

## ADVANCED INDUSTRIAL TECHNOLOGY

Aug. 25, '97 - July 26, '98, 5 participants

産業技術研究

J-97-00366

- 1. PURPOSE** This course is to acquaint participants with advanced industrial technology in Japan and to help the participants to develop into researchers capable of carrying out the basic research needed to enhance the research potential of their own countries. It is not the purpose of the course to familiarize the participants with existing technologies that can be immediately applied in their countries, but rather to have them master the method used in conducting basic research.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of individual training in the laboratory. Each participant is to take one of the 18 subjects prepared by the following 8 institutes for their individual research. The institutes are: (1) Mechanical Engineering Laboratory, MEL (1 subject) (2) National Institute of Materials and Chemical Research, NIMC (7 subjects) (3) National Institute of Bioscience and Human Technology, NIBH (1 subject) (4) Geological Survey of Japan, GSI (1 subject) (5) National Institute for Resources and Environment, NIRE (4 subjects) (6) National Industrial Research Institute of Nagoya, NIRIN (1 subject) (7) Osaka National Research Institute, ONRI (1 subject) (8) Chugoku National Industrial Research Institute, CNIRI (2 subjects)
- 3. QUALIFICATION OF APPLICANT** (1) researcher with a bachelor's degree, capable of carrying out basic research in the field of industrial science and technology (2) presently engaged in research work in the field of industrial science and technology and have occupational experience of more than three years in the said field. Administrative officers are not qualified for this course (3) over 25 and under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Tsukuba International Centre (TBIC), JICA (2) Laboratories of Agency of Industrial Science and Technology (AIST), Ministry of International Trade and Industry
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

## ENERGY CONSERVATION

May 20, '97 - July 10, '97, 13 participants

省エネルギー

J-97-00315

- 1. PURPOSE** The purpose of the course is to provide the participants with information concerning the administrative and technical aspects of Japan's energy conservation, so that they will be able to later use this knowledge in future energy conservation efforts in their own respective countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, discussions, group case studies, practice and observation trips. (1) Japanese energy conservation policy and the present conservation situation in Japan (2) development of energy conservation and new technology in Japan (3) energy conservation situation in major Japanese industries (4) industrial energy conservation technology (5) methods for promoting energy conservation in industry (6) energy consumption measurement and data analysis (7) case study of the promotion of energy conservation in a model factory
- 3. QUALIFICATION OF APPLICANT** (1) university/college graduate or equivalent and presently employed in government, governmental institutions, industrial associations, or companies (2) presently engaged in work in the energy field or expected to be engaged in such work after returning to the country (3) be under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Energy Conservation Center, Japan (ECC)
- 5. REMARKS** Country Reports will be highly utilized both for the selection of participants and for the Comparative Studies.

## INDUSTRIAL POLLUTION CONTROL RESEARCH

Aug. 18, '97 - Dec. 14, '97, 6 participants

産業公害防止

J-97-00363

- 1. PURPOSE** The purpose of this course is to contribute to upgrading knowledge and techniques of scientists and researchers in the field of pollution control engineering, including computer technology, especially to understand knowledge and techniques in their own speciality through exercise and practical training on each subject in the individual research training.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common lectures for all participants (2 weeks) and individual research training in the laboratory. Common lectures are given to provide participants with fundamental knowledge of industrial pollution control. Participants will then choose a certain subject on pollution control technology out of 15 to 20 subjects.
- 3. QUALIFICATION OF APPLICANT** (1) scientist, a researcher or a university teacher in the field of pollution control technology with more than three years occupational experience. Administrative officers are not qualified for this course. (2) university graduate or equivalent (3) have the knowledge of computer programming with FORTRAN or BASIC languages in the course of simulation technology (4) no more than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tsukuba International Centre (TBIC), JICA (2) National Institute for Resources and Environment (NIRE), Agency of Industrial Science and Technology, Ministry of Trade and Industry.

## ENERGY MANAGEMENT

Jan. 19, '98 - June 6, '98, 6 participants

エネルギー管理

J-97-00418

- 1. PURPOSE** The purpose of this course is to upgrade the knowledge and skills of managers and engineers on energy management of administration, so as to conserve energy and mitigate environmental pollution through proceeding energy management effectively and add practical effect to production activities.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is laid on subjects that will help participants to practically and concretely solve the problems in the field of energy management of their own countries. The subjects covered in the course are: (1) introduction of energy management (2) computer literacy (3) basic thermo-dynamics and basic automatic control (4) heat balance and heat measurement (5) basic theory of electricity (6) methodology of energy conservation (7) energy conservation measures for industrial furnaces (8) energy system for environmental pollution control (9) maintenance management and data (10) in-plant training
- 3. QUALIFICATION OF APPLICANT** (1) have energy management experience or will be in charge of energy management in near future (2) university graduate in Japan or post graduate in Faculty of Technology (3) 40 years of age or less (4) HAVE A SUFFICIENT COMMAND OF WRITTEN AND SPOKEN JAPANESE
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Kitakyushu international Techno-cooperative Association
- 5. REMARKS** THIS COURSE WILL BE CONDUCTED IN JAPANESE.

## HYDRO-ELECTRIC POWER ENGINEERING II (FOR ELECTRICAL/MECHANICAL ENGINEERS)

May 13, '97 - June 28, '97, 9 participants

水力発電Ⅱ(電気・機械)

J-97-00055

- 1. PURPOSE** The purpose of the course is to provide the participants with the latest information and knowledge concerning managing and technical aspects of the Japan's hydro-electric power industry so that the participants would be able to play their greater role for further progress and advancement of hydro-electric power generation in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** The course is formulated to cover both aspects of "electrical/mechanical engineering" and "civil engineering" alternatively. This year (Japanese Fiscal 1997), electrical/mechanical engineering matters will be focused mainly. The following are the major subjects this year: (1) outline of Japan's electric power industry (2) Japan's government policy and regulation relating to Japan's electric power industry (3) method of planning, designing, construction and operation and maintenance technique of hydro-power stations from the view point of electrical/mechanical engineering
- 3. QUALIFICATION OF APPLICANT** (1) electrical/mechanical engineers who are presently employed by governmental or private hydro-electric power utilities (2) technical college graduate or equivalent and have more than five and less than ten years of practical experience in the field of hydro-electric power engineering
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Agency of Natural Resources and Energy, Ministry of International Trade and Industry (3) Japan Electric Power Information Center, Inc. (4) Electric Power Development Co., Ltd.

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

Oct. 7, '97 - Nov. 19, '97, 5 participants

石炭火力発電

J-97-00352

- 1. PURPOSE** The purpose of the course is to provide the participants with the information concerned with the administrative and technical aspects of the coal-fired thermal power engineering in Japan so that the participants, as instructors for operation and maintenance staff, would be able to apply the knowledge obtained in the course for the future development in the said field in their countries.
- 2. MAIN FEATURES OF CURRICULUM** Following subjects are referred in the course; (1) operation and maintenance technique of coal-fired thermal power stations in Japan (2) countermeasures for environmental protection (3) Japanese electric power industry
- 3. QUALIFICATION OF APPLICANT** (1) electrical and/or mechanical engineers presently employed at governmental institutions or private companies in the field of coal-fired thermal electric power generation and have more than five years of occupational experience in this field (2) technical college graduate or equivalent
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Agency of Natural Resources and Energy, Ministry of International Trade and Industry (3) Japan Electric Power Information Center, Inc. (4) Electric Power Development Co., Ltd.

## NUCLEAR POWER GENERATION

Jan. 6, '98 - Mar. 12, '98, 7 participants

原子力発電

J-97-00419

- 1. PURPOSE** The purpose of the course is to provide the participants with general introductory information on the administrative and technical aspects of Japan's nuclear power industry, which includes experience gained through planning, design, construction and operation of nuclear power plants, so that the participants will be able to implement the future development plan of nuclear power in their countries.
- 2. MAIN FEATURES OF CURRICULUM** Major subjects in this course are as follows: (1) lectures (a) outline of nuclear power generation in Japan safety regulation and administration for commercial nuclear power plants (b) major system of boiling water reactor and pressurized water reactor (c) construction of nuclear power plant (d) operation and maintenance (2) exercise (a) operation and plant behaviour related to plant start-up, shutdown and accidents, etc. by using a compact simulator (b) maintenance and inspection (non-destructive test)
- 3. QUALIFICATION OF APPLICANT** (1) nuclear, electrical and/or mechanical engineers presently employed at governmental institutions or private companies in the field of electric power generation 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) Tokyo International Centre (TIC), JICA (2) Agency of Natural Resources and Energy, Ministry of International Trade and Industry (3) Japan Electric Power Information Center, Inc. (JEPIC) (4) Japan Atomic Power Company (JAPC)

## ELECTRIC POWER MANAGEMENT II

Sep. 2, '97 - Oct. 20, '97, 11 participants

電気事業経営Ⅱ

J-97-00153

- 1. PURPOSE** The purpose of the course is to introduce participants to Japan's electric power industry focusing on management methods adopted in Japan for maintaining stable supply of electric power to cope with the increasing power demand.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures, discussions and observations which mainly cover the following topics: (1) outline of the electric power industry in Japan (2) power development plan (3) power system planning and operation (4) power distribution (5) electricity sales (6) financial management (7) personnel development and labor management
- 3. QUALIFICATION OF APPLICANT** (1) senior manager-class engineer in electric power utilities with at least ten years working experience (2) between 35 and 50 years of age
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) Agency of Natural Resources and Energy, Ministry of International Trade and Industry (3) Japan Electric Power Information Center, Inc. (4) Chubu Electric Power Co., Inc.

## ELECTRIC POWER DISTRIBUTION SYSTEM MANAGEMENT

Aug. 25, '97 - Nov. 1, '97, 5 participants

配電システム管理

J-97-00512

- 1. PURPOSE** The purpose of the course is to impart information on administrative and technical aspects of Japan's electric power distribution engineering system so that participants will be able to utilize the knowledge obtained from the course for the future development of this field in their countries. Note: This course deals with distribution systems from secondary sides of distribution substations to service wires and does not cover transmission lines or interior wiring. The voltage of distribution lines is approximately from 6 KV to 22 KV in Japan.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures and visits. The main themes are: (1) outline of electric power industry in Japan (2) management techniques (total quality control, education system, safety measures, etc.) (3) power demand and supply schemes (4) transmission of electrical energy (5) distribution of electrical energy (automatic distribution system, etc.) (6) visits (power stations, factories which produce power distribution apparatus, etc.)
- 3. QUALIFICATION OF APPLICANT** (1) electrical power engineer presently employed at governmental or private electric power utilities in the field of electric power distribution (2) between 30 and 40 years of age (3) technical university graduate or equivalent, and have more than 5 years of practical experience
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Agency of Natural Resources and Energy (3) Japan Electric Power Information Center, Inc. (JEPIC) (4) Kansai Electric Power Co., Inc. (KEPCO)
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week.

