de trois ans d'expérience dans le domaine de l'entretien et la réparation des véhicules diesel (2) âgés de plus de 25 ans et de moins de 35 ans (3) dotés d'une connaissance suffisante de la langue française
- INSTITUTION DU STAGE** (1) Hachioji International Training Centre (HITC), JICA (2) La Société de Fabrication Automobile de Hino (Hino Motors Limited)
- REMARQUES** Le cours s'effectuera en français ou par traduction du japonais en français.

RESEARCH AND APPLICATION OF USEFUL MICROORGANISM

Aug. 4, '97 - May 30, '98, 5 participants

有用微生物研究と応用

J-97-03338

- PURPOSE** The purpose of this course is to instruct a researcher the basic knowledge and techniques of biotechnology on themes relating to useful microorganisms. Each participant will be expected to learn research methods through laboratory work and contribute to microorganism-related industries.
- MAIN FEATURES OF CURRICULUM** The participants will select one subject among seven subjects prepared for individual research training and engage in laboratory work under a instructor. Observation tours to relating research institutes and fermented companies will be conducted occasionally.
- QUALIFICATION OF APPLICANT** (1) presently engaged in research work in the field of biotechnology with more than three years occupational experience (2) Be a researcher with Master's degree (3) not more than 35 years of age.
- TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) The National Research Institute of Brewing
- REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

CERAMICS DEVELOPMENT TECHNOLOGY II

Apr. 14, '97 - Oct. 20, '97, 5 participants

陶磁器開発・活用技術 II

J-97-03211

- PURPOSE** The purpose of the course is to provide engineers or researchers presently engaged in the ceramics development work at research or educational institutions with knowledge and techniques ranging from the study of raw materials to the improved application technology for ceramics through scientific approaches.
- MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on practical training and related lectures. The main themes are: (1) raw materials (2) preparation of bodies (3) glaze (4) screen printing (5) firing. The participants will also have the chance to observe some of the famous areas for ceramic industries, during field trips.
- QUALIFICATION OF APPLICANT** (1) university graduate or equivalent, and have more than three year practical experience at educational or research institution related to ceramics (2) working at ceramic manufacturing plant as an engineer or institution of ceramic research and development as a researcher, and not be a craftsman (3) between 25 and 40 years of age
- TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) National Industrial Research Institute of Nagoya (NIRIN) (3) Tajimi City Pottery Design and Technical Center (4) Institute for Comparative Pottery, Chukyo Junior College (5) other public institutions and private companies
- REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for four weeks (100 hours).

COAL CONSERVATION AND UTILIZATION TECHNOLOGY

Sep. 8, '97 - Sep. 6, '98, 5 participants

石炭転換・利用技術

J-97-03289

- 1. PURPOSE** Coal is one of the most important energy sources, and the dependence on coal is expected to rise extremely high in the future in developing countries in the Pacific Rim region in particular. This course is to teach basics of all kinds of coal conversion processes through experiments, to make trainees understand the importance of energy and environmental problems, and thereby to contribute to the improvement of coal conversion techniques in consideration of environment circumstances of the Pacific RIM.
- 2. MAIN FEATURES OF CURRICULUM** This course is separated 4 different courses of liquefaction, justification, confusion and ash utilization of coal, to learn basics of coal, methods of reaction experiments and all kinds of analysis through experiments.
- 3. QUALIFICATION OF APPLICANT** (1) research worker in the central or a local government with more than three years but less than 10 years of experience, (2) university graduate or equivalent, (3) between 25 and 35 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Hokkaido National Industrial Research Institute
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for 4 weeks.

SOLAR POWER GENERATION AND ITS APPLICATION SYSTEM (OCEANIAN COUNTRIES)

Sep. 15, '97 - Dec. 14, '97, 5 participants

太陽光発電及び利用の技術システム(大洋州諸国)

J-97-03266

- 1. PURPOSE** The purpose of this course is to provide the knowledge and information on solar power generation and its application system (electrification in solitary islands, power resources of medical facilities, storage pump etc.). In order to solve the disharmony between development and environment in participating countries, especially in Oceanic countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, discussions and observation trips: (1) lecture; basis of, (a) semiconductor engineering (b) ray engineering (c) battery engineering (d) electrical engineering (e) environmental engineering (2) lecture; (a) manufacturing technique (b) preservation of regional environment (3) observation of private institution applying solar power technique system (4) design the solar power generation system of minimum electric power in the specified study
- 3. QUALIFICATION OF APPLICANT** (1) technical officials who are engaged in work in the field of electricity and/or energy (2) have more than 3 years' experience (3) between 25 and 45 years of age (4) university graduate majoring in science or engineering
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Faculty of Engineering, Osaka City University
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks. (50 hours)

CORPORATE MANAGEMENT FOR ASIAN REGION

July 7, '97 - July 27, '97, 12 participants

アジア企業経営

J-97-03330

- 1. PURPOSE** The aim of the course is to contribute to economic growth and business expansion among private enterprises in Asia and the Pacific region by familiarizing managerial staff with key factors in Japan's economic growth, and with the phenomenon of Japanese-style business management which underpinned it. Through lectures, discussions and study visits, course participants will learn how Japanese industry, with its worldwide reputation for high-quality products, attained its present position, and about the production systems it employs.
- 2. MAIN FEATURES OF CURRICULUM** Major subjects (1) present situation and future prospects of Asian and Pacific economies (2) development of the Japanese economy (3) product quality and business management methods in Japan (a) market research and product planning (b) manufacturing strategy and supporting industry (c) sales strategy and after-sale service (d) Factory management characteristics (4) presentation of country reports (5) discussion (6) final presentation
- 3. QUALIFICATION OF APPLICANT** (1) executives of private enterprises interested in articles with which this course deals (e.g. activities to improve QUALITY of products.) Type of industry will not be considered. (2) nominated by a business organization such as Chamber of Commerce and Industry, Federation of Industry (3) between 30 and 50 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Pacific Resource Exchange Center (PREX)

SEMINAR ON DISTRIBUTION SYSTEM IN THE JAPANESE MARKET

Oct. 13, '97 - Nov. 16, '97, 9 participants

日本市場商品流通システムセミナー

J-97-03189

- 1. PURPOSE** The purpose of this seminar is to contribute to the promotion of export to Japan from participating countries. Participants will study the present state of the Japanese market through specific case studies in order to obtain an overview of the demands of the Japanese market and gain an understanding of the overall process of exporting to Japan and of the various methods of entering the market.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly covers; (1) mechanism of distribution in the Japanese market (2) case study of specific markets (3) observation and study tour of actual distribution processes
- 3. QUALIFICATION OF APPLICANT** (1) college graduate or equivalent (2) individual in leadership position in export promotion at either central or local government or an official in business organizations, such as, the chamber of commerce and Industry, association of manufacturers or distributors, etc. (3) between 30 and 50 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Pacific Resource Exchange Center (PREX)

PROMOTION OF DIRECT INVESTMENT

Jan. 19, '98 - Feb. 15, '98, 15 participants

投資環境整備

J-97-03177

- 1. PURPOSE** This course, offered to senior administrators directly in charge of encouraging direct investment from abroad or officials responsible for legislative formulation, aims to contribute to the institution and development of legislation designed to promote direct investment in participating countries.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures and visits. The main themes are: (1) Legal aspects of Japanese corporate operation (Establishment and Dissolution, Capital Procurement, Tax and Accounting) (2) Japanese policy for attraction of overseas investment (3) case study on feasibility of direct investment (4) round table discussions
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) senior government officials in charge of policy on legal aspects at their countries' Board of Investment, or responsible for legislative formulation on foreign direct investment, with professional experience of at least seven years (3) between 30 and 50 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Kyoto Comparative Law Center

**INVESTMENT PROMOTION SEMINAR (1)
(ASIAN COUNTRIES)**

Apr. 17, '97 - May 25, '97, 11 participants

投資促進セミナー(1)(アジア諸国)

J-97-03321

- 1. PURPOSE** Direct investments from developed nations, including grants and technical transfers, are effective for stimulating industrial development of countries facing difficulties in local procurement and securing essential factors such as capital and technology. In addition, improvement of investment promotion programmes requires the cultivation of capable personnel in relevant positions of authority. This seminar is designed primarily for government officials of Asian countries, who are responsible for soliciting investments from overseas sources. Since it is essential, in receiving such investments, to understand the investor nation, a case emphasis will also be put on understanding the comprehensive or total background of Japan, including its business practices and organizational structures in Japan.
- 2. MAIN FEATURES OF CURRICULUM** The main theme of this seminar is to clarify and analyze the current situation and problems of his/her own country's investment promotion.
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) under 40 years of age (3) official who belongs to governmental or semi governmental organizations (e.g. investment promotion organization) with more than five years of practical experience in the administration of overseas investment
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) World Trade Center Tokyo, Inc. (WTCTO)
- 5. REMARKS** This course is organized for Asian countries.

**INVESTMENT PROMOTION SEMINAR (2)
(LATIN AMERICAN COUNTRIES)**

June 26, '97 - Aug. 9, '97, 11 participants

投資促進セミナー(2)(中南米諸国)

J-97-03320

- 1. PURPOSE** Direct investments from developed nations, including grants and technical transfers, are effective for stimulating industrial development of countries facing difficulties in local procurement and securing essential factors such as capital and technology. In addition, improvement of investment promotion programmes requires the cultivation of capable personnel in relevant positions of authority. This seminar is designed primarily for government officials of the countries of Latin America, who are responsible for soliciting investments from overseas sources. Since it is essential, in receiving such investments, to understand the investor nation, a case emphasis will also be put on understanding the comprehensive or total background of Japan, including its business practices and organizational structures in Japan.
- 2. MAIN FEATURES OF CURRICULUM** The main themes of this seminar are: (1) analysis of the current situation and problems of his/her own country's investment promotion (2) research paper writing on "Selection of Potential Japanese Investors"
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) under 40 years of age (3) official who belongs to governmental or semi governmental organizations (e.g. investment promotion organization) with more than five years of practical experience in the administration of overseas investment
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) World Trade Center Tokyo, Inc. (WTCTO)
- 5. REMARKS** This course is organized for Latin American countries.

**MANAGEMENT OF CHAMBERS OF
COMMERCE AND INDUSTRY**

Nov. 18, '97 - Dec. 18, '97, 7 participants

商工会議所マネジメント

J-97-03221

- 1. PURPOSE** The purpose of this course is to give leading managers of Chambers of Commerce and Industry a knowledge of how to manage industrial associations and how to promote small- and medium-sized businesses. In addition, this course aims to contribute to the development of human resources that are necessary for fully augmenting the social structure, industrial activities and economic growth.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course during lectures in Tokyo and a field trip: (1) seminar programme on Japan's foreign trade, overseas economic cooperation, and management and activities of Chambers of Commerce and Industry, (2) discussions of country reports, (3) observation of activities by the Japan and Tokyo Chamber of Commerce and Industry, other related offices, and commercial facilities in Tokyo, (4) study trip, (5) summary, evaluation and closing ceremony.
- 3. QUALIFICATION OF APPLICANT** (1) be managers/directors of sections in the Chambers of Commerce and Industry or other similar organizations, or governmental officials who are in charge of these organizations, (2) be university graduates or possess equivalent knowledge, (3) be under 45 years of age, (4) have more than 5 years of practical experience in this field.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) The Japan Chamber of Commerce and Industry (JCCI)

(PRIVATE SECTOR) BUSINESS MANAGEMENT IN THE PACIFIC BASIN COOPERATION (ASIAN, OCEANIAN, AND LATIN AMERICAN COUNTRIES)
June 16, '97 - July 27, '97, 34 participants

太平洋民間協力(アジア・太平洋・中南米諸国) J-97-03327

- 1. PURPOSE** The participants will be exposed to the Pacific basin cooperation in the private sector through which they are expected to understand the necessity for the trade and investment liberalization and facilitation, and the economic and technical cooperation. The intensive exposure will, in a middle and long range perspective, help them express and act in a positive and constructive manner, toward the realization of the goal (the trade and investment liberalization and facilitation) in collaboration with such international non-governmental organizations as PBEC, PECC, etc. through their respective channels.
- 2. MAIN FEATURES OF CURRICULUM** The following issues are dealt with in this training course, in a manner of interactively presenting them, to the extent that the participants will recognize the necessity for the trade and investment liberalization and facilitation, and the economic and technical cooperation: (1) the prevailing situation and issues related to the trade and investment in the Pacific region, (2) the characteristics of the Japanese market, (3) development and environment, (4) development of small and medium sized enterprises in Japan, and their present situation.
- 3. QUALIFICATION OF APPLICANT** (1) those engaged in the middle level management either in the privately or the publicly owned corporations (however, not including the government officials) (2) those qualified at the university level education, (3) those who have more than three years of practical business experience, and (4) those aged under 45 years old.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA, (2) Japan Member Committee, Pacific Basin Economic Committee, (3) The Tokyo Chamber of Commerce and Industry

TOP MANAGEMENT SEMINAR ON SUSTAINABLE INDUSTRIAL DEVELOPMENT
Oct. 20, '97 - Nov. 29, '97, 10 participants

持続可能な産業開発トップマネジメントセミナー J-97-03286

- 1. PURPOSE** The purpose of this seminar is to help participants understand that industrial development can coexist with environmental conservation. Participants will also be expected to understand what is to emphasize, according to the conditions of respective countries, in order to achieve industrialization of their countries.
- 2. MAIN FEATURES OF CURRICULUM** The course mainly consists of lectures, discussion and visits to companies and environmental conservation facilities: (1) environmental preservation in Kitakyushu City (2) management in Japanese companies (3) production management and cost management (4) quality control (5) maintenance, energy-saving and data processing
- 3. QUALIFICATION OF APPLICANT** (1) senior production managers of enterprises or senior governmental officials who direct the industrial management, (2) practical experience in the relevant field, for more than ten (10) years (3) between 35 and 50 years of age, (4) university graduates
- 4. TRAINING INSTITUTIONS:** (1) Kitakyushu International Techno-cooperative Association (KITA) (2) JICA Kyushu International Centre

SEMINAR ON POLICIES FOR PROMOTION OF SMALL- AND MEDIUM- SCALE INDUSTRIES
Jan. 19, '98 - Feb. 14, '98, 8 participants

中小工業育成政策セミナー J-97-03250

- 1. PURPOSE** The seminar is designed for senior officials in charge of industrial policies in the government in order to introduce industrial policies of Japan with special emphasis on small- and medium-scale industries.
- 2. MAIN FEATURES OF CURRICULUM** The seminar covers the following: (1) small-and medium-scale industries and the post-war economic development of Japan (2) present status of small-and medium-scale industries in Japan (3) policies on organization and promotion of small-and medium-scale industries (4) financial policies for small-and medium-scale industries (5) policies on research and innovation of technology (6) environmental countermeasures (7) human resource development policy
- 3. QUALIFICATION OF APPLICANT** (1) government official in charge of industrial policies for small-and medium-scale industries ranked as director of division or equivalent (2) between 30 and 45 years of age
- 4. TRAINING INSTITUTIONS** Institute for International Cooperation (IFIC), JICA

SEMINAR ON TRADE AND INVESTMENT INSURANCE
Oct. 1, '97 - Oct. 30, '97, 10 participants

貿易保険セミナー J-97-03342

- 1. PURPOSE** The purpose of this seminar is to facilitate each country's trade insurance system by providing training programs on trade insurance system and its management through presentation and demonstration to officials of governments and governmental organizations in charge of trade insurance system. The program places emphasis on helping participants, who are beginners or have no experience in the trade insurance business, to have the basic knowledge of trade insurance.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly consists of lectures, discussions and field studies, and covers the following: (1) the purpose, the role and the characteristics of Trade and Investment Insurance (2) the outline of Trade and Investment Insurance System in Japan (risk management, short-term insurance, claims and recoveries, and others) (3) the visits to the trade insurance related institutions and companies
- 3. QUALIFICATION OF APPLICANT** (1) officials of governments or governmental organizations related to trade or trade insurance (2) with little practical experience in the trade insurance and (3) with English knowledge.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japan Trade and Investment Insurance Organization (JTIO), TOKYO
- 5. REMARKS** This course is organized for Asian countries.

**TRADE PROMOTION POLICY SEMINAR
(AFRICAN, MIDDLE-EASTERN COUNTRIES)**

Sep. 25, '96 - Nov. 8, '97, 10 participants

貿易振興政策セミナー(アフリカ・中近東諸国) J-97-03322

- 1. PURPOSE** The main purpose of this seminar is to inform the participants of recent knowledge and background information in the field of international trade in connection with Japan and the Japanese, directly and indirectly stressing some successful export promotion cases executed by Japanese enterprises and organizations. Through this knowledge and information, the participants can figure out effective measures to expand the volume of their own exports in the future.
- 2. MAIN FEATURES OF CURRICULUM** The main themes of this seminar are: (1) acquisition of the accurate knowledge and necessary information about the successful development of trade by Japanese enterprises (2) analysis of situation/problems of his/her own country's trade promotion (3) research paper writing on "How to Penetrate into Japanese Market - Improvement of Product or Selection of Suitable Distribution Channels"
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) senior official who belongs to governmental or semi governmental organizations (e.g. trade promotion organization) with more than five years of practical experience in the administration of international trade (3) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) World Trade Center Tokyo, Inc. (WTCTO)
- 5. REMARKS** This course is organized for African, Middle-Eastern and Caribbean countries.