## THERMAL-ELECTRIC POWER ENGINEERING

May 12, '97 - July 3, '97, 8 participants

火力発電

J-97-00570

- 1. PURPOSE** The purpose of the course is to provide the participants with the latest information and knowledge concerning managing and technical aspects of Japan's thermal electric power industry so that the participants would be able to play greater roles for further progress and advancement of thermal electric power generation in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of Japanese situation and know-how. Following subjects are referred to in the course: (1) Japan's electric power industry (2) Japan's government-policy, planning, laws and regulations concerned with electric power industry (3) general and comprehensive information related to thermal electric power engineering in Japan, especially from the view points of planning, design, construction, operation and maintenance stages of thermal electric power stations and relevant points concerning electric power industry
- 3. QUALIFICATION OF APPLICANT** (1) electrical and/or mechanical engineers presently employed by governmental or private electric power utilities and have more than three years of operation and/or maintenance experience at thermal power stations (2) under 40 years of age (3) technical college graduate or equivalent
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Agency of Natural Resources and Energy, Ministry of International Trade and Industry (3) Japan Electric Power Information Center, Inc. (JEPIC) (4) Chugoku Electric Power Co., Inc. (CEPCO)

## COAL SCIENCE AND TECHNOLOGY

Sep. 22, '97 - Dec. 3, '97, 5 participants

石炭資源開発・利用

J-97-00312

- 1. PURPOSE** The purpose of the training course is to provide participants with advanced knowledge and experience of coal exploration, exploitation, utilization and environmental engineering.
- 2. MAIN FEATURES OF CURRICULUM** The course is divided into two sections: introductory and advanced. In the first section, participants are to study the following basic topics: (1) coal geology (2) mining (3) chemistry (4) mechanical engineering for coal utilization (5) environmental engineering. Five series of lectures on advanced topics relevant to the modern coal industry in the mentioned fields will be provided in the second section. Each participant can take one or more series of lectures. Related experimental study is also scheduled. Participants are advised to bring their own themes to study in the laboratories at Kyushu University under the supervision of instructors.
- 3. QUALIFICATION OF APPLICANT** (1) have more than three years' occupational experience in the field of coal science and technology (2) university graduate or equivalent (3) not less than 25 years and 45 years of age or less
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Kyushu University
- 5. REMARKS** A compulsory Japanese language course will be conducted at evening.

## COAL MINING AND PREPARATION

May 12, '97 - July 19, '97, 5 participants

採炭・選炭技術

J-97-00353

- 1. PURPOSE** The course aims to contribute to technical upgrading the coal mining and preparation technology as follows: (1) productivity and stable supply (2) mine safety (3) environmental protection and preservation (4) effective utilization of available resources
- 2. MAIN FEATURES OF CURRICULUM** The course will consist of the following major subjects: (1) lectures (a) coal mining history of Japan and recent technology (b) coal mining industry policy and governmental administration in Japan (c) general and practical technology of coal mining, roadway drive, coal preparation, central monitoring system, long wall mining, and environmental protection for coal mining (2) observation tours (a) under-ground collieries (b) open-cut mining site (c) manufacturers of related equipment (e.g. fan, pump, cooler, excavator, drum cutter)
- 3. QUALIFICATION OF APPLICANT** (1) university / college graduate with basic knowledge of coal mining or equivalent (2) mining engineer, preparation engineer or engineer in the field of coal mining industry who are presently employed by government institutions or private companies in the field of coal mining (3) have more than five years of practical experience (4) between 35 and 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Japan Technical Cooperation Center for Coal Resources Development (JATEC)
- 5. REMARKS** A compulsory 25-hour Japanese language course will be conducted prior to the technical training.

## NUCLEAR TECHNOLOGY

May 6, '97 - June 18, '97, 8 participants

原子力基礎技術

J-97-00303

- 1. PURPOSE** The purpose of the course is to provide scientists and engineers who are engaged in the application of radioisotopes and the operation of nuclear reactors with both fundamental and practical knowledge of nuclear technology for reconfirmation. As technology transfer, this course also aims to instruct them in essential techniques for safe handling of radioisotopes and safe operation and utilization of nuclear reactors.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly consists of common subjects for all participants, group exercises for two sub-groups, and individual practice in accordance with each participant's speciality. The major common subjects (lectures and laboratory exercises) are: (1) basic concepts and experiments (2) radiological protection (3) radiation monitoring (4) radiation and radioisotope application. Participants will be divided into two sub-groups to cover one of the following subjects of laboratory exercises. (A) radioisotope and radiation experiments (B) experiments and simulations of nuclear reactors
- 3. QUALIFICATION OF APPLICANT** (1) university/college graduate in science or technology, or equivalent (2) presently working in or will be working in an organization in the nuclear technology field (3) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japan Atomic Energy Research Institute (JAERI)

## SEMINAR ON NUCLEAR SAFETY AND REGULATION

Oct. 8, '97 - Nov. 9, '97, 7 participants

原子力安全規制行政セミナー

J-97-00354

- 1. PURPOSE** The purpose of the seminar is to comprehend the Japanese setup of nuclear safety and regulations in general as well as the work-site system for the safety control of radiation through lectures and observation trips. It is also expected to exchange opinions and information between countries on matters concerning their immediate problems.
- 2. MAIN FEATURES OF CURRICULUM** In this seminar, the emphasis is put on introduction of Japanese systems by means of lectures and observation trips to various related organizations/facilities. The main themes to be covered in the seminar are: (1) regulations and administration for safety assurance and control in Japan (2) safety control at facilities using radioisotope and reactor.
- 3. QUALIFICATION OF APPLICANT** senior officer (section head or equivalent) in charge of national nuclear safety and regulation and have at least five years' experiences in this field
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Nuclear Safety Bureau, Science and Technology Agency (3) Japan Atomic Industrial Forum

## GEOHERMAL ENERGY (ADVANCED)

Aug. 18, '97 - Dec. 14, '97, 10 participants

地熱エネルギーアドバンス

J-97-00442

- 1. PURPOSE** The purpose of the training course is to provide participants with effective training in the field of science and engineering to enable them to plan, execute and evaluate geothermal development projects for the maximum utilization of available energy resources, considering environmental assessment.
- 2. MAIN FEATURES OF CURRICULUM** Participants are divided into five groups: geologists, geophysicists, geochemists, drilling engineers and production engineers. All the participants will acquire advanced and comprehensive knowledge of the whole process of development of geothermal energy. Participants are expected to perform the following respective activities according to their specialized fields. (1) geologists: field reconnaissance, emphasized on geologic control of thermal manifestations (2) geophysicists: structural interpretation of the area, definition of the area extent and depth of the reservoir (3) geochemists: construction of a model of the geothermal system under exploration, comprehension of the systematic knowledge of geochemical prospecting methods in different thermal manifestations (4) drilling engineer: command of all the necessary techniques for rational drilling of geothermal wells such as cementing, stimulating and completing high temperature wells (5) production engineer: design and administration of production; distribution of production and reduction wells, control of production and all other related items
- 3. QUALIFICATION OF APPLICANT** (1) either be an ex-participant of JICA Group Training Course in "Geothermal Energy" at Kyushu University, or have been engaged in the field of geothermal energy development for at least three years (2) leading staff member in their organizations (3) university graduate or equivalent (4) over 25 and under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Geothermal Research Centre, Faculty of Engineering, Kyushu University (3) Hatchobaru Geothermal Power Station
- 5. REMARKS** A compulsory Japanese language course will be conducted at evening.

## RADIOLOGICAL PROTECTION FOR RADIATION SAFETY OFFICERS AT NUCLEAR FACILITIES

Jan. 26, '98 - Mar. 5, '98, 5 participants

放射線安全管理実務者

J-97-00482

- 1. PURPOSE** This course is designed for young engineers who are working at facilities or organizations concerned with nuclear energy. The purpose of the programme is to introduce them to beneficial knowledge for safe radiation control derived from recent science and technology, to present ideas and techniques of radiation protection through lectures, laboratory exercises and facility observations, and to contribute to improving the radiation protection system in each participant's home country. It is also anticipated that participants will master the techniques of using radiation measuring equipment.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lecture and exercises in laboratory and field regarding radiation protection. The main themes are: (i) lectures (1 week) (a) orientation of lectures and exercises (b) observation of facilities (Exhibition Center at Oarai Engineering Center) (c) general lectures (i) introduction to radiation protection (ii) basic knowledge of radiation (iii) radiation measuring equipment (iii-1) explanation of radiation measuring equipment (iii-2) statistical counting errors (iii-3) technical introduction to energy spectrum analysis of alpha, beta and gamma radiation (iii-4) measurement of gamma radiation (iv) biological effects of radiation on man and dose limits for radiation protection (v) environmental monitoring (vi) external radiation monitoring for occupational workers (vii) individual monitoring (viii) calibration and maintenance of radiation measuring instruments (2) laboratory exercises (1 week) (a) radiation measurement practice using ion chamber, GM counter, ZnS (Ag) counter (b) radiation measurement practice using GM counting system (3) field exercises (1 week) (a) maintenance and calibration of radiation monitoring instruments (b) individual monitoring for internal and external exposure (c) environmental radiation monitoring (4) observation tour (1 week) observation tours to relevant facilities for radiation protection as listed below are conducted at the final stage of the course. (a) experimental fast reactor "Joyo" at Oarai Engineering Center, PNC. (b) Japan Atomic Energy Research Institute (JAERI) in Tokai (c) Advanced Thermal Reactor "Fugen" at Tsuruga, PNC. (d) a fabrication plant of radiation measuring equipment
- 3. QUALIFICATION OF APPLICANT** (1) university graduate with basic knowledge of nuclear energy and radiation protection (2) radiation safety engineer who is working at facilities or organization concerned with nuclear energy except medical facilities for one to five years (3) over 23 and under to 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Tsukuba International Centre (TIC), JICA (2) Power Reactor and Nuclear Fuel Development Corporation (PNC) (3) Tokai Works of PNC (4) Oarai Engineering Center of PNC

**SEMINAR ON SMALL AND MEDIUM ENTERPRISES DEVELOPMENT POLICIES**

May 12, '97 - June 30, '97, 10 participants

中小企業政策セミナー

J-97-00108

- 1. PURPOSE** The purpose of the course is to enable participants to devise better measures for the promotion of small business in their countries, by introducing Japanese small business policy.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common subjects for all participants. The main themes are: (1) background of the Japanese economy (2) history and status quo of public policy and programs towards small business-finance, management, technology, subcontracting system, grouping system, internationalization.
- 3. QUALIFICATION OF APPLICANT** (1) university / college graduate, or equivalent (2) senior administrative officials engaged in the formulation of small business policy, with experience of at least 5 years (3) under 45 years of age (4) have a sufficient command of English, equal to TOEFL score of more than 550 points or an equivalent spoken and written standard
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Japan International Cooperation Center
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week. Writing and Reading proficiency in English is indispensable to make obligatory report on each topic.