SUSTAINABLE TOURISM DEVELOPMENT

Sep. 15, '97 - Oct. 29, '97, 10 participants

観光開発と環境保全 J-97-03307

- 1. PURPOSE** Considering the meeting of the APEC Tourism Working Group in 1995, this course is designed for representatives of tourism-related ministries and agencies of APEC member Countries to discuss the methods and importance of harmonizing tourism development with environmental protection. Participants are expected to gain knowledge on policy-making, and measures for promoting sustainable tourism development.
- 2. MAIN FEATURES OF CURRICULUM** The course covers basic concepts and actual practice on sustainable tourism development as follows: (1) presentation and discussion of tourism development harmonized with environmental protection in Japan (2) examining actual cases of environmentally conscious tourism sites in Japan through study trips, (3) introducing cases of tourism development in participating countries. Participants will make presentation on sustainable tourism development
- 3. QUALIFICATION OF APPLICANT** (1) in charge of planning and development at tourism-related ministries or agencies (including cultural and historical preservation and landscape and scenery), (2) university graduate or equivalent (3) age between 35 and 50 years old.
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) International Tourism Development Institute of Japan (ITDIJ)

**SCIENCE EXPERIMENT IN PRIMARY EDUCATION
(SOUTH ASIAN COUNTRIES)**

Aug. 25, '97 - Nov. 22, '97, 6 participants

小学校における理科実験教育(南西アジア諸国) J-97-03297

- 1. PURPOSE** The course is designed for teachers' trainers for primary education. The course will introduce science practices utilizing simple experiment equipment and materials at the *Obihiro Youth Science Museum. Participants will also join in extra-curricular school activities and visit various education facilities. The purpose of this course is to acquire knowledge and techniques for primary science education. (i.e., instruction of science education, performing of experiments) *The Obihiro Youth Science Museum is a community-based facility established by the Obihiro City Board of Education, for the purpose of providing the opportunity for youths (primary school students) to perform science experiments outside the school environment.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course: (1) overview of Japanese education; (2) introduction of primary science education; (3) education taking place in science-activity facilities for children
- 3. QUALIFICATION OF APPLICANT** (1) be a teachers' trainer for primary education, (2) have at least five years' experience in the field, (3) be at least high-school graduates or equivalent, and be holder of certificate for teaching primary education; (4) between 25 and 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (HICS), JICA (2) Northern Regions Center (NRC)
- 5. REMARKS** A compulsory intensive Japanese course will be conducted prior to the technical training for three weeks (75 hours).

**LOCAL EDUCATIONAL ADMINISTRATION SEMINAR
(SUB-SAHARA AFRICAN COUNTRIES)**

Aug. 5, '97 - Sep. 29, '97, 10 participants

地方教育行政セミナー(サブ・サハラアフリカ諸国) J-97-03295

- 1. PURPOSE** This course aims to provide an opportunity for administrators in charge of local education to understand the local educational administration system of Sapporo City, through a curriculum comprised of lectures, discussions and visits/study trips pertaining to educational administration of Sapporo City and thereby to improve local educational administration in developing countries.
- 2. MAIN FEATURES OF CURRICULUM** The course consists of lectures and visits/field trips. Each curriculum is organized to provide effective training from the viewpoint of both theory and practice as follows: (1) educational administration of Sapporo City (2) compulsory education (primary education and lower secondary education in Japan) (3) school and social education in Sapporo.
- 3. QUALIFICATION OF APPLICANT** (1) be personnel in charge of the administration of local education in the central or local government, (2) university graduate, or equivalent, (3) under 45 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Sapporo Education Research Institute
- 5. REMARKS** An intensive Japanese language course will be conducted prior to the seminar for all the participants for 3 weeks.

SEMINAR FOR OFFICERS OF WOMEN'S EDUCATION

Jan. 27, '98 - Feb. 25, '98, 10 participants

女性の教育問題担当官セミナー

J-97-03285

- 1. PURPOSE** The purpose of the seminar is (1) to study the countermeasures to expand the educational opportunity for women in developing countries through the lectures and discussions of Japan's current educational programming system, (2) to exchange views and information on various issues
- 2. MAIN FEATURES OF CURRICULUM** The seminar covers the following: (1) lectures and observations (a) Japanese Educational System and Current Situation of Educational Reforms (b) financial structure in education (c) training and education of teachers, etc. (d) visits to kindergarten, elementary school (2) discussions focusing on several topics relating to education: (a) current situation and tasks of educational policies on women (b) history of women's learning activities and role of institutions for women's education (c) WID (Women in Development) (3) country report presentation and discussion to identify various problems and measures to improve the education for women in participating countries.
- 3. QUALIFICATION OF APPLICANT** (1) a government, and an administrative officer in charge of curriculum development/planning and extension of education, especially for women (2) university graduate or equivalent (3) have more than five years of occupational experience
- 4. TRAINING INSTITUTIONS** (1) Institute for International Cooperation (IFIC), JICA (2) Lifelong Learning Bureau, Ministry of Education, Science and Culture (3) National Women's Education Centre

AUTOMOTIVE MAINTENANCE ENGINEERING II

Sep. 8, '97 - Mar. 15, '98, 10 participants

自動車整備技術 II

J-97-03303

- 1. PURPOSE** This course is designed for technical instructors who are engaged in vocational training. The purpose of this course is to provide them with expertise on automotive maintenance, and thereby to improve their knowledge and skills in respective countries.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures and practices on (1) basics of automotive maintenance (2) engine maintenance method (3) electric equipment method (4) car body maintenance method, and (5) industrial engineering.
- 3. QUALIFICATION OF APPLICANT** (1) technical instructor in the field of automotive maintenance (2) have more than 5 years' experience (3) under 35 years of age (4) graduate from technical high school (5) have sufficient abilities of speaking and reading English.
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Higashi-Yodogawa Advanced Vocational Training School (HAYOT)
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks.

REMOTE SENSING TECHNOLOGY (FUNDAMENTAL) II

Aug. 12, '97 - Oct. 23, '97, 8 participants

リモートセンシング技術(基礎) II

J-97-03333

- 1. PURPOSE** The purpose of the course is to transfer fundamental knowledge and technology on satellite remote sensing, mainly focused on digital analysis, to the researchers and engineers from developing countries, through lectures, practices, field trips, and so on.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on workshop using computers. The following are the major subjects to be covered in the course. (1) basic theory (2) sensor satellite (3) image processing (4) application (5) ground truth (6) workshop: digital image analysis, geometric correction and GIS, personal computer processing, personal computer system and programming
- 3. QUALIFICATION OF APPLICANT** (1) university graduate, or equivalent with fundamental knowledge of physics and mathematics (2) researcher or engineer in remote sensing application fields, such as country planning, agriculture, forest management and mapping (3) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Remote Sensing Technology Center of Japan (RESTEC)

REMOTE SENSING TECHNOLOGY (ADVANCED)

Oct. 21, '97 - Dec. 3, '97, 5 participants

リモートセンシング技術(上級)

J-97-03064

- 1. PURPOSE** The purpose of the course is to introduce the application technology and advanced digital processing technology covering remote sensing data.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on workshop using computers. The following are the major subjects to be covered in the course. (1) lectures (2) practice of digital analysis (a) analysis by personal computers (b) analysis with digital image processing systems (3) observation study
- 3. QUALIFICATION OF APPLICANT** (1) university graduate, or equivalent with a fundamental knowledge of physics and mathematics, (2) researchers or engineers in remote sensing application fields, such as country planning, agriculture, forest management and mapping, (3) under 45 years of age, (4) person having completed the JICA Group Training Course in "Remote Sensing Technology (fundamental)" or having experienced investigation or activities in remote sensing application for more than 3 years.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Remote Sensing Technology Center of Japan (RESTEC)