**CONSULTANCY SERVICE FOR SMALL INDUSTRIES**

Sep. 1, '97 - Dec. 22, '97, 10 participants

中小企業診断

J-97-00466

- 1. PURPOSE** The purpose of this course is to provide personnel who extend their services to small-scale industries for promoting business efficiency, productivity and profitability with necessary knowledge and techniques to further develop and promote small-scale industries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures and observations dealing mainly with: (1) system and measures for small industries in Japan (2) basic understanding of business management (3) techniques of business diagnosis. At the end of the program, participants will be divided into two groups to conduct a one-week practical business diagnosis.
- 3. QUALIFICATION OF APPLICANT** (1) assigned to business diagnostic services, management consultancy, and extension services at an organization dealing with development and promotion of small scale industries (2) university graduate or equivalent in this field. In addition, the basic knowledge to prepare financial statements of a business corporation is prerequisite condition for participation in this training course (3) have at least three years experiences of such activities as mentioned above, having already undergone the basic training on business management (4) between 30 and 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) Aichi Industrial Research Association (3) Small and Medium Enterprise Management Consultants Association of Japan (4) Aichi Prefectural Small-and-Medium-Sized Enterprise Guidance Center (5) other related organizations
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

**PRODUCTION MANAGEMENT (THEORY AND PRACTICE ON WORK IMPROVEMENT)**

Oct. 13, '97 - Mar. 5, '98, 8 participants

生産性向上技術

J-97-00340

- 1. PURPOSE** The purpose of the training course is to provide participants with the opportunities to (1) understand technology and techniques accumulated in the Kitakyushu area through its experience and research activities, (2) acquire the knowledge on higher productivity through practical training and plant observations of Japanese factories, (3) introduce and utilize the acquired knowledge and techniques to solve their own problems of production.
- 2. MAIN FEATURES OF CURRICULUM** The subjects covered in the course are: (1) productivity and management techniques (2) typical organization of Japanese companies (3) factors affecting productivity (4) production management (5) value engineering (6) industrial engineering (7) work improvement (8) plant maintenance and total productive maintenance (9) single arrangement and "Poka-Yoke" (prevention of simple mistakes) (10) two-day improvement activity (11) quality control and statistical methods (12) QC circle activity (13) engineering economy (14) SE/OR (15) computer utilization in enterprise (16) CAD system (17) productivity improvement activity (18) basic production planning (19) employee education (20) QC New-7 Tools
- 3. QUALIFICATION OF APPLICANT** (1) have more than 5 years' occupational experience in the field of production management (2) university graduate or equivalent in engineering (3) 40 years of age or less
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Kitakyushu International Techno-cooperative Association
- 5. REMARKS** A compulsory 25-hour Japanese language course will be conducted prior to the technical training.

**PRODUCTIVITY MANAGEMENT**

Apr. 7, '97 - June 8, '97, 10 participants

実践の総合生産性向上

J-97-00355

- 1. PURPOSE** The course is designed to update the administrative and managerial skills of personnel who are currently engaged in the administration or management of production, or related job or position.
- 2. MAIN FEATURES OF CURRICULUM** The highlight of the program is the in-plant-practice for productivity improvement. Main topics by lecture: Production control and system, Improvement of total productivity, Implementation of low cost automation, Basic design of training for human resource development. Main practice: Productivity improvement practice in plant
- 3. QUALIFICATION OF APPLICANT** (1) official presently in charge of plant management in manufacturing sector in central or provincial governments or in local bodies, with 5 or more years of experience in this field (2) university graduate or equivalent (3) over 30 and under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Japan Productivity Center for Socio-Economic Development (JPCSED)

**SEMINAR ON SHIPBUILDING MANAGEMENT**

Sep. 16, '97 - Nov. 21, '97, 7 participants

造船経営管理セミナー

J-97-00249

- 1. PURPOSE** The purpose of the seminar is to provide the participants with the opportunity to get workable and basic know-how of shipbuilding management, such as the outline of shipbuilding, the control of business activities, and production control in the shipyards, and to exchange information on how to cope with the development of the international conventions, thus contributing to the development of shipbuilding industries.
- 2. MAIN FEATURES OF CURRICULUM** In this seminar, the emphasis is put on introduction of Japanese shipbuilding industries and basic know-how of shipbuilding management through lectures and observation. The following are the major subjects to be covered in the seminar. (1) outline of shipbuilding industries and management in Japan (2) shipyard management and control of business activities (3) production control in shipyard management (4) introduction and recent trends of IMO convention (5) international cooperation
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in the field of shipbuilding management in government, public or private organizations and have more than eight years of occupational experience in this field (2) university graduate or equivalent (3) between 35 and 50 years of age
- 4. TRAINING INSTITUTIONS** (1) Kanagawa International Fisheries Training Centre (KIFTC), JICA (2) Maritime Technology and Safety Bureau, Ministry of Transport (3) Overseas Shipbuilding Cooperation Centre (OSCC)

**FOREIGN TRADE DEVELOPMENT FOR LEADERS**

Aug. 25, '97 - Dec. 3, '97, 10 participants

貿易促進のための指導者

J-97-00208

- 1. PURPOSE** The purpose of the course is to provide leading officers presently in charge of foreign trade administration with practical knowledge of Japanese market through lectures and observations (field trips). It also provides the knowledge of Japanese historical experience in achieving economic development through trade promotion, as well as Japanese trade practice, thus assisting the participants to figure out effective measures for trade development to Japan.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of comprehensive knowledge on the following subjects, through lectures and field trips: (1) theoretical analysis of economic development and trade (2) historical analysis of Japanese experience of economic development (3) role of small and medium scale trading companies (4) multilateral analysis of Japanese market (5) business practice of trade transaction (a) Japanese distribution system (b) consumer behavior (6) trade promotion to Japanese market (7) case study on trade business (a) field trip
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent with occupational experience of more than three years (2) leading officer in administration of foreign trade (3) no less than 26, and not more than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hyogo International Centre (IHC), JICA (2) Kobe International Association (3) Kobe Chamber of Commerce and Industries (4) Kobe University (5) Kobe Customs House, Ministry of Finance
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for 2 weeks (40 hours).

**INTELLECTUAL PROPERTY RIGHTS IN TECHNOLOGY TRANSFERS**

May 6, '96 - Aug. 3, '96, 10 participants

国際知的財産権

J-97-00486

- 1. PURPOSE** This course is intended for specialists who are in a leading post to prepare and promote policies and measures for technology transfer and for the protection of intellectual properties. The participants will be trained in highly specialized matters such as legal practices regarding technology transfer and legislation regarding intellectual properties in Japan. The course aims to not only help foster specialists in technology trade but also to develop and promote legal systems for the protection of intellectual properties.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of lectures, tutorial studies and discussions including final Symposium. The main themes are: (1) outline of Japanese law (2) intellectual property right system in general (3) IPR in Japan: Industrial Property Rights, Copyright Act, Unfair Competition Prevention Act (4) legal practices concerning technology transfer (5) tutorial instruction (6) case study (7) symposium on intellectual property rights (a) Participants are requested to report on the current issue regarding the trend of intellectual property rights in their countries
- 3. QUALIFICATION OF APPLICANT** (1) senior administrators in charge of legislation of intellectual property rights or in charge of policy making, or in the position of making technical suggestion in their fields with practical experience of at least 3 years in this field. (2) under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Kyoto Comparative Law Center
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

**SEMINAR ON COMPREHENSIVE TOURISM II**

May 6, '97 - June 30, '97, 16 participants

総合観光セミナーⅡ

J-97-00070

- 1. PURPOSE** The purpose of this seminar is to furnish participants with the skills and know-how to promote tourism in a sustainable manner in each of their countries.
- 2. MAIN FEATURES OF CURRICULUM** In this seminar, following major subjects will be covered through lectures, discussion, presentation and observation. (1) Japanese tourism policy and related industries (2) concrete development methods for marketing and advertising for international tourism promotion (3) concrete development methods for marketing and advertising for domestic tourism promotion
- 3. QUALIFICATION OF APPLICANT** (1) university graduates or the equivalent (2) currently engaged in tourism promotion activities in the governmental or other public tourism organizations with the occupational experience of more than three years (3) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Transport Policy Bureau, Ministry of Transport (3) International Tourism Development Institute of Japan (ITDI)

### JAPANESE LANGUAGE FOR TECHNICAL COOPERATION

Oct. 2, '97 - Mar. 27, '98, 11 participants

技術協力のための日本語

J-97-00421

- 1. PURPOSE** The purpose of this course is to provide Japanese language training for those who are directly or indirectly engaged in technical cooperation projects of JICA, so that they will (1) facilitate better communication with JICA experts in Japanese, (2) promote smoother and more effective implementation of JICA cooperation projects, (3) understand Japanese people, society and culture.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures, practice and field trips. The main themes are: (1) writing practice of Hiragana, Katakana, and Kanji (Chinese Character) (2) pronunciation (3) basic sentence structure (4) conversation (5) reading and composition skills.
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged directly or indirectly in JICA's cooperation programmes (2) university graduate or equivalent (3) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA (2) Japan International Cooperation Center

### JAPANESE LANGUAGE FOR TECHNICAL COOPERATION (INTERMEDIATE AND ADVANCED LEVEL)

Oct. 2, '97 - Mar. 27, '98, 5 participants

技術協力のための日本語(中上級)

J-97-00422

- 1. PURPOSE** The purpose of this course is to provide Japanese language training for those who are directly or indirectly engaged in technical cooperation projects of JICA and also be able to speak basic Japanese, so that they will (1) facilitate better communication with JICA experts in Japanese, (2) promote smoother and more effective implementation of JICA cooperation projects (3) understand Japanese people, society and culture.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures, practice and field trips. The main themes are: (1) writing practice of Kanji (Chinese Character) (2) pronunciation (3) advanced sentence structure (4) conversation (5) reading and composition skills, for persons who have studied introductory Japanese.
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged directly or indirectly in JICA's cooperation programmes (2) have studied introductory Japanese (3) university graduate or equivalent (4) under 40 years of age (5) wait at least one year before reapplying for this course in the case of ex-intensive Japanese Language Course participants.
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA (2) Japan International Cooperation Center

### PRODUCTION OF AUDIO VISUAL COMMUNICATIONS MEDIA (A)

May 8, '97 - Aug. 29, '97, 9 participants

視聴覚メディア制作(A)

J-97-00437

- 1. PURPOSE** The purpose of this course are (1) to introduce basic theory and technique of audiovisual technology in human communication to the participants who are working in the area of production and utilization of the audiovisual media (2) to enhance the effective application of audiovisual media in human communication by the participants' organizations
- 2. MAIN FEATURES OF CURRICULUM** The emphasis of this course is put on the basic production skills of audiovisual media. Main subjects covered in the course are: (1) basic theories in audiovisual communications media (2) basic video (3) desk top publishing (4) slide (5) other presentation media (6) final production
- 3. QUALIFICATION OF APPLICANT** (1) person who plays a role in planning, production and utilization of audiovisual media with two to four years of experience. This course is not designed for those who are working in television stations. (2) university graduate or equivalent (3) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA (2) Japan International Cooperation Center

### PRODUCTION OF AUDIO VISUAL COMMUNICATIONS MEDIA (B)

Jan. 8, '98 - Apr. 27, '98, 9 participants

視聴覚メディア制作(B)

J-97-00491

- 1. PURPOSE** The purposes of this course are (1) to introduce basic theory and technique of audiovisual technology in human communication to the participants who are working in the area of production and utilization of the audiovisual media (2) to enhance the effective application of audiovisual media in human communication by the participants' organizations
- 2. MAIN FEATURES OF CURRICULUM** The emphasis of this course is put on the basic production skills of audiovisual media. Main subjects covered in the course are: (1) basic theories in audiovisual communications media (2) basic video (3) desk top publishing (4) slide (5) other presentation media (6) final production
- 3. QUALIFICATION OF APPLICANT** (1) person who plays a role in planning, production and utilization of audiovisual media with two to four years of experience. This course is not designed for those who are working in television stations. (2) university graduate or equivalent (3) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA (2) Japan International Cooperation Center

**VIDEO PRODUCTION (FOR INSTRUCTIONAL,  
TRAINING AND PROMOTIONAL ACTIVITIES)**

Aug. 21, '97 - Dec. 19, '97, 9 participants

ビデオ制作

J-97-00473

- 1. PURPOSE** The course is designed to help participants acquire fundamental knowledge and skills production and utilization of video media for educational training and its spread in participating countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on video program production. The main themes are: (1) basic theory of audiovisual communication (2) case study of utilization of video media (3) technique of video materials and production (4) exercises (5) observation (6) final production
- 3. QUALIFICATION OF APPLICANT** (1) has been engaged in planning, production and utilization of video media in public institutions. This course is not designed for those who are working in television stations. (2) has 2 to 5 years experience (3) under 35 years of age (4) university graduate or equivalent
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA (2) Japan International Cooperation Center