HUMAN-RADIATION INTERFACE ; APPLICATION AND SAFETY OF RADIATION IN MEDICAL, BIOLOGICAL, AND ENVIRONMENTAL SCIENCES

Oct. 6, '97 - Nov. 15, '97, 8 participants

ヒト-放射線インタ-フェイス;医学、生物学、環境科学における放射線の利用と安全 J-97-03334

- 1. PURPOSE** The purpose of this course is to give the participants knowledge on Human-Radiation Interface in view of medical, biological and environmental sciences and to transfer the latest techniques through lectures, practices of one's specialty and interest, study tours and seminars to promote sound and rational development in the field of application and safety control of radiation in each developing country by means of: (1) systematic and fundamental knowledge on radiation use for medical biology and environmental radiation protection, (2) understanding of latest knowledge and techniques, (3) human resource development in this radiation field in line with each country's condition
- 2. OBJECTIVES** (1) to understand biological influences on the level of molecule, cell and individual, (2) to learn the actual condition, principle and procedures of safety protection in natural and work environment, (3) to acquire clinical knowledge, skills of the principle of therapy and diagnosis by radiation of every kind such as X-ray, neutron ray and beryllium, and radio medicine, (4) to understand and apply the above researches, and to acquire the latest knowledge concerning each participant's present specialty and further needs, and to obtain the ability to introduce the latest techniques in a required way.
- 3. MAIN FEATURES OF CURRICULUM** (1) Lectures: Radiation and human, energy industries and radiation, the past and future of radiation, etc. (2) Experiments: Basic test of radiometry, radiation medicine, radiation biology, etc. (3) Observation: Exercises of radiation health control, industries concerned, radiotherapy, etc. (4) Practice: Select one of followings practices of clinical radiotherapy, diagnosis of nuclear medicine, radiation health control, measurement of environmental radiation, radiation individual biology, etc.
- 4. QUALIFICATION OF APPLICANT** (1) medical doctor of radiologist/radiological technologist or be engaged with radiologists (University Graduate or equivalent), (2) resume the same field of work after returning home, (3) under 50 years of age
- 5. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) National Institute of Radiological Sciences, Science and Technology Agency
- 6. No JAPANESE LANGUAGE CLASS**
- 7. REMARKS** This course is conducted only for RCA member countries.

MUSEUM MANAGEMENT TECHNOLOGY (COLLECTION, PRESERVATION, EXHIBITION)

Aug. 5, '97 - Jan. 26, '98, 7 participants

博物館技術(収集、保存、展示)

J-97-03232

- 1. PURPOSE** The purpose of this course is to provide comprehensive knowledge on the role and function of contemporary museums both in theory and practice, in order to train experts who are expected to take leading roles in administration and management of museums which will contribute to the promotion of tourism and will be the center of educational and cultural activities.
- 2. MAIN FEATURES OF CURRICULUM** This course includes lectures and practices on the role and function of modern museums by introducing accumulated knowledge and experience in Japan: (1) introduction of museology, (2) filing and recording, (3) exhibition technique, (4) preservation, (5) public relation and educational activity, (6) facilities and equipments.
- 3. QUALIFICATION OF APPLICANT** (1) specialist with at least 3 years of experience in the field of management and administration of museums, (2) university graduate or person with equivalent technical qualification in the field, (3) between 25 and 45 years of age.
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) National Museum of Ethnology (3) Japan International Cooperation Center.
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for 3 weeks (75 hours).

CULTURAL ASSET PRESERVATION AND RESTORATION TECHNOLOGY

Feb. 16, '98 - July 12, '98, 6 participants

文化財修復整備技術

J-97-03156

- 1. PURPOSE** To contribute to the preservation and restoration of cultural assets in participating countries by introducing technology accumulated in Kyoto, concentrating on restoration of wooden cultural assets. As a rule, stone cultural assets are not focused in this training course.
- 2. MAIN FEATURES OF CURRICULUM** The course consists of a common programme for all participants and a following specialized training programme to meet each participant's interest. Each participant is to choose one of the following subjects for their specialized training programme. (1) wooden buildings and townscapes (2) buried cultural assets
- 3. QUALIFICATION OF APPLICANT** (1) leading technical experts with at least three years' experience in the field of cultural asset preservation and restoration technology (2) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) The Agency for Cultural Affairs (3) Faculty of Engineering and Faculty of Agriculture, Kyoto University (4) Kyoto National Museum, ACA (5) Kyoto Prefectural Archaeological Research Center, (6) Kyoto City Archaeological Research Institute Incorporation (7) Kyoto Kagaku Co., Ltd. (8) University of Shiga Prefecture (9) Kyoto University of Art and Design
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for four weeks.

SEMINAR FOR SENIOR OFFICERS IN MENTAL HEALTH CARE

Jan. 26, '98 - Feb. 22, '98, 6 participants

精神医療指導者研修

J-97-03149

- 1. PURPOSE** This seminar is designed to provide participants with an opportunity to have a comprehensive understanding of Japanese mental health services and to help psychiatrists of the participating countries define appropriate psychiatric models for their own countries.
- 2. MAIN FEATURES OF CURRICULUM** This seminar puts an emphasis on discussion, presenting experience of Japan for a case study. The main themes are: (1) legislation, including the mental health law, the medical law and other laws relevant to psychiatry (2) mental health service system and the health insurance system (3) present situation of comprehensive community mental health services (4) alcohol dependency programmes
- 3. QUALIFICATION OF APPLICANT** (1) psychiatrists directly involved in mental health and in positions to lead the mental health services of their countries (2) able to freely exchange knowledge and opinions with others, and intend to remain in the field of mental health
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Japanese Association of Psychiatric Hospitals (JAPH)

HISTOPATHOLOGICAL DIAGNOSIS OF EARLY GASTRIC AND COLORECTAL CARCINOMAS

Aug. 19, '97 - Oct. 27, '97, 8 participants

早期胃・大腸癌の病理組織診断

J-97-03324

- 1. PURPOSE** The purpose of the course is to introduce participants to recent concepts and techniques in gastroenterology, especially gastrointestinal pathology, so that they will gain broader perspectives and clues for their future research as well as diagnosis techniques.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common curriculum for all participants and specific practical training for each participant, to cover the following themes respectively: (1) recent gastrointestinal pathology in Japan (common curriculum mainly made up of lectures, seminars, microscopic examinations and conferences at university) (2) histological diagnosis of surgical specimens (practical training at designated hospital)
- 3. QUALIFICATION OF APPLICANT** (1) established pathologist (2) university medical school graduate or equivalent
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Tokyo Medical and Dental University Faculty of Medicine, Pathology Department

LEPROSY RESEARCH

Apr. 7, '97 - Dec. 21, '97, 5 participants

ハンセン病医学研究

J-97-03076

- 1. PURPOSE** The purpose of the course is to enable participants to pursue further theoretical and experimental studies on leprosy. They will learn up-to-date knowledge and technology indispensable to leprosy control through assigned laboratory research work. The acquired knowledge, technology, and the cultivated research mind will be useful not only for leprosy control but will also contribute to the development of biomedical sciences in participating countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on laboratory research work. Each participant is to take one of the following subjects for his/her specific study: (1) serology and seroepidemiology of leprosy and *Mycobacterium leprae* infection (2) development of histopathological techniques for early diagnosis of leprosy (3) kinetics of *M. leprae* with PCR (Polymerase Chain Reaction) (4) cell-mediated immunity of leprosy (5) development of antileprosy chemotherapeutics using nude mice.
- 3. QUALIFICATION OF APPLICANT** (1) a medical doctor or a graduate from a faculty of science, pharmacy, agriculture, veterinary medicine, medical technology or equivalent (2) presently engaged in research or clinical work on leprosy in an organization (3) less than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) National Institute for Leprosy Research (NILR)

VIROLOGICAL DIAGNOSIS TECHNIQUE FOR POLIO ERADICATION PROGRAMME

Aug. 18, '97 - Sep. 14, '97, 7 participants

ポリオ根絶計画ウイルス検査技術

J-97-03127

- 1. PURPOSE** The purpose of this training course is to provide the participants with; (1) standard technique of cell culture, (2) standard technique of isolation and typing of poliovirus, (3) introduction to molecular epidemiology of poliomyelitis, and (4) information on the outline of polio vaccine control.
- 2. MAIN FEATURES OF CURRICULUM** In this course the emphasis is put on lectures and laboratory experiments. The main themes are: (1) lecture (a) global eradication of poliomyelitis (b) maintenance and quality control of cell cultures (c) laboratory biosafety etc. (2) practical training (a) preparation of media and cell cultures (b) identification of polioviruses (c) determination of neutralizing antibodies to polioviruses (d) detection of viral antigen and antibody by ELISA (e) amplification of virus genome by PCR etc.
- 3. QUALIFICATION OF APPLICANT** (1) presently a technical staff member of microbiology laboratory
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) National Institute of Health (Miyayama Annex)

VIROLOGICAL DIAGNOSIS TECHNIQUES OF HIV INFECTION (AIDS)

Jan. 5, '98 - Feb. 22, '98, 8 participants

エイズのウイルス感染診断検査技術

J-97-03185

- 1. PURPOSE** The purpose of the course is to train those who are capable of precisely diagnosing HIV infection virologically in the laboratory.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly covers the following themes; (1) surveillance of HIV infections (2) introduction to sophisticated technology of virus diagnosis (3) evaluation method of examination kit (4) examination method of pathogens relevant to opportunistic infections
- 3. QUALIFICATION OF APPLICANT** (1) have experience of microbes examination and research, preferably more than two years (2) to be engaged in a crusade against AIDS in future
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) National Institute of Health