**PRACTICE OF SCIENCE EDUCATION**

Sep. 1, '97 - Nov. 3, '97, 6 participants

科学教育実技

J-97-00460

- 1. PURPOSE** The course is designed to enable the participants, who teach science in junior high and high schools or who belong to education research institutes, universities, and science education centers, to understand the essentials of the latest methods for teaching science. After completion of this course, participants will be able to use simple science equipment according to the basic principles of science education and formulate suitable test questions for science activities.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on report presentation, lectures which introduce Japanese experience and basic theories of science education, and workshop practice of science education. It mainly covers: (1) basic principles of science (2) practice concerning physics, chemistry, biology, earth science and educational technology
- 3. QUALIFICATION OF APPLICANT** (1) presently a secondary school science teacher or researcher on science education in an education research institute/university/college. Administrative officers are not qualified for this programme. (2) university graduate or equivalent (3) be not more than 35 years of age.
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Faculty of School Education, Hiroshima University (3) Faculty of Education, Hiroshima University (4) Education Center, Hiroshima Prefecture (5) Education Center, Hiroshima City
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

**SEMINAR ON TRAINING SPECIALIST FOR  
SUPERVISORS II (FOCUSED ON IN-HOUSE TRAINING)**

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

監督者訓練専門家セミナーII

J-97-00016

- 1. PURPOSE** The seminar is designed to contribute to the development of the ability of key personnel of in-house training engaged in planning and conducting the training for supervisors, foremen and workers of manufacturing industries in participating countries, by introducing to the participants, Japanese system of the training for supervisors and by providing them with necessary knowledge and information concerned.
- 2. MAIN FEATURES OF CURRICULUM** In this seminar, the necessary emphasis is placed upon the practical knowledge of the training for supervisors, Japanese in-plant training system, the training methods of the in-plant training corresponding to the technological innovations, and the ability to pick up the idea to develop the training for supervisors, suited to the training need of the participating countries through lectures and discussions on the outline of human resources development in Japan and the training for supervisors in Japan, and through the observation tours of the related facilities and organizations.
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) training specialist concerned with planning and conducting the in-house training designed for foremen and other first line supervisors, etc. (3) more than one year's working experience in the said position with the expectation to work in the same position in the future (4) between 30 and 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Japan Vocational Ability Development Association

**SEMINAR ON TRAINING MANAGEMENT IN  
VOCATIONAL TRAINING INSTITUTIONS**

June 16, '97 - Aug. 10, '97, 10 participants

職業訓練管理セミナー

J-97-00345

- 1. PURPOSE** The purpose of this seminar is to introduce to the participants the current situation of the human resources development administration, and the management of vocational training institutions in Japan, and to provide them with an opportunity for making a comparative study on management and programming of vocational training between Japan and their countries as well as among the participating countries, and thereby to contribute to the improvement of vocational training in each country.
- 2. MAIN FEATURES OF CURRICULUM** To achieve the above purpose, the following major subjects have been carefully selected, so that the participants will acquire the understanding necessary to apply and/or to make recommendations for the improvement of vocational training institutions in their countries. (1) the economic, social and historical background and the present situation as well as the human resources development administration in Japan (2) the management of vocational training institutions and facilities, such as human management, operation management and physical management (3) programming of vocational training, such as training needs and development of training courses (4) the management of vocational training institutions and facilities in the participating countries
- 3. QUALIFICATION OF APPLICANT** (1) headship being presently engaged in management of a vocational training institution, with the expectation to continue to work in the same field (2) between 30 and 50 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Human Resources Development Bureau, Ministry of Labour



**SEMINAR ON HUMAN RESOURCES DEVELOPMENT  
ADMINISTRATION (VOCATIONAL TRAINING ADMINISTRATION)**  
Nov. 17, '97 - Dec. 21, '97, 15 participants

職業能力開発行政セミナー

J-97-00346

1. **PURPOSE** The purpose of the seminar is to introduce to the participants the current situation of human resources development administration in Japan specifically placing emphasis on vocational training, and to provide them an opportunity of making a comparative study on the said field between Japan and the participating countries as well as among their countries, and thereby to contribute to the improvement of the human resources development administration in the respective countries.
2. **MAIN FEATURES OF CURRICULUM** To achieve the above purpose, the following major subjects have been carefully selected, so that the participants will acquire the understanding necessary to apply and/or to make recommendations for the improvement of human resources administration in their countries. (1) the economic, social and historical background and the present situation concerning the human resources development administration in Japan (2) establishment of training policy and strategy for human resources development administration in Japan (3) general methods of management and operation of various types of vocational training institutions in Japan (4) present situation of human resources development in enterprises (5) human resources development administration among the participating countries
3. **QUALIFICATION OF APPLICANT** (1) at least a director of the department in the central government who is presently engaged in the human resources development administration (2) between 35 and 50 years of age
4. **TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Human Resources Development Bureau, Ministry of Labour

**ADVANCED TECHNOLOGY OF AUTOMATIC CONTROLS  
FOR ROBOTS (FOR VOCATIONAL TRAINING INSTRUCTORS)**  
Aug. 18, '97 - Feb. 15, '98, 5 participants

ハイテクロボット制御(職業訓練指導員)

J-97-00313

- A: DYNAMIC BEHAVIOR ON LARGE SCALED FLOATING OFFSHORE STRUCTURE SUBJECTED TO SEA WAVES AND SEAQUAKES**  
**B: PRODUCT DESIGN**
1. **PURPOSE** The purpose of this course is to provide senior instructors of vocational training institutes with an opportunity to acquire up-to-date technology and knowledge in the field of controls for robot.
  2. **MAIN FEATURES OF CURRICULUM** This course covers the following topics. (1) sensor devices (2) measuring and control (3) small motors and their control technology (4) speed control induction motor (5) sequence control technique (6) computer application technology (7) power electronics (8) Special Lecture
  3. **QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (except doctor degree holders) (2) engaged in vocational training/education (3) more than 3 year experience in the said field, and not more than 40 years of age
  4. **TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Polytechnic University, Employment Promotion Corporation
  5. **REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for four weeks (100 hours).

**VOCATIONAL TRAINING INSTRUCTORS  
(INFORMATION AND COMPUTER ENGINEERING)**  
Apr. 7, '97 - Dec. 21, '97, 9 participants

職業訓練指導員(情報工学)

J-97-00504

1. **PURPOSE** The course aims to provide participants engaged in vocational/technical profession with requisite technology and information available in Japan, in order to share the outcomes of the training to enhance technical standard and productivity in their respective countries.
2. **MAIN FEATURES OF CURRICULUM** This course, comprised of lectures and practices, mainly covers: (1) computer software (2) computer hardware (3) logical circuit (4) digital signal processing (5) data communication
3. **QUALIFICATION OF APPLICANT** (1) presently engaged in vocational training as an instructor of information and computer engineering at a vocational training center, college, university, or research institute (2) university graduates with at least three years of occupational experience in this field (3) not less than 25 and not more than 35 years of age
4. **TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Polytechnic University, Employment Promotion Corporation
5. **REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for five weeks (125 hours).

**VOCATIONAL TRAINING INSTRUCTORS  
(ARCHITECTURAL ENGINEERING)**  
Apr. 7, '97 - Dec. 21, '97, 5 participants

職業訓練指導員(建築工学)

J-97-00377

1. **PURPOSE** The course aims to provide participants engaged in vocational/technical profession with requisite technology and information available in Japan, so that they could share the outcomes of the training to enhance technical standard and productivity in their respective countries.
2. **MAIN FEATURES OF CURRICULUM** This course, comprised of lectures and practices, mainly covers: (1) production system of construction (2) spatial structures (3) building equipment and indoor environmental engineering (4) seismic engineering (5) building construction
3. **QUALIFICATION OF APPLICANT** (1) presently engaged in vocational training as an instructor of architectural engineering or related field at a vocational training center, college, university, or research institute (2) university graduate with at least three years of occupational experience in this field (3) not less than 25 and not more than 35 years of age
4. **TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Polytechnic University, Employment Promotion Corporation
5. **REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for five weeks (125 hours).

# **VOCATIONAL TRAINING INSTRUCTORS (ELECTRONIC ENGINEERING) II**

Apr. 7, '97 - Dec. 21, '97, 10 participants

職業訓練指導員(電子工学) II

J-97-00378

- 1. PURPOSE** The course aims to provide participants engaged in vocational/technical profession with requisite technology and information available in Japan, so that they could share the outcomes of the training to enhance technical standard and productivity in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** This course, comprised of lectures and practices, mainly covers: (1) electronic devices (2) control engineering (3) optical electronic (4) electro magnetic wave engineering (5) Electronic Circuits Engineering.
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in vocational training as an instructor of electronic engineering or related field at a vocational training center, college, university, or research institute (2) university graduates (except doctorate degree holder) with at least three years of occupational experience in this field (3) not less than 25 and not more than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Polytechnic University, Employment Promotion Corporation
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for five weeks (125 hours).

# **VOCATIONAL TRAINING INSTRUCTORS (-AUTOMOTIVE MECHANICAL ENGINEERING-)**

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

職業訓練指導員(産業機械工学)

J-97-00434

- 1. PURPOSE** The course aims to provide participants engaged in vocational/technical profession with requisite technology and information available in Japan, so that they could share the outcomes of the training to enhance technical standard and productivity in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** This course, comprised of lectures and practices, mainly covers: (1) Materials for Automobile (2) Mechanism of Automobile (3) Automotive Engineering (4) Internal Combustion Engines (5) Air-Conditioning of Automobile.
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in vocational training as an instructor of mechanical engineering for industry at a vocational training center, college, university (2) university or junior college graduates with at least three years of occupational experience in this field (3) not less than 25 and not more than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Polytechnic University, Employment Promotion Corporation
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for five weeks (125 hours).

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

Apr. 7, '97 - Dec. 21, '97, 8 participants

職業訓練指導員(生産機械工学)

J-97-00435

- 1. PURPOSE** The course aims to provide participants engaged in vocational/technical profession with requisite technology and information available in Japan, so that they could share the outcomes of the training to enhance technical standard and productivity in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** This course, comprised of lectures and practices, mainly covers: (1) machining technology (2) precision measurement (3) deformation on processing (4) numerical control equipment (5) material testing
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in vocational training as an instructor of mechanical engineering for production or related field at a vocational training center, college, university, or research institute (2) university graduates (except doctor degree holders) with at least three years of occupational experience in this field (3) not less than 25 and not more than 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Polytechnic University, Employment Promotion Corporation
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for five weeks (125 hours).

# **VOCATIONAL TRAINING INSTRUCTORS (WOODWORK ENGINEERING AND DESIGN)**

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

職業訓練指導員(造形工学)

J-97-00436

- 1. PURPOSE** The course aims to provide participants engaged in vocational/technical profession with requisite technology and information available in Japan, so that they could share the outcomes of the training to enhance technical standard and productivity in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** This course, comprised of lectures and practices, mainly covers: (1) woodworking system in production (2) furniture construction (3) mechanical processing (4) NC router machining (5) testing properties of wood and wood bases materials
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in vocational training as an instructor of woodwork engineering at a vocational training center, college, university, or research institute (2) not less than 25 and not more than 40 years of age (3) not be a former participants of the course.
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Polytechnic University, Employment Promotion Corporation
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for five weeks (125 hours).