HIV/AIDS CONTROL PLAN

Nov. 10, '97 - Dec. 20, '97, 12 participants

HIV/AIDS対策モデル

J-97-03305

- 1. PURPOSE** Especially Asian region, AIDS (Acquired Immune Deficiency Syndrome) has been raging in developing countries. Since the social backgrounds of infection route, and the kinds of opportunistic infection are different in these countries, it is indispensable for them to have sufficient knowledge about HIV. The purpose of this course is to provide the participants with the opportunity to study the characteristic of infection diseases in each country or region, and to acquire the ability to plan the measures of AIDS.
- 2. MAIN FEATURES OF CURRICULUM** (a. Both Groups) Lectures will be given in the general theory of the history of infectious diseases, international cooperation models, vaccinology, virology, bacteriology, parasitology, immunology, pathology, clinical medicine (including hematology) and regional control of health and hygiene (b. Laboratory Tests for Diagnosis group) Practical experience will also be given in these areas (detection of HIV antibodies and antigens, detection of HIV, tuberculosis bacilli and Pneumocystis carinii genes by PCR, HIV culture, culture of bacteria related to sexually transmitted diseases (c. Education and Awareness group) Lectures will include observation of provincial local government activity, observation (including direct observation) of educational activity, observation of diagnosis, treatment and laboratory testing in hospitals, observation of Red Cross blood centre, and observation of non-governmental organization activity
- 3. QUALIFICATION OF APPLICANT** (1) applicants wishing to participate in the Diagnosis group (Group 1) should be between 30 and 45 years of age and be either -medical doctors involved in government-sponsored HIV testing and diagnosis, or -technicians in clinical laboratories with a university level education (two applicants from each country will be selected, one from each category) (2) applicants wishing to participate in the AIDS Education and Awareness group (Group 2) should be advisors or government officials of no more than 45 years of age involved in government-sponsored AIDS policy, education and awareness planning (two applicants from each country will be selected) applicants for both groups should have the prospect of resuming a relevant position after returning to their country
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) The Research Foundation for Microbial Diseases of Osaka University

HOSPITAL PHARMACY

Sep. 23, '97 - Nov. 21, '97, 10 participants

病院薬学

J-97-03218

- 1. PURPOSE** This programme is designed for those who are presently engaged in hospital pharmacy and provides knowledge, technology and skills for practical hospital pharmacy through lectures, practice drills and observations.
- 2. MAIN FEATURES OF CURRICULUM** Participants are expected to acquire knowledge and techniques such as the following, which are essential for hospital pharmacy in Japan: dispensing, pharmaceutical preparation, drug testing, drug control, clinical pharmacy, drug information and drug supply.
- 3. QUALIFICATION OF APPLICANT** (1) have experience of more than five years in their profession (2) presently engaged in practices of hospital pharmacy (3) recommended by the President of the association the applicants belong to and/or the President of the institution at which they work (4) under 40 years of age (5) be pharmacists.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japan International Medical Technology Foundation (3) Japanese Society of Hospital Pharmacists (4) related institutes

WORKMEN'S HEALTHCARE

Oct. 27, '97 - Nov. 30, '97, 8 participants

労災医療

J-97-03190

- 1. PURPOSE** The purpose of the course is to improve and enhance the system of workmen's accident medical treatment by giving training not only to doctors but to nurses to raise their capability and the standard of medical technology.
- 2. MAIN FEATURES OF CURRICULUM** The programme is designed for participants to deepen the knowledge of this specific field and be able to ameliorate the standard of treatment and rehabilitation of patients as well as emergency medicine. Main subjects are as follows; (1) laws and administration (2) workmen's accident compensation administration (3) treatments and examinations (4) rehabilitation (5) emergency medicine system
- 3. QUALIFICATION OF APPLICANT** medical doctor or nurse engaged in workmen's accident medical treatment
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Japan Overseas Health Administration Center (JOHAC)

ORAL AND MAXILLOFACIAL RADIOLOGY

Sep. 1, '97 - Feb. 28, '98, 5 participants

口腔顎顔面放射線診断

J-97-03225

- 1. PURPOSE** The course is designed for specialists or potential future specialists in oral and maxillofacial radiology presently engaged in the training of dentistry students in the medical and dental schools of higher education establishments in participating countries. Through specialist-oriented study encompassing the whole field of radiology, including practical technical training, the course seeks to provide developing countries with medical specialists and educators capable of fulfilling the role of educators of the next generation of specialists in their field.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on workshop practice at laboratory experiments and introduction of Japanese experience. The main themes are: (1) oral and maxillofacial radiology, (2) radiation physics, (3) radiation biology, (4) radiation management, (5) radiation equipment engineering, (6) general image diagnostics.
- 3. QUALIFICATION OF APPLICANT** (1) graduate from university-level dental or medical school (2) staff member (teaching and/or research) of a dental or medical school, or similar institution, e. g. dentist or doctor specializing in dentistry (3) have served at a university or equivalent institution for over 3 years (4) be at present specializing in radiology, or hereafter intending to specialize in radiology (5) under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Faculty of Dentistry, Osaka University.
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for 3 weeks.

ENDEMIC DISEASES CONTROL MEASURES (LABORATORY AND FIELD TECHNIQUES IN ECHINOCOCCOSIS/HYDATIDOSIS) (ASIA, LATIN AMERICAN COUNTRIES)

Jan. 12, '98 - Mar. 16, '98, 5 participants

地域流行病対策(エキノコックス症試験検査技術)(アジア・中南米諸国) J-97-03234

- 1. PURPOSE** This course is designed to provide opportunities to obtain basic and practical knowledge and techniques on echinococcosis to researchers and medical technicians who are engaged in this field in its prevalent areas for the purpose of improving the situation of public health on the whole.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures, laboratory experiments and field work. It mainly covers; (1) measures for echinococcosis in Hokkaido, (2) basic and applied techniques of diagnosis in the laboratory and epidemiological survey, (3) practical training in public health care centers and meat inspection centers, (4) hygiene and medical administration of regional health care.
- 3. QUALIFICATION OF APPLICANT** (1) be a university graduate or equivalent, (2) be presently engaged in examination or research work of echinococcosis, (3) have over two years' experience in this field, (4) be over 25 and under 40 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido Institute of Public Health, (2) Hokkaido International Centre, Sapporo (HICS), JICA.

TUBERCULOSIS CONTROL LABORATORY SERVICES

Sep. 29, '97 - Feb. 15, '98, 5 participants

結核対策細菌検査サービス J-97-03251

- 1. PURPOSE** The purpose of the course is to educate the leaders of laboratory works on training methods and to promote nationwide tuberculosis control programmes in participating countries.
- 2. MAIN FEATURES OF CURRICULUM** In this training course, the emphasis is placed on the management and evaluation of TB laboratory system, importance of bacteriological examination such as case-finding in tuberculosis control programmes, how to examine staining method of mycobacteria, the way to isolate culture from specimens of tuberculosis patients, the sensitivity test for anti-tuberculosis drugs, the identification of mycobacterium tuberculosis from other mycobacteria, etc.
- 3. QUALIFICATION OF APPLICANT** (1) a senior technician or a medical doctor responsible for the management of laboratory works in TB control programme in the region/country and the training of health personnel in laboratory works for tuberculosis control (2) not more than 50 and not less than 26 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training (75 hours). Those whose tuberculin test is negative are advised to get BCG vaccination before departure from their countries.

NATIONAL TUBERCULOSIS PROGRAMME MANAGEMENT

May 5, '97 - June 22, '97, 10 participants

国家結核プログラム管理 J-97-03282

- 1. PURPOSE** The purpose of this course is to enhance the ability of the participants to manage a national tuberculosis programme, to set up a strategy for implementation and improvement of the programme and to evaluate the programme through lectures, discussions and observation tours, and also by exchange of experiences and views with the participants from other countries, to contribute to the strengthening of the programmes of the countries concerned.
- 2. MAIN FEATURES OF CURRICULUM** This course aims at enhancing the abilities to: (1) make a management plan for the programme based on the deficiencies and shortcomings as identified by evaluation (2) evaluate the on-going national tuberculosis programme in their own country (3) assess the epidemiological status of tuberculosis and its time trend in their countries (4) incorporate new knowledge and technology of tuberculosis control into their national programme.
- 3. QUALIFICATION OF APPLICANT** (1) a medical officer who is in charge of a tuberculosis control programme at a certain administrative level, preferably an ex-participant of the Group Training Course in "Tuberculosis Control" with about five years' field experience after participating in the course (2) not more than 55 and not less than 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association
- 5. REMARKS** The participants should bring the report on the current information of their own countries regarding the health status and tuberculosis activities, manual of national tuberculosis control programme, recording form of tuberculosis patients, etc.