## MECHATRONICS

Apr. 14, '97 - Jan. 22, '98, 8 participants

メカトロニクス訓練

J-97-00571

- 1. PURPOSE** The purpose of this training course is to offer skill improvement training to personnel who are currently involved in machining technology and who wish to acquire comprehensive knowledge, skills and techniques related to mechatronics technology. The course further aims to impart to them an understanding of the present situation of mechatronics in Japanese industry through on-site observation and to make them aware of the importance of relevant technologies and standardization of quality and processing, which are indispensable to the introduction of mechatronics in their countries. With this knowledge it is hoped participants will be in a position to contribute to the human resources development of their home countries. Participants should be intending to resume their activity in this field after completion of the course.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on workshop practice and introduction of Japanese experience. The main themes are: (1) production engineering (2) machining technology (3) control technology (4) XY table production and assembly
- 3. QUALIFICATION OF APPLICANT** (1) instructor at technical high school or vocational training school in the field of mechanical or machining technology (a) only applicable to the persons who have completed all the basic mechanical subjects, the person of the electrical fields will be excluded from its application (2) university graduate or equivalent (3) between 27 and 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Osaka Prefectural Higashi-Yodogawa Advanced Vocational Training School (HAVOT)
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks.

## ENZYME TECHNOLOGY

Apr. 7, '97 - Aug. 10, '97, 5 participants

酵素工学

J-97-00248

- 1. PURPOSE** The purpose of the course is to introduce to participants knowledge and techniques required for microbial enzyme technology such as cultivation of microorganisms, production and purification of enzymes and properties and action of enzymes, through lectures, experiments and observations. (Note that the course is focused on introducing basic knowledge and techniques of microbial enzyme technology, and is not intended to provide participants with knowledge and techniques of food processing resulting from application.)
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common subjects for all participants and individual research work at laboratory. Each participant is to take one of the following subjects for his/her individual research: (1) microbial conversion of aromatic compounds (2) study on levan-degrading enzyme (3) synthesis of glycolipids by enzymic action (4) study on digestion of raw starch with amylase (5) study on the applied uses of micro-algae
- 3. QUALIFICATION OF APPLICANT** (1) master's degree; or bachelor's degree with as much academic knowledge and technical experience as the former, and major in biochemistry, fermentation technology or applied microbiology (2) between 25 and 35 years of age (3) more than three years experience in fermentation technology or enzyme technology
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Osaka Municipal Technical Research Institute (OMTRI)
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks.

## BIOTECHNOLOGY

Mar. 23, '98 - July 31, '98, 8 participants

バイオテクノロジー

J-97-00389

- 1. PURPOSE** The purpose of the course is to provide graduates who majored in biotechnology and bioscience, mainly in the fields utilizing higher plants and microorganisms, in a university or the equivalents with fundamental and practical knowledge required for the effective application of biotechnology.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of fundamental and practical knowledge on the following subjects through lecture, practice and study tours. (1) lecture: general principles of biotechnology utilizing microorganisms, biotechnology utilizing plants, etc. (2) laboratory works: plant and cell engineering application of plant tissue culture techniques etc. (3) observation tours: observation of institutes concerned with crop genes application of microbial activities etc.
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in research work and have more than four years of occupational experience in this field (2) university graduate or equivalent (3) not less than 26 and not more than 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Hyogo International Centre (HIC), JICA (2) Faculty of Agriculture, Kobe University
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for several days.

## TUBERCULOSIS CONTROL II

June 16, '97 - Oct. 19, '97, 18 participants

結核対策 II

J-97-00030

- 1. PURPOSE** The purpose of the course is to give training to key organizers of the national tuberculosis programme in the modern methods of tuberculosis control, in order to prepare them for developing or promoting the programme in a rational, realistic and efficient manner under their own country's socio-economic conditions.
- 2. MAIN FEATURES OF CURRICULUM** Through the intensive lectures with discussions, practical training, seminars, workshops, field observations, etc. in this training course, it is so designed that the participants will acquire: (1) the abilities in formulating, implementing and evaluating a national tuberculosis programme based on the cost-benefit relationship (2) epidemiological view of tuberculosis control (3) understanding of the way to protect healthy people from tuberculosis (4) understanding of how to cut the chain of transmission of tuberculosis
- 3. QUALIFICATION OF APPLICANT** (1) a medical officer who is engaged in the national tuberculosis control programme, preferably having, or going to have, a leading role in the programme, excluding those who are engaged in pure clinical work (2) not more than 45 and not less than 30 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 will be required to take examinations for the qualification of Diploma of Tuberculosis Control and Epidemiology from the Research Institute of Tuberculosis when the training is completed. The participants should bring updated information on the health status and tuberculosis activities, manual of national tuberculosis control programme, recording form of tuberculosis patients, etc. of their countries.

## CLINICAL ONCOLOGY II

Oct. 14, '97 - Dec. 22, '97, 10 participants

がん対策 II

J-97-00068

- 1. PURPOSE** The purpose of this training course is to provide the participants with an opportunity to acquire the latest knowledge and technique of cancer diagnosis and treatment established in Japan.
- 2. MAIN FEATURES OF CURRICULUM** This training course mainly consists of two parts, i.e., lecture session which all the participants are expected to attend, and individual programme to be conducted in accordance with the participants' respective specialties. Through the training programme, the participants are expected to; (1) create a better understanding on various aspects of cancer diagnosis and treatment, and (2) acquire the latest knowledge and technique in their respective field
- 3. QUALIFICATION OF APPLICANT** (1) licensed physician authorized by their governments and specialized in cancer diagnosis and its treatment (2) strictly less than 35 years of age and have clinical experience of more than three years in cancer diagnosis and its treatment
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) National Cancer Center (NCC)

## EARLY GASTRIC CANCER DETECTION AND RELATED DIGESTIVE TUMORS II

Jan. 11, '93 - Mar. 12, '98, 16 participants

早期胃癌診断 II

J-97-00144

- 1. PURPOSE** The purpose of this course is to introduce participants to the various characteristics of cancers and to the fundamental and the latest knowledge and techniques concerning the detection of early gastric cancer, ulcer, polyp and related digestive tumors. It also aims to enable participants to become competent enough to assume responsible duties after returning to their home countries, to contribute to the early detection of gastric cancer and related digestive tumors and finally, to improve health standards in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** This course is focused on the introduction of fundamental and latest knowledge in Japan by means of lectures, hospital training on each participant's specialty (either Radiology, Endoscopy, or Histopathology), and case studies (practice reading). The major subjects to be treated in the lectures are; (1) general radiology (general information, X-ray studies, diagnosis of elevated/depressed lesions, radio diagnosis of minute lesions, screening and epidemiological studies, etc.) (2) endoscopy (general information, gastric biopsy, diagnosis and treatment of esophageal diseases, magnification endoscopy, duodenoscopy, diagnosis of cancer of colon, etc.) (3) histopathology (method of histopathological examination, histogenesis of gastric cancer) (4) chemotherapy (5) echography (6) diagnosis of cancer of liver, pancreas and gallbladder
- 3. QUALIFICATION OF APPLICANT** (1) graduate of a medical college or the medical department of a university, who majored in gastroenterology with more than seven years of practical experience in diagnosing cancer, gastritis, ulcer and polyp of the stomach and its adjacent region in the field of radiology, endoscopy, biopsy or pathology (2) able to give a report on respective fields which may include the applicant's prior scientific presentations, studies abroad, or other pertinent information (3) able to assume such responsible duties as chief instructor, professor or specialist in the aforementioned fields after returning to their respective countries (4) under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Foundation for Detection of Early Gastric Carcinoma

## SEMINAR ON BLOOD TRANSMITTED DISEASES (SPECIAL REFERENCE TO AIDS, ATL, AND HEPATITIS)

July 7, '97 - Aug. 18, '97, 15 participants

血液由来感染症

J-97-00358

- 1. PURPOSE** The purpose of the course is to provide middle level managers of health services with information on: (1) natural history of infectious diseases which are transmitted from person to person through blood namely, acquired immunodeficiency syndrome (AIDS), adult T-cell leukemia (ATL) and hepatitis B (HB) & C (HC) (2) how to establish national or regional policy on control of the above mentioned diseases and how to supervise or guide the implementation of control measures in respective countries
- 2. MAIN FEATURES OF CURRICULUM** With regard to diseases such as AIDS, ATL, and HB & HC, the course is conducted in the form of lectures, discussions, films, practical work and field trips. Participants are expected to: (1) study natural histories of the diseases with particular emphasis on epidemiology and surveillance methodology. (2) understand diagnosis, pathology, clinical features and treatment of the diseases. (3) develop their capabilities for performing the various practical procedures related to clinical diagnosis of the diseases. (4) review, discuss and contemplate the possible control programmes of the diseases in their respective countries.
- 3. QUALIFICATION OF APPLICANT** (1) medical doctor and, at the same time, manager of middle level or higher in the office or in the field (2) engaged in the work which is related to this training course (3) 40 years of age or less
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Agency for Cooperation in International Health (3) Kumamoto National Hospital
- 5. REMARKS** A compulsory 25-hour Japanese language course will be conducted prior to the technical training.

## INFECTIOUS DISEASE MEDICINE

Jan. 6, '98 - Mar. 22, '98, 5 participants

感染症臨床学研修

J-97-00423

- 1. PURPOSE** The purpose of this course is to share the Japan's experience in the control and management of infectious diseases with participants from developing countries. The course will also give the participants new knowledge on recent problems in the field, such as nosocomial/opportunistic infections and emerging infectious diseases.
- 2. MAIN FEATURES OF CURRICULUM** This course will be conducted in the form of individual training, lectures and visit to other facilities. The participants will have an individual programme at an appropriate division in accordance with their respective specialties for a certain period. Through the training programme, the participants are expected to: (1) understand basic strategies against infectious diseases (2) advance knowledge on infectious diseases (3) be able to diagnose infectious disease correctly (4) be able to examine patients with infectious diseases adequately (5) be able to treat patients with infectious diseases appropriately (6) be able to perform disinfection and aseptic techniques (7) be able to apply the knowledge to medical practice after returning to their respective countries
- 3. QUALIFICATION OF APPLICANT** (1) licensed physician authorized by his/her government, and have a clinical experience of more than five years (2) between 29 and 34 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) International Medical Center of Japan

## MANAGEMENT AND TECHNOLOGY IN MICROBIOLOGICAL LABORATORY DIAGNOSIS

Oct. 27, '97 - Apr. 13, '98, 9 participants

感染症診断の技術と管理

J-97-00424

- 1. PURPOSE** The purpose of this training course is to provide participants with knowledge and techniques required for the management of laboratory activities, and production, evaluation and quality control of agents and media in their laboratories.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on practical exercise in the laboratory. The subjects covered in the course are: (1) basic lectures (a) host-microbe interaction (b) quality control of biological products, especially of vaccines (c) pathogenic vibrios (d) serological diagnosis of toxic diseases (e) antimicrobial susceptibility testings-principle and practice (f) bacterial toxin (g) quality control of blood products (h) drug distribution system and quality control (i) Mechanism of drug resistance in bacteria (j) recent topics of viral infections (k) recent topics of bacterial infections (l) laboratory biosafety control (m) bacterial toxin and intestinal colonization (n) control of infectious diseases in developing countries (o) bacteriology (2) special lectures (a) surveillance of nosocomial infections (b) epidemiology and control of nosocomial pneumonia (c) nosocomial infection and laboratory (d) nosocomial infection and viral hepatitis (e) antimicrobial agents and MRSA
- 3. QUALIFICATION OF APPLICANT** (1) medical doctor or specialist in pharmacology, agriculture, or biology, and at the same time, managers of middle level or above, in fields related to the course (2) 45 years of age or less
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Agency for Cooperation in International Health (3) Kumamoto Prefectural Institute of Public Health (4) Kumamoto Municipal Institute of Public Health (5) Chemo-Cero-Therapeutic Research Institute
- 5. REMARKS** A compulsory 95 hour Japanese language course will be conducted prior to the technical training

## SEMINAR ON POLIO ERADICATION, ITS THEORY AND PRACTICE

Aug. 25, '97 - Sep. 29, '97, 7 participants

小児麻痺根絶計画の理論と実際

J-97-00425

- 1. PURPOSE** The purpose of this course is to provide middle level managers of the health services with information on: (1) analysis of the history of past polio eradication programmes and elements needed for the success of the programmes, (2) setting-up of practical eradication methodology and management of field programme based on aforementioned (1), (surveillance, diagnosis, vaccination, etc.), and (3) review of global eradication programmes, especially the programmes of WHO Western Pacific Region.
- 2. MAIN FEATURES OF CURRICULUM** In this seminar, the emphasis is put on report presentation of polio eradication plan in each participants' country through discussions, lectures and field survey practice. The subjects covered in the seminar are: (1) basic lectures (a) virology and epidemiology poliomyelitis (b) pathology poliomyelitis (c) clinical features of poliomyelitis (d) production of oral polio vaccine (e) maintenance of cold chain (f) laboratory diagnosis management specimens (g) laboratory diagnosis management of diagnostic technique and feedback to field (h) relationship between EPI and polio eradication efforts (2) special lectures (a) Introduction to poliomyelitis eradication strategy (b) international health and medical cooperation (multi/bilateral/NGO) (3) programme management (4) case study (5) field action and field trips (6) practice laboratory diagnosis (7) group discussion and study (8) presentation and discussions of Country Report
- 3. QUALIFICATION OF APPLICANT** (1) medical doctor of (2) person of equivalent position manager responsible for the national EPI and/or the polio eradication programme (3) 50 years of age or less
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Agency for Cooperation in International Health
- 5. REMARKS** A compulsory 25-hour Japanese language course will be conducted prior to the technical training.

## ADVANCED MICROBIAL DISEASES STUDY

Sep. 2, '96 - July 26, '97, 6 participants

上級微生物病研究

J-97-00393

- 1. PURPOSE** The purpose of the course is to improve the competence of the participants who work at the frontline in microbial research in developing countries, and thus contributing to the development of human resources in this field in their countries.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of individual research work at laboratory. Each participant is to belong to one of the following departments for his/her individual research. (1) Department of Bacterial Infections (2) Department of Molecular Protozoology (3) Department of Bacterial Toxinology (4) Department of Viral Infections (5) Department of Virology (6) Department of Neurovirology (7) Department of Molecular Embryology (8) Department of Tumor Virology (9) Department of Molecular Microbiology (10) Department of Medical Genetics (11) Department of Immunoregulation (12) Department of Molecular Immunology (13) Department of Science for Laboratory Animal Experimentation
- 3. QUALIFICATION OF APPLICANT** (1) be researchers on microbial diseases in national research institutes or universities with a degree of M. D. or a master's (or higher) degree or equivalent knowledge, or be ex-participants of the JICA Group Training Course in "Microbial Diseases Study". (2) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Research Institute for Microbial Diseases, Osaka University
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two week.

## NEONATAL AND INFANTILE SCREENING

Jan. 5, '98 - Mar. 23, '98, 8 participants

新生児・乳児マスキリーニング

J-97-00492

- 1. PURPOSE** The course is designed to upgrade knowledge and technique of mass-screening in the field of neonatal and infantile screening for inherited disorders and related diseases.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on the technical exercises. It mainly deals with: (1) inborn errors of metabolism (2) congenital hypothyroidism (3) congenital adrenal hyperplasia (4) neuroblastoma
- 3. QUALIFICATION OF APPLICANT** (1) medical doctor or have a doctorate in medical science and also be planning to organize neonatal and infantile screening (2) university graduate or equivalent (3) over 25 and under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Sapporo City Institute of Public Health

## CLINICAL DENTISTRY

Apr. 14, '97 - Aug. 20, '97, 11 participants

歯学

J-97-00426

- 1. PURPOSE** The purpose of the course is to provide participants with the knowledge and skills of modern dentistry from fundamental to advanced level. Based on knowledge obtained through the course, participants are expected to be able to organize and conduct various activities such as examination of patients, education and administration of the dental health in order to promote the dental health systems from the viewpoint of long and short-term period service.
- 2. MAIN FEATURES OF CURRICULUM** In this course, participants will acquire the theory and practical skills through the model-oriented exercise. Also extensive knowledge on the advanced theory and technology of modern dentistry will be introduced. It mainly covers: (1) advancement in basic dentistry (2) dental care delivery system and dental public health service in Japan (3) dental care for children and adolescents (4) dental caries (5) periodontal disease (6) crown bridge and denture (7) arthrosis (8) oral cancer (9) dentistry for special patient (10) dental materials and clinical practices in the up-to-date dental medicine.
- 3. QUALIFICATION OF APPLICANT** (1) dentist with more than three years' professional or academic experience at academic institution, health administration or in practice (2) presently engaged or expected to be working on their return in this line (3) 40 years of age or less.
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Faculty of Dentistry, Kyushu University.
- 5. REMARKS** A compulsory 35-hour Japanese language course will be conducted prior to the technical training.

## COUNTER-MEASURE FOR IMPROVEMENT OF INFANT MORTALITY RATE

Aug. 18, '97 - Sep. 29, '97, 8 participants

乳児死亡率改善対策

J-97-00519

- 1. PURPOSE** The purpose of this course is to aim to have participants develop the managerial and planning skill toward the reduction of the infant mortality rate (IMR) in their own countries through (1) identifying the factors of reducing the IMR in the assigned areas (2) discussing with fellow participants on their observations (3) developing their own solution for the improvement for themselves.
- 2. MAIN FEATURES OF CURRICULUM** The course is designed for the participants to review the policies and execution of work related to the IMR reducing factors through visiting hospitals, public health centre and policy making office and discussing among participants and/or with their staff. The following basic subjects are covered through lecturers: (1) Japan's health policy (2) maternal health (3) child health (4) health staff service.
- 3. QUALIFICATION OF APPLICANT** (1) be medical doctor, paramedical or administrative staff of higher position who are responsible for national formation of maternity and child health strategy and its execution, level of high ranking manager or middle level manager (2) be fifty 50 years of age and less.
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Kumamoto Prefectural Center for Health and Preventive Medicine.
- 5. REMARKS** A compulsory 25-hour Japanese language course will be conducted prior to the technical training.

## ADVANCED MEDICAL RADIOLOGICAL TECHNOLOGY

Sep. 1, '97 - Feb. 22, '98, 7 participants

医療放射線技術指導者

J-97-00511

- 1. PURPOSE** This course is set as an Advanced Course for "Medical Radiological Technology" (1973-1993). In view of present situation of medical radiological technology, the purpose of this course is to advance the radiological technology in developing nations. The program is designed to provide broad and practical knowledge on radiological technology and educational method for the leaders who can contribute to the implementation of the radiological technology.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of quality control, effective operation and maintenance of radiological equipment, educational method for new technology, and research for appropriate technology etc. (1) fundamental theories of radiological technology for 1 month (2) practical training at hospital for 3 months (3) discussions and case studies on appropriate technology for each country for 1 month.
- 3. QUALIFICATION OF APPLICANT** The course offers to those who take leadership in the field of radiological technology (chief technologist, chief medical physicist, director of technological school, etc.) or those who are expected to be leaders in the future (Deputy chief technologist, Senior technologist or the equivalent, medical physicist, Instructor of school for technologist, etc.), and also applicants should be: (1) university/college graduate or equivalent (2) radiological technologist or medical physicist having diagnostic experiences of more than five years, or instructor having experiences of teaching at school for radiological technologist (3) under 45 years of age.
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) The School of Allied Health Sciences (Faculty of Medicine), Osaka University (3) Osaka University Hospital.
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two week.

## CLINICAL LABORATORY TECHNOLOGY

Nov. 11, '97 - Feb. 15, '98, 15 participants

臨床検査技術

J-97-00521

- 1. PURPOSE** This programme aims to invite those who are presently engaged in medical technology practices, especially in the field of clinical laboratory to provide them through lectures, practice drills and observations, with knowledge, technology skills for practical medical technology.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of basic common training for all participants and group work for which the participants will be divided into the following two groups. Group A: bacteria and parasite testing technology as a countermeasure against diarrhea caused by intestinal bacteria and parasite (Salmonella, Shigella, Yersinia, Vibrio Aeromonas, Plesimonas, Campylobacter, Clostridium, S. aureus, B. cereus, BTEC will be treated) Group B: clinical immunological technology (fundamentals and practical applications of clinical immunology).
- 3. QUALIFICATION OF APPLICANT** (1) have experience of more than five years in their profession (2) presently engaged in practices of clinical laboratory (NOTE: not be medical doctors or nurses) (3) recommended by the President of the Association at which they work (4) under 40 years of age.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japan International Medical Technology Foundation (3) Japanese Association of Medical Technologists (4) related institutes.

## TOTAL MEDICAL IMAGING AND RADIATION THERAPY TECHNOLOGY

Dec. 1, '97 - Apr. 5, '98, 15 participants

総合医用画像・放射線治療技術

J-97-00516

- 1. PURPOSE** This programme aims to invite those who are presently engaged in medical technology practices, especially in the field of medical imaging information management and radiation therapy, to provide them through lectures, practice drills and observations, with knowledge, technology and skills for practical medical technology.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of basic common training for all participants and group work for which the participants will be divided into the following two groups. Group A: Medical imaging technology (analogue and digital image processing (computed radiology, magnetic resonance imaging, computed tomography, ultrasound, etc.) will be treated). Group B: Medical imaging information management and radiation therapy technology management (archives and communication) of the medical imaging system, introduction to medicine, oncology and acquisition of radiotherapy technology will be treated.
- 3. QUALIFICATION OF APPLICANT** (1) have experience of more than five years in their profession (2) be radiographer/radiological technologist who is presently engaged in practice of diagnostic radiology, magnetic resonance imaging and ultrasound examinations (Group A) and management of total medical imaging and radiotherapy (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
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Japan International Medical Technology Foundation (3) related institutes
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks (50 hours).