MEDICAL TECHNOLOGY ON RADIOLOGY

Aug. 25, '97 - Dec. 14, '97, 5 participants

医療放射線技術者実務 J-97-03258

- 1. PURPOSE** This course is designed for radiological technologist to obtain basic knowledge of radiology and advanced knowledge and techniques that can meet the requirements of advanced medical equipment.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly covers the following themes. (1) lectures (a) osteological dissection and photographing techniques (b) dissection of respiratory organs and photographing techniques (c) dissection of digestive organs and photographing techniques (d) radiological facilities and their management (e) image diagnosis by CT and MRI and testing methods (f) blood vessel contrast test and image processing (DSA and CINE) methods (g) principles of PACS and FCR and their practice (h) roles and image quality evaluation of X-ray film and intensifying paper (i) protection against radioactive rays and safety management (j) ultrasonic diagnosis and testing methods (k) nuclear medicine testing method (2) clinical training and experimentation and practice (a) each part to be photographed and testing method (b) various photographing devices and testing method (c) image diagnosis using actual clinical cases (d) image quality evaluation and data processing (e) maintenance and management of automatic developing device (f) analog and digital image processing (3) specialized training (a) MRI training course (b) CT training course (c) AG and TV training course
- 3. QUALIFICATION OF APPLICANT** (1) certified radiological technologist (2) presently engaged in practices of radiography with more than five years of experience (3) be not more than 40 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Sapporo Medical University
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for four weeks.

DRUG ABUSE PREVENTION ACTIVITIES COOPERATION WITH JAPAN AND THE USA (ASIAN REGION)

Oct. 13, '97 - Nov. 16, '97, 8 participants

薬物乱用防止啓発活動(日米協力)(アジア諸国) J-97-03255

- 1. PURPOSE** The purpose of this course is to contribute to improvement of measures against drug abuse in the Asian region by introducing to the participants the recent development of drug abuse prevention activities in Japan.
- 2. MAIN FEATURES OF CURRICULUM** This course includes the following topics (1) lectures (a) outline of drug abuse prevention activities in Japan (b) collaboration between government administration and NGOs (c) training of personnel engaged in the activities (d) medical and sociological study on drug abuse (e) international cooperation (2) observation (a) facilities for drug dependents (b) prevention activities in local autonomies (3) comparative study (group discussion)
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) official of central or local government engaged in the said field or leader of NGOs (3) working experience of more than 5 years (4) between 30 and 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Ministry of Health and Welfare (3) Drug Abuse Prevention Center

CLINICAL NURSING ON CARDIAC SURGERY AND ICU

Aug. 11, '97 - Dec. 14, '97, 5 participants

臨床看護実務(心臓外科・ICU) J-97-03259

- 1. PURPOSE** The purpose of this course is to provide participants with comprehensive knowledge and technique on clinical nursing, particularly maternal and child and cardiac surgery nursing through lectures, practices and observations with a view on contribution to the improvement of clinical and practical nursing techniques.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly covers the following themes, (1) maternal child nursing (antepartem, intrapartem, postpartum) (2) cardiovascular surgical nursing (3) critical care nursing (4) emergency nursing (5) manipulation of medical equipment and instruments
- 3. QUALIFICATION OF APPLICANT** (1) certified staff nurse with more than five years nursing experience including clinical nursing (2) not more than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Sapporo Medical University
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for three weeks.

MATERNAL AND CHILD HEALTH NURSING (LAOS, VIETNAM, CAMBODIA)

Jan. 12, '98 - Mar. 8, '98, 9 participants

母子保健看護(インドシナ諸国) J-97-03306

- 1. PURPOSE** The purpose of this course is to provide the participants with basic knowledge and clinical technique focusing on "Re-Education" related to maternal and child health nursing and thereby to contribute to train prospective nurses or nurses in the hospitals with the acquired techniques in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in this course; (1) observation and practice of neonatal care and maternity ward in hospitals (2) observation and practice in district-based maternal and child healthcare (3) observation and practice in midwifery
- 3. QUALIFICATION OF APPLICANT** (1) qualified nurse or midwives with at least seven years' experience in the field of maternal and child healthcare (2) under 45 years of age (3) head nurse or occupy similar supervisory position in the obstetrics department of a hospital
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Department of Nursing, School of Allied Health Sciences, Faculty of Medicine, Osaka University (3) International Nursing Foundation of Japan

HOSPITAL MANAGEMENT (WITH SPECIAL REFERENCE TO FINANCIAL CAPACITY BUILDING)

Jan. 12, '98 - Mar. 21, '98, 5 participants

病院経営・財務管理 J-97-03264

- 1. PURPOSE** The purpose of the course is to provide participants with the concepts and practical know-how of hospital management. The knowledge obtained through this course will help them to strengthen the financial basis of the hospitals for which they work.
- 2. MAIN FEATURES OF CURRICULUM** The training course consists of four main parts, namely, (1) lectures on hospital management (2) field trips (3) presentation, (4) financial data management with computers. The following major subjects for hospital management are covered in the course: (1) outline of hospital management (2) outline of financial management (3) book keeping (4) slip system (5) purchase planning (6) cost accounting (7) financial report (8) accounting system (9) financial management with computer (10) planning of hospital operation management
- 3. QUALIFICATION OF APPLICANT** (1) university graduate with more than 5 years of professional experience in the field of financial management (2) presently engaged in the field of hospital financial management (3) between 30 years and 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) St. Mary's Hospital
- 5. REMARKS** A compulsory 25-hour Japanese Language course will be conducted prior to the technical training.

COMPREHENSIVE COMMUNITY CARE SYSTEM LINKING A REGIONAL CORE HOSPITAL

Jan. 5, '98 - Mar. 27, '98, 10 participants

地域中核病院を核とした包括的高齢者ケア J-97-03346

- 1. PURPOSE** The purpose of this course is to understand the Japanese experience of age's welfare and advanced comprehensive community care linking a regional core hospital and consider a suitable policy for each participating nation.
- 2. MAIN FEATURES OF CURRICULUM** It mainly covers: (1) the Japanese history, present situation and governmental policy about age's care system (2) the role of a regional core hospital (3) the linking between public health service, medical system and welfare (4) the example of comprehensive community care (5) preparation of an action plan.
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in public health service, medical system or welfare with more than five years occupational experience (2) university graduate or equivalent (3) more than 30 years of age and less than 50 years of age.
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Mitsugi General Hospital
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

SPECIAL TRAINING COURSE FOR WOMEN IN NUTRITION AND DIET IMPROVEMENT

Dec. 8, '97 - Feb. 27, '98, 8 participants

女性指導者のための食物栄養改善 J-97-03299

- 1. PURPOSE** This course is designed for people who work at medical/insurance/health and hygiene institutions, food-providing facilities or educational institutions in developing countries. The purpose of this course is to provide knowledge on dietary habits through lectures on food nutrition and practice of looking, and thereby to improve lifestyles and living environments, dietary habits.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course; (1) theories on food and culture, food and environment; (2) human physiology and biochemistry, food science; (3) dietetics; (4) food preparation and management of food-providing, food product hygiene and public hygiene, food processing, food storage
- 3. QUALIFICATION OF APPLICANT** (1) engaged in nutritional or hygiene instruction or other work related to improvement of dietary habits, have more than two years' experience, (2) graduate from high school or equivalent, (3) female under 45 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (IHCS), JICA (2) Northern Regions Center (NRC), (3) Otani Junior College
- 5. REMARKS** A Compulsory intensive Japanese course will be conducted prior to the Technical Training for three weeks (75 hours).