## HOSPITAL ADMINISTRATION AND HEALTH SERVICES MANAGEMENT

Jan. 20, '98 - Feb. 28, '98, 7 participants

病院管理技術とヘルスサービスマネジメント J-97-00481

- 1. PURPOSE** The purpose of this course is to introduce participants to the latest knowledge and technology in the field of health services management, laying emphasis on hospital administration, through lectures, group discussions, field visits and individual studies.
- 2. MAIN FEATURES OF CURRICULUM** The following subjects will be covered in the course. (1) district/regional health facilities (a) role (b) planning (2) application of appropriate technology (3) health services (a) system (b) resource management (c) planning and evaluation (4) hospital management (5) hospital visit
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in hospital administration at the top management level (e. g. director or deputy director of hospital) or government officer, (2) not more than 50 years of age (3) university graduates or equivalent responsible for district health care or hospital administration
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) National Institute of Health Services Management

## FOOD MICROBIAL CONTROL

Jan. 12, '98 - May 29, '98, 6 participants

食品微生物検査技術

J-97-00361

- 1. PURPOSE** The course is designed to upgrade the technical skills of personnel who are currently engaged in food microbial control.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of comprehensive knowledge on the following subjects through lecture, practice and field trip. (1) lectures (1 week) (a) Japanese food sanitation law (b) microbial control (c) anaerobic bacteria (d) pathogenic bacteria (e) saprophytic bacteria (f) fungi (g) recent trend of regulation for marine and livestock products in Japan (2) practice (12 weeks) (a) basic techniques (i) staining of bacteria (gram stain etc.) (ii) preparation of culture medium (iii) viable count of bacteria (iv) viable count of coliform group in drinking water (v) viable count of fungi and yeast (vi) viable count of lactic acid bacteria (vii) viable count of anaerobic bacteria (b) procedures for the isolation and identification of pathogenic microbes related to food-poisoning (i) salmonella (ii) staphylococcus aureus (iii) pathogenic vibrios (*V. parahaemolyticus*, *cholerae*) (iv) campylobacter (v) clostridium perfringens (vi) listeria monocytogenes (vii) fungi and yeast (3) observation of private and public facilities related to food microbial control
- 3. QUALIFICATION OF APPLICANT** (1) research or technical officer presently engaged in food microbial control (2) university graduate or equivalent with occupational experience of more than three years in the field of food microbial control (3) under 35 year of age
- 4. TRAINING INSTITUTIONS** (1) Hyogo International Centre (HIC), JICA (2) Kobe College of Pharmacy (3) Public Health Research Institute of Kobe City (4) Kobe Quarantine Station, Ministry of Health and Welfare
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for about several days.

## IMPORT AND EXPORT FOOD INSPECTION

Aug. 11, '97 - Dec. 3, '97, 6 participants

輸出入食品検査技術

J-97-00226

- 1. PURPOSE** The course is designed for brushing up the knowledge and technique of the middle-class personnel in the manner of in-service training.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of comprehensive knowledge on the following subjects through lecture, practice and field trip. (1) lectures (a) current trend of public health administration in the world (b) principle of food hygiene in international trade (c) food hygiene administration on national and community levels (d) government formalities for international food trade at entry and exit (e) hygienic criteria for food safety in international trade (f) function of public institute for food health (g) monitoring of imported food in domestic market (2) laboratory experiments (a) microbial examinations (b) physico-chemical and other examinations
- 3. QUALIFICATION OF APPLICANT** (1) a technical personnel of import and export food sanitation of inspection who are university graduates and/or those who have equivalent practical experiences of food hygiene services more than three years (2) not more than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hyogo International Center (HIC), JICA (2) Kobe Quarantine Station, Ministry of Health and Welfare (3) Kobe Center for Quality Control and Consumer Service, Ministry of Agriculture, Forestry and Fisheries
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for several days.

**MYCOTOXIN INSPECTION IN FOOD**

Feb. 9, '98 - May 29, '98, 7 participants

食品におけるマイコトキシン検査技術 J-97-00390

- 1. PURPOSE** The purpose of the course is to enable the participants to understand the basic knowledge and techniques for the control and management of mycotoxins. After this course, they are expected to be able to apply them in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of comprehensive knowledge on the following subjects through lecture, practice and field trip. (1) lectures (a) food sanitation law and food inspection (b) general view on mycotoxins (c) introduction to fungi (d) isolation and identification of fungi (e) *aspergillus flavus* contamination of groundnuts and maize (f) *fusarium* contamination of wheat and maize (g) sampling for mycotoxins (h) analysis of mycotoxins (i) control of mycotoxins (j) analysis of food preservatives (2) practices (a) method of the isolation and identification of mycotoxins-producing fungi (b) analysis of mycotoxins such as aflatoxins and *fusarium* mycotoxins (c) analysis of food preservatives (3) observation and field trips government and private food inspection organization, food processing factories
- 3. QUALIFICATION OF APPLICANT** (1) technical officer or inspector presently engaged in food inspection (2) university graduate or equivalent with practical experience of not less than three years in the field of food inspection (3) not more than 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Hyogo International Center (HIC), JICA (2) Public Health Research Institute of Kobe City
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for several days.

**SEMINAR ON PARASITE CONTROL ADMINISTRATION FOR SENIOR OFFICERS**

Jan. 20, '98 - Feb. 15, '98, 10 participants

寄生虫予防指導者セミナー J-97-00241

- 1. PURPOSE** The purpose of this seminar is to provide the participants with an opportunity (1) to create a better understanding on tripartite activities in Japan for parasite control conducted by administrative authorities of the government, medical experts and citizens' community, (2) to broaden knowledge on Japanese method or technique and its effectiveness of parasite control programme which is considered as a step to integrated primary health care programme, and (3) to contribute to promoting public appreciation of parasite control programme and their voluntary participation in it in respective countries of the participants.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the seminar. (1) parasite control program and public health activities in Japan (a) relations between central prefectural and municipal governments/authorities (b) medical experts (c) community/voluntary institutions (2) parasitology (a) soil-transmitted helminths such as ascaris and hookworm (b) examination methods and techniques (c) deworming and treatment (d) training of medical personnels and volunteers (3) integrated parasite control program and community/family health activities
- 3. QUALIFICATION OF APPLICANT** (1) senior-level administrator or expert from government or private sector in charge of parasite control at national or local level (2) have medical or other related profession (3) under 55 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japan Association of Parasite Control

**SPECIALIZED NURSING**

Apr. 6, '97 - Dec. 7, '97, 8 participants

専門看護 J-97-00314

- 1. PURPOSE** The purpose of this training course is to enhance the participants' competency on selected fields through lectures and practice so as to contribute to improving nursing services and its standard of respective countries.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common subjects for all participants and individual practical study in the hospital in accordance with the speciality of each participant. Through the training programme, the participants are expected to be able to: (1) comprehend and state the causes, symptoms, pathophysiology of diseases and its treatment and nursing care, (2) pursue comprehensive patient's management in skillful manner, (3) understand and manipulate specific medical equipment and instruments, (4) state the significance, process and nursing intervention of related clinical examinations, (5) understand psychosocial aspects of patients and their families, and (6) understand the expanded role of nurses in the community.
- 3. QUALIFICATION OF APPLICANT** (1) have completed a fundamental nursing education programme of three years or more (2) have more than five years experience in nursing and more than one year experience in the specialized field for which the applicant is to apply (3) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) International Nursing Foundation of Japan (INFJ)
- 5. REMARKS** (1) A compulsory intensive Japanese language course will be conducted prior to the technical training for two months. (2) This course is not conducted in JFY 1996.

**CLINICAL NURSING**

July 30, '97 - Feb. 2, '98, 5 participants

臨床看護実務 J-97-00341

- 1. PURPOSE** The purpose of this course is to provide the opportunity for experienced clinical nurses for the improvement of skills and the enhancement of knowledge through exposure to the theory and practice of nursing care of Japan in an effort to develop clinical nurses of high caliber with leadership quality who would serve to improve the standard of clinical nursing in participating countries.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common subjects for all the participants and Subcourse subjects. The Subcourses to be chosen are: (1) emergency nursing/surgical nursing (2) maternal and child nursing (3) internal medicine nursing
- 3. QUALIFICATION OF APPLICANT** (1) certified staff nurse with more than five years of nursing experience (head nurse and chief nurse are not applicable) (2) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA (2) Okinawa Prefectural Chubu Hospital
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two months (220 hours).



## CARDIOVASCULAR DISEASES

Aug. 19, '96 - Dec. 5, '96, 7 participants

循環器病対策

J-97-00273

- 1. PURPOSE** The purpose of this course is to help the specialists to improve their ability in the fields of cardiovascular and related diseases through discussions, observations and practices of laboratory examinations.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of individual and specialized training in a given department of the National Cardiovascular Center. Each participant is to choose one of the following departments: (1) department of medicine: cardiac division (2) department of medicine: cerebrovascular division (3) department of medicine: division of hypertension, renal division (4) department of medicine: division of arteriosclerosis and metabolism (5) department of cardiovascular surgery (6) department of cerebrovascular surgery (7) department of anesthesiology (8) department of pediatric cardiology (9) department of radiology (10) department of preventive medicine (11) department of pathology (12) department of perinatology
- 3. QUALIFICATION OF APPLICANT** (1) licenced physician and surgeon authorized by their government (2) occupational experience of at least two years in diagnosis and treatment of cardiovascular diseases (for the applicants who wish to specialize in Perinatology, the required duration of occupational experience is minimized; experience of less than two years is enough for application), (3) under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) National Cardiovascular Centre (NCVC)
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week.

## SEMINAR ON HUMAN RESOURCES DEVELOPMENT IN PUBLIC HEALTH

May 20, '97 - June 15, '97, 10 participants

公衆衛生教育

J-97-00455

- 1. PURPOSE** The purpose of this course is to enhance the ability of the participants to formulate a national and local programme for human resources development in public health. Though this might be very difficult to handle, exchange of experience and views in each country will be necessarily useful and meaningful. Therefore, in this course, the way which Japan is taking in public health administration and human resources development will be presented as the study material, and participants are required to fill out the questionnaire on this matter in order to make it easy to develop the mutual discussions.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on discussions by participants, which follow lectures and field study to introduce Japanese systems and situations. The main themes are: (1) health administration and production of professional health personnel in Japan (2) institutions and personnel for public health services in Japan (3) systems and situations in participating countries
- 3. QUALIFICATION OF APPLICANT** (1) be either (a) director/dean of a school of public health, (b) chief of educational courses/programmes at a school of public health, or (c) government official responsible for human resources development in public health (2) not less than 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) The Institute of Public Health, Ministry of Health and Welfare

## PUBLIC HEALTH AND ENVIRONMENTAL POLLUTION TECHNOLOGISTS

May 29, '97 - Dec. 21, '97, 5 participants

公衆衛生・環境汚染分析技術者

J-97-00296

- 1. PURPOSE** The purpose of this training course is to provide participants, who are presently engaged as laboratory technologists in the field of public health, with fundamental and practical knowledge of public health technology through lectures, field work, laboratory work and observations.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common subjects for all participants and individual research work at laboratory. Each participant is to take one of the following subjects for their individual research: (1) infectious disease (2) medical zoology (3) food chemistry (4) air pollution (5) water pollution (6) snake venom and antivenin
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in research work as a laboratory technologist in the field of public health (2) university graduate or equivalent and having occupational experience of more than three years (3) under 41 years of age
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA (2) Okinawa Prefectural Institute of Public Health
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for eight weeks (150 hours).

## OCCUPATIONAL HEALTH

Aug. 4, '97 - Dec. 7, '97, 10 participants

産業医学

J-97-00305

- 1. PURPOSE** The purpose of the course is to provide participants with basic concepts and fundamental knowledge of occupational health. The knowledge obtained through the course will enable them to organize and conduct research planning, management and administration in order to prevent occupational diseases and to improve health conditions of workers in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** The training course consists of five main parts, that is (1) lectures on occupational health (2) field trips (3) elective seminar (4) presentation (5) course on biostatistics and data management with computer. The following major subjects for occupational health are covered in the course: (1) general principle of occupational and environmental health (2) occupational epidemiology and biostatistics (3) occupational health in agriculture (4) occupational diseases (5) occupational disorders due to physical factors (6) occupational toxicology (7) work physiology and psychology (8) ergonomics and management (9) evaluation of work environment (10) control of work environment (11) occupational safety and health administration & law (12) occupational health service
- 3. QUALIFICATION OF APPLICANT** (1) medical doctor in principle (university graduate with more than three years of professional or academic experience in the field of occupational health would be approved) (2) presently engaged or expected to be in the field of occupational health (3) 40 years of age or less
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) University of Occupational and Environmental Health, Japan (3) Rosai Hospital for Silicosis, Labor Welfare Projects Corporation
- 5. REMARKS** A compulsory 25 hour Japanese language course will be conducted prior to the technical training.