FOOD SANITATION ADMINISTRATION

Jan. 19, '98 - Mar. 15, '98, 10 participants

食品保健行政 J-97-03292

- 1. PURPOSE** This course is designed to allow the technical officials in charge of food sanitation administration to learn comprehensive knowledge on food sanitation and health promotion measures to be taken consistently in production, processing, distribution and consumption stages, thus to help the developing countries to improve their public health conditions.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, exercises, and observations aiming at effective technical guidance from the viewpoint of both theory and practice. (1) an introduction to food sanitation, (2) an introduction to food science, (3) an introduction to food industry, (4) dietetics, (5) food safety, and nutritional guidance, (5) health management
- 3. QUALIFICATION OF APPLICANT** (1) technical officials concerned with administration or projects related to food sanitation or health promotion in a national or local government organization, (2) university graduate or equivalent, (3) over twenty-five (25) and under forty-five (45) years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Health and Sanitation Bureau, City of Sapporo

SEMINAR ON NATIONAL HEALTH DEVELOPMENT

Jan. 19, '98 - Feb. 23, '98, 14 participants

保健衛生指導者セミナー J-97-03353

- 1. PURPOSE** This seminar is designed to introduce Japan's overall hygiene administration in the past and to contribute to the progress of health medical practice administration of the participating countries by focusing on current issues and through the exchange of opinions.
- 2. MAIN FEATURES OF CURRICULUM** Most part of the program is allocated to discussions on the following themes; (1) health policy and planning (2) social security system (3) health resources development and management (4) community health (5) infectious diseases control (6) environmental health and hygiene (7) maternal and child health (8) occupational health (9) school health
- 3. QUALIFICATION OF APPLICANT** (1) medically qualified senior administrator of the national government in charge of health administration, or the equivalents in public institutions (2) be in a position to participate in planning and deciding the national health administration policy (3) between 35 and 55 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Ministry of Health and Welfare (MHW) (3) International Medical Foundation of Japan (IMFJ)

INSTRUCTORS TRAINING OF ESOPHAGEAL VOCALIZATION (ASIAN COUNTRIES)

Jan. 6, '98 - Mar. 15, '98, 6 participants

喉嚨者発声指導者養成(アジア諸国) J-97-03219

- 1. PURPOSE** The purpose of this course is to have participants master the esophageal vocalization method and its instruction method, and consequently to contribute to the promotion of rehabilitation of laryngectomees in their respective countries and their reorientation into society.
- 2. MAIN FEATURES OF CURRICULUM** The curriculum consists of step-by-step training of the esophageal vocalization method and lectures upon instruction theory.
- 3. QUALIFICATION OF APPLICANT** (1) laryngectomee, whose larynx has been removed due to laryngeal cancer, etc., (2) currently or expected to be engaged in rehabilitation of laryngectomees, (3) person who finished at least secondary education, (4) under 55 years of age.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) The Guinrei-Kai Inc. Association

LEADERSHIP TRAINING OF ASIAN AND OCEANIAN DEAF PERSONS

Oct. 12, '97 - Nov. 30, '97, 8 participants

聾者のための指導者(アジア・大洋州諸国) J-97-03253

- 1. PURPOSE** The purpose of this course is to provide practical knowledge and information on social welfare in Japan, in order to contribute to deaf persons who are in severe social and economic situations in participating Asian and Oceanian countries, to be independent and participatory in the society.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, discussions and observation trips: (1) present situation of social welfare for the deaf in Japan (2) education of the deaf in Japan (3) employment of the deaf in Japan (4) sign language interpretation in Japan (5) present situation of the world federation of the deaf (WFD) and its regional secretarial office of Asia and the Pacific (WFD/SA/P) (6) Japanese deaf organizations and their activities
- 3. QUALIFICATION OF APPLICANT** (1) be deaf persons who use sign language to communicate (2) have past experience or the future prospect of leadership in the deaf community (3) be proficient in the sign language of their country either in American sign language or in international sign language, and have a reasonable reading knowledge of English (4) be between 25 and 40 years of age (5) be in sufficiently good health, both physically and mentally, to undergo the training; pregnancy is regarded as a disqualifying condition for participation in the course. It should be noted that the applicants must be independent of daily activities, and no attendant shall be assigned for the participant during the course
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) Japanese Federation of the Deaf

ASSISTIVE TECHNOLOGY FOR VISUALLY DISABLED PERSONS (ASIAN AND OCEANIAN COUNTRIES)

Jan. 20, '98 - Mar. 15, '98, 8 participants

視覚障害者用支援技術(アジア・大洋州諸国) J-97-03254

- 1. PURPOSE** The purpose of this course is to introduce the participants to recent development of the technology in Japan so that they may be able to define appropriate technology for their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** (1) systems for low vision persons, including TV, video etc., (2) raised graphics for teaching materials by use of three dimensional photo copying (3) translation of documents into Braille by use of image scanners (4) how to increase opportunity for education and employment taking advantage of information processing ability by use of voice synthesizer and Braille display
- 3. QUALIFICATION OF APPLICANT** (1) be a manager, instructor, supervisor, social worker, and/or researcher at governmental or nongovernmental facilities such as an education center, rehabilitation center, vocational rehabilitation center, sheltered workshop or other relevant facilities for visually disabled persons, or a leader of a union organized by and for visually disabled persons authorized by their government, with occupational experience of more than five years (2) not be a medical doctor or a nurse (3) be able to operate computer keyboard or typewriter (4) be not less than 28 years and no more than 40 years of age (5) be independent in daily activities and should have no other disability in case the participant has a visual disability (NOTE: No attendant shall be assigned for the participant during the course)
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japan Vocational Development Center for the Blind

SEMINAR ON TECHNOLOGY FOR THE SUPPORT OF INDEPENDENT LIVING OF PERSONS WITH DISABILITY

Feb. 15, '98 - Mar. 22, '98, 5 participants

障害者自立支援技術セミナー

J-97-0348

- 1. PURPOSE** The purpose of this seminar is (1) to introduce the participants to Japanese social welfare systems for disability persons and knowledge and technology for management of facility for the support of independent living of persons with disability (2) to assist them to contribute to the betterment of social welfare level by the achievement of the comparative study on the situation of technology for the support of independent living of persons with disability.
- 2. MAIN FEATURES OF CURRICULUM** (1) Lectures: Japanese social welfare and law system for disability persons, Present situation and problem for technology for the support of independent living of persons with disability, Present situation and problem for the employment of persons with disability (2) Sightseeing: The facility and workshop for the support of independent living of persons with disability, (3) Comparative study: The situation for the support of independent living of persons with disability on respective country including Japan
- 3. QUALIFICATION OF APPLICANT** (1) have more than two years of practical experience in management or leader of workshop concerned support of independent living of persons with disability (2) not more than 40 years (3) be independent in daily activities (NOTE: No attendant shall be assigned for the participants during the seminar.)
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA (2) Okinawa Colony (3) Okinawa Selp Centre

SEMINAR ON AGING SOCIETY AND WELFARE POLICY

Jan. 12, '98 - Mar. 11, '98, 6 participants

高齢化社会と福祉行政セミナー

J-97-03351

- PURPOSE** To provide participants with knowledge and experience necessary for their planning measures for promoting welfare policies and relative activities through exchanging information, research results and discussion on achievements of social welfare services for aging people in terms of facility building and technical innovation
- MAIN FEATURES OF CURRICULUM** Participants are expected to receive knowledge pertaining to: (1) analysis of social situations of aging people and future forecast (2) analysis of measures taken in advanced countries (3) guidelines of welfare policies, social welfare schemes and social benefits for aged people in Japan (4) analysis of life patterns of aged people and survey methods including population dynamics survey (5) correlative transactions between medical treatment and welfare services (treatment of diabetes, heart disease and other cardiovascular diseases, rehabilitation of muscle movement, etc.) (6) formulation of appropriate policies for welfare of aged people and their surrounding communities
- QUALIFICATION OF APPLICANT** (1) nominated by their governments in conformity with procedures designated by the Government of Japan, (2) specialists or government administrators with knowledge of and experience in health and welfare activities for aged people for more than five years, (3) in good command of English in speaking and writing (4) graduates of college/university, or, specialists with competent knowledge as university graduates, and (5) younger than 51 years old
- TRAINING INSTITUTIONS** (1) Kyushu International Centre, JICA (2) Public Health and Welfare Bureau, Kitakyushu City Office (3) Kitakyushu Council for Social Welfare

SEMINAR ON IMPROVEMENT OF THE STATUS OF WOMEN FOR GOVERNMENT OFFICERS

June 23, '97 - July 25, '97, 8 participants

女性の地位向上のための行政官セミナー

J-97-03323

- PURPOSE** The purpose of this seminar is to foster government officers capable of promoting comprehensive women's welfare activities based on the principle of "Women in Development", for the purpose of improving the status of women in participating countries.
- MAIN FEATURES OF CURRICULUM** Participants will be able to upgrade their knowledge and capabilities necessary for the management of women's affairs through lectures, discussions and observation. The main themes in the course are: (1) administration and administrative planning of policies for women's affairs (2) policies and administration for women workers (3) nursery system and social welfare policies (4) school education and women's education (5) women in development (6) public health care (7) women and the environment (8) living environment control (9) policies for the advancement of women in farms and the improvement of their living standards
- QUALIFICATION OF APPLICANT** (1) government officer currently in a post of planning policies for improving the status of women
- TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Kitakyushu Forum on Asian Women

SEMINAR ON PROMOTION OF GENDER EQUALITY

Oct. 30, '97 - Dec. 3, '97, 9 participants

男女共同参画推進セミナー

J-97-03319

- PURPOSE** The purpose of the seminar can be summarized as follows: (1) to study functions and institutional location of the national machinery for the advancement of women in Japan, (2) to exchange views and information on functions, activities and effectiveness of national machineries in participating countries, (3) to improve knowledge required for establishing or improving national machineries and promoting their activities, and (4) to acquire knowledge on Japanese ODA, especially Focusing in WID (Women in Development)
- MAIN FEATURES OF CURRICULUM** In this seminar, a special theme regarding women's issues is selected as a specific subject each year. The seminar covers the following: (1) national machinery for the advancement of women (a) role of the national machinery (b) status of women and major women's issues (c) networks between to national machinery and local governments, NGOs (2) promotion of "women in development" (WID) (a) concept of WID (b) Japan's Official Development Assistance (ODA) focusing on WID (3) Country Report. roles of national machineries and WID issues (identification of various problems and measures for the advancement of women) in each participating country (4) observation tour to local governments, women's centers (5) Participation in the International Forum
- QUALIFICATION OF APPLICANT** (1) officer in charge of national machinery for the advancement of women (2) university graduate or equivalent (3) have more than five years of occupational experience (4) between thirty (30) and forty (40) years of age
- TRAINING INSTITUTIONS** (1) Institute for International Cooperation (IFIC), JICA (2) Office for Gender Equality, Prime Minister's Office

SEMINAR ON INDUSTRIAL SAFETY AND HEALTH

Aug. 24, '97 - Oct. 5, '97, 18 participants

労働安全衛生セミナー

J-97-03206

- PURPOSE** The purposes of the seminar are: (1) to contribute to the upgrading of industrial safety and health standards in participating countries through the introduction of the present condition of industrial safety and health administration of the government, as well as that of the relevant activities of the private sector in Japan, (2) to promote mutual understanding and cooperative activities through the exchange of information and opinions on actual situations of industrial safety and health, and related issues in participating countries.
- MAIN FEATURES OF CURRICULUM** (1) outline of industrial safety & health (outline of regulatory authorities, law, public administration) (2) detail of industrial safety & health (industrial accident cause analysis, zero accidents promotion activities • KYT, statistics, education & dissemination)
- QUALIFICATION OF APPLICANT** (1) governmental official (division head, or section chief) engaged in planning and administration in industrial safety and health, or staff at governmental relevant organizations promoting and guiding the prevention of industrial accidents (2) university/college graduate or equivalent (3) person with experience of five years or more in the field of industrial safety and health or labor standards inspection (4) over 30 but under 45 years of age
- TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Labour Standards Bureau, Ministry of Labour (3) Japan Industrial Safety and Health Association (JISHA)

WORKING ENVIRONMENT IMPROVEMENT TECHNOLOGY

July 21, '97 - Sep. 12, '97, 10 participants

作業環境改善技術

J-97-03302

- 1. PURPOSE** The purpose of this course is to make participants understand the practical knowledge and comprehensive information on hygiene technology measures for control of emission of toxic factors such as gas, steam, and dust in workplace. And thereby to contribute to improvement of standard in the field of industrial hygiene technology and environmental improvement in neighboring regions.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course: (1) evaluation methods of working environment (understanding of toxicity of dust and organic chemical substances) (2) hygiene technology methods for environmental improvement (devices for dust proofing, sound proofing, sectional exhaust and etc.) (3) case studies on improvement (4) observation trip
- 3. QUALIFICATION OF APPLICANT** (1) technical officials who are engaged in the field of industrial health or staffs at safety health association who are engaged in improvement control of working environment (2) university graduates of science or engineering faculty or have an equivalent qualification (preferably qualified in chemistry or a related subject) (3) between 20 and 40 years of age with more than five year's experience
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Japan Industrial Safety and Health Association (3) Sumitomo Metal Industries, Ltd.
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week. (25 hours)

SEMINAR ON INTRODUCTION TO JAPAN DISASTER RELIEF ACTIVITIES AND DISASTER PREVENTION SYSTEM (LATIN AMERICA COUNTRIES)

Nov. 24, '97 - Dec. 14, '97, 7 participants

国際緊急援助隊及び防災体制紹介セミナー(中南米諸国) J-97-03275

- 1. PURPOSE** Japan has developed scientific technology and investigation skills with which we can cope with prospective disasters. It has also accumulated knowledge of disaster prevention and arranged the disaster prevention system. This seminar is designed to provide practical workers (manager level) in developing countries with knowledge and understanding about Japan Disaster Relief Activities, to contribute to smooth implementation of these activities and to improve disaster prevention system in respective countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, discussions and observation trips: (1) introduction of the system, organizational structure, procedure of application for disaster relief activities conducted by JICA (2) disaster/prevention measures implemented in Japan (3) regional disaster prevention system (4) emergency medicine in Japan
- 3. QUALIFICATION OF APPLICANT** Practical workers (manager level) in organizations in charge of application for emergency assistance.
- 4. TRAINING INSTITUTIONS** Okinawa International Centre (OIC), JICA

SEMINAR ON LABOUR-MANAGEMENT RELATIONS ADMINISTRATION

Jan. 26, '98 - Mar. 9, '98, 9 participants

労使関係行政セミナー

J-97-03336

- 1. PURPOSE** The purposes of the seminar are to introduce participants the system and an outline of the administration in the field of labour-management relations in Japan, to offer an opportunity for making a comparative study on labour-management relations in the participating countries, and thereby to contribute to the improvement of labour-management relations in these countries.
- 2. MAIN FEATURES OF CURRICULUM** This seminar is designed to be participative, providing an opportunity to gain knowledge through the exchange of information and ideas with other course members and other Japanese members. And it mainly covers: (1) labour-management relations in Japan (2) administration of labour-management relations in Japan (3) Japanese labour legislation on labour-management relations (4) productivity movement and technological innovation (5) comparative study on Labour-management Relations
- 3. QUALIFICATION OF APPLICANT** (1) middle ranking officer in charge of labour-management relations administration in the governmental organization and have more than three years of occupational experience in this field (2) university graduate or equivalent (3) not more than 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Labour Management Bureau, Ministry of Labour (3) Japan Institute of Labour

SEMINAR FOR SENIOR POLICE MANAGERS

(not conducted in JFY 1997)

国際警察トップリーダーズセミナー

1. **PURPOSE** The purpose of this seminar is to share experiences on the most important issue in participating countries and to have an opportunity to learn useful practices of Japanese police from administrative system to individual technique in criminal investigation.
2. **MAIN FEATURES OF CURRICULUM** This seminar consists mainly of presentation and discussion based on the knowledge and experiences of participants, and partly of several lectures on management. The seminar aims to: (1) have participants from varying countries share experiences on police-related issues, (2) have participants learn about the Japanese police administrative system as well as criminal investigation techniques.
3. **QUALIFICATION OF APPLICANT** A director of a department in central police organization or higher in position with police career for more than 15 years, who is expected to be a top leader in the future.
4. **TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) International Research and Training Institute for Criminal Investigation (IRTCI), National Police Academy
5. **REMARKS** Starting Japanese Fiscal Year 1996, this course will be conducted alternately with "Advanced Course for Senior Police Administrators" every other year. This year (Japanese Fiscal Year 1996), This course will be offered.

INDUSTRIAL SOLID WASTE RECYCLING TECHNOLOGY

(not conducted in JFY 1997)

産業廃棄物の再資源化

1. **PURPOSE** Along with economic development, especially in the industrial sector, the emphasis should be placed upon saving energy, preserving natural resources, and protecting the environment. Thereby, the course aims at introducing to the participants, effective countermeasures and new technology useful for industrial solid waste management.
2. **MAIN FEATURES OF CURRICULUM** The course covers the following subjects: (1) Lectures on the outline of Japan's industrial solid waste control and its law and regulations concerning environmental protection, (2) case studies on the technology for recycling (e.g. crushing, incineration, landfill, detoxification, segregation, dehydration, etc.) (3) visits to research laboratories and related plants for solid waste treatment.
3. **QUALIFICATION OF APPLICANT** (1) university graduate majoring in engineering or equivalent, (2) have more than 5 years of practical experience in industrial solid waste management, (3) be engaged in government office or public cooperation as technical officials, (4) be between 30 and 45 years of age
4. **TRAINING INSTITUTIONS** (1) Ministry of International Trade and Industry (MITI), (2) Tokyo International Centre (TIC), JICA, (3) Clean Japan Center
5. **REMARKS** This course is offered alternately with the course "Saving and Re-Using Industrial Water" every other year. This year (in Japanese Fiscal Year 1996) this course will be offered.

100-443887-100

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the work.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources and timeline needed to complete them.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves assessing the outcomes against the objectives and goals and identifying any lessons learned for future projects.

MEMO