**RESEARCH FOR TROPICAL MEDICINE**

Jan. 12, '98 - Dec. 21, '98, 9 participants

熱帯医学研究

J-97-00324

- 1. PURPOSE** The purpose of this course is to invite junior or senior scientists to Japan and give them the specialized research training in the area of tropical medicine.
- 2. MAIN FEATURES OF CURRICULUM** The Institute of Tropical Medicine, Nagasaki University offers some research subjects in collaboration with ten (10) departments: (1) pathology (2) environmental physiology (3) parasitology (4) virology (5) bacteriology (6) protozoology (7) medical entomology (8) biochemistry (9) internal medicine (10) social entomology. Although the course consists of those lectures, the basic research through experimental works is provided to the participants.
- 3. QUALIFICATION OF APPLICANT** (1) presently employed either at the Ministry of Health or medical research laboratory (2) medical doctor or graduate from a faculty of biology, pharmacy or agriculture or have at least three years of occupational experience in medical field (3) not less than 24 and not more than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Institute of Tropical Medicine, Nagasaki University
- 5. REMARKS** A compulsory 90-hour Japanese language course will be conducted during the technical training period.

**VACCINE QUALITY CONTROL TECHNOLOGY**

July 14, '97 - Dec. 14, '97, 6 participants

ワクチン品質管理技術

J-97-00367

- 1. PURPOSE** The participants are expected to acquire quality control technology for an acceptance inspection of their producing or imported vaccines and techniques for preserving, transporting or using vaccine correctly in their countries.
- 2. MAIN FEATURES OF CURRICULUM** This course consists of common subjects for all participants and group work at laboratory. Common subjects are: (1) quality control technology for measles vaccine and DPT vaccine (2) effect of transportation and presentation conditions on the vaccine quality (3) good manufacturing practice. Participants will be divided into 2 groups to cover one of the following subjects: (a) measles virus vaccine (b) diphtheria pertussis-tetanus combined vaccine
- 3. QUALIFICATION OF APPLICANT** (1) university / college graduate or equivalent with occupational experience of more than three years in developing, manufacturing and quality control of biological products (2) under 35 years of age (3) engaged in the same field after returning to their country
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Research Foundation for Microbial Diseases of Osaka University
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for four weeks.

**MAINTENANCE ENGINEERING FOR MEDICAL EQUIPMENT**

Aug. 14, '97 - Sep. 20, '97, 8 participants

医療機器保守管理技術

J-97-00428

- 1. PURPOSE** The purpose of this training course is to provide an opportunity to improve their maintenance technique of diagnostic X-ray apparatus produced by Japanese manufacturing firms.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on observation and practices at private factories. The course covers the following themes: (1) normal operation of conventional diagnostic X-ray apparatus (2) routine maintenance of diagnostic X-ray apparatus (3) troubleshooting and repair of diagnostic X-ray apparatus
- 3. QUALIFICATION OF APPLICANT** (1) (a) be presently engaged in maintenance of X-ray apparatus produced by such manufacturing companies as Hitachi Medical Corporation, Shimadzu Corporation and/or, Toshiba Corporation, and have an occupational experience in this field of more than three years (b) have efficient knowledge on two-pulse X-ray generator and combined radiographic devices (c) be expected to continuously resume the same duties as X-ray apparatus maintenance after returning home (2) college graduate specialized in electrical and/or electronic technology, or its equivalent (3) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japan Association for Advancement of Medical Equipments (JAAME)

**SEMINAR ON EMERGENCY/ DISASTER MEDICINE**

Oct. 27, '97 - Nov. 16, '97, 8 participants

救急・大災害医療セミナー

J-97-00427

- 1. PURPOSE** This seminar is designed for senior physicians and/or administrators who are in charge of emergency and disaster medicine in emergency medical facilities and medical administrations in participating countries. Participants are encouraged to discuss the conditions and problems of their countries on emergency/disaster medicine as comparative study, thus contribute to the further development of emergency/medical services system in each country and to the development of international cooperation in the event of a disaster.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on report presentation and discussions by participants, introduction of Japanese experience and basic theories of emergency/disaster medicine. The main themes are: (1) introduction (a) medical care system in Japan (b) history of emergency medical care in Japan (2) visits (observation) (a) emergency medical system in Japan (b) disaster preparedness (c) cooperation of governmental organization and private organization (d) cooperation among hospitals/clinics in EMS (e) education on emergency medicine
- 3. QUALIFICATION OF APPLICANT** (1) A senior doctor, or an administrator engaged in measures for emergency/disaster medicine and taking leadership in emergency medical institution or medical administrative organization
- 4. TRAINING INSTITUTIONS** Osaka International Centre (OSIC), JICA

### SEMINAR ON EVALUATION OF DRUG EFFICACY

Mar. 23, '98 - July 6, '98, 6 participants

医薬品の効果判定セミナー

J-97-00471

- 1. PURPOSE** The purpose of this course is to provide senior researchers and middle level managers who are responsible for the evaluation of drug efficacy including traditional medicine (crude drugs) with information on: (1) management of laboratory activities (2) development of new drugs (3) basic and advanced knowledge of production (4) evaluation and quality control of drugs
- 2. MAIN FEATURES OF CURRICULUM** The seminar offers information on efficacy, safety and stability of drugs (including traditional drugs) as well as technology for development of new drugs to utilize medical resources. The subjects covered in the seminar are: (1) evaluation of traditional medicine (2) development of new drugs (3) production, evaluation, and quality control of biological products (4) drug disposition and pharmacokinetic analysis (5) dosage forms and administration (6) hospital pharmacy
- 3. QUALIFICATION OF APPLICANT** (1) pharmacist or medical doctor, and at the same time, senior researcher or manager responsible for the evaluation of drug efficacy or person of equivalent (2) 45 years of age or less
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Agency for Cooperation in International Health (3) Faculty of Pharmaceutical Science, Kumamoto University
- 5. REMARKS** A compulsory 25-hour Japanese language course will be conducted prior to the technical training.

### COMMUNITY HEALTH SERVICES

Mar. 23, '98 - Sep. 19, '98, 8 participants

地域保健指導者

J-97-00489

- 1. PURPOSE** The purpose of the course is to provide training in practical methodology for health and hygiene diagnosis in communities, improvement of health and hygiene in communities and evaluation of such understandings, with a view of fostering those who are to take leading roles in the implementation of disease prevention and countermeasures, improvement and dissemination of hygiene standard.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on the introduction of the Japanese experience on how to plan programmes of the health and hygiene services, how to make the regional health diagnosis, how to improve the health and hygiene services and how to plan the investigation and research work useful for effective execution of the health and hygiene services. The subjects covered in the course are: (1) history and current status of health care in Japan (2) emergency medical care system (3) health statistics (4) nutrition (5) data processing (with personal computer) (6) counter-measures for infectious diseases (7) degenerative diseases (8) counter-measures for diseases (9) population problems, maternal & child health and school health (10) public health activities (11) and others
- 3. QUALIFICATION OF APPLICANT** (1) have practical experience of more than three years in health hygiene work (2) between 30 and 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) St. Mary's Hospital
- 5. REMARKS** A compulsory 145 hour Japanese language course will be conducted prior to the technical training.

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

Sep. 29, '97 - Dec. 1, '97, 8 participants

農村近代化過程の健康障害対策セミナー

J-97-00490

- 1. PURPOSE** The purpose of the training course is to provide participants with information on research and control measures developed in Japan during the last five decades. The course will help participants to: (1) assess the technology to be introduced (2) formulate the plans for development of rural health services which are applicable to their respective countries or regions
- 2. MAIN FEATURES OF CURRICULUM** The major subjects covered in the course are: (1) modernization and public health in rural areas (2) importance of health policies and primary health care in rural areas (3) problems on agricultural chemicals (4) health problems in the modernizing process of agriculture and forestry (5) health problems in rural areas
- 3. QUALIFICATION OF APPLICANT** (1) medical doctor or co-medical staff and, at the same time, manager of middle level or above, with more than five years' experience in the related fields (2) engaged in the work related to this course (3) 50 years of age or less
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA (2) Agency for Cooperation in International Health
- 5. REMARKS** A compulsory 20 hour Japanese language course will be conducted prior to the technical training.

### SEMINAR ON FAMILY PLANNING ADMINISTRATION FOR SENIOR OFFICERS II - Strengthening Coordination and Collaboration Between Government and Non-Governmental Organizations -

Aug. 19, '97 - Sep. 14, '97, 14 participants

家族計画指導者セミナー II ~政府とNGOの連携強化~

J-97-00137

- 1. PURPOSE** The aims of the seminar are mutual exchange of information, experience and ideas on reproductive health (RH) /family planning (FP) among participating countries for better administration of the programme using Japanese experience in family planning, maternal and child health care (MCH) after World War II as case studies, and country presentations which is to be made by each participant.
- 2. MAIN FEATURES OF CURRICULUM** This seminar covers the following, (1) general outline of population/RH/FP in Japan (2) coordination and collaboration between government and NGO (3) exchange of information on situations and experiences in participating countries by presentation of Country Reports (4) adolescent health and RH
- 3. QUALIFICATION OF APPLICANT** (1) high-ranking official responsible for planning administration, and implementation of the field programme by governmental/non governmental organization for family planning (2) between 35 and 50 years of age, and with more than five years experience in the field of RH/FP.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japanese Organization for International Cooperation in Family Planning, Inc. (JOICFP)

## MENTAL RETARDATION

May 13, '97 - July 27, '97, 8 participants

精神薄弱福祉

J-97-00251

- 1. PURPOSE** This course aims to enhance participants' knowledge on mental retardation, to introduce Japan's welfare systems and various institutions for the mentally retarded and thus to help participants provide better systems in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** The course gives lectures on various rehabilitation services and related subjects, augmented by observations of relevant facilities. The second half of the curriculum gives participants on opportunity to closely survey particular institutions to deepen their understanding.
- 3. QUALIFICATION OF APPLICANT** (1) a chief officer of the central or local government, working in a section responsible for the improvement of education/training, welfare services, or employment of the mentally retarded/the physically & mentally handicapped, or currently in a position of director/manager (or a position responsible for planning and coordination of all activities) of an institution or special school for the mentally retarded. (2) expected to continue his/her duty after he/she returns. (3) more than 30 years of age.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japan League for the Mentally Retarded (JLMR)

## PROSTHETIC AND ORTHOTIC TECHNICIANS

July 21, '97 - Dec. 7, '97, 4 participants

補装具製作技術

J-97-00321

- 1. PURPOSE** The purpose of the course is to introduce participants activities in prostheses and/or the fabrication thereof to the latest knowledge and techniques of this field through lectures, drills and field tours, and thus to improve techniques in their respective countries, and ultimately to promote the rehabilitation of physically disabled persons.
- 2. MAIN FEATURES OF CURRICULUM** This course is conducted in the form of lecture/discussion and practical training and mainly covers: (1) lecture (a) basic medicine (b) introduction to prosthetics and orthotics (c) functional anatomy (d) disabilities and clinical prosthetics and orthotics (2) technical study through practice (a) B/K prosthetics (b) A/K prosthetics (c) upper extremity prosthetics (d) upper and lower orthotics
- 3. QUALIFICATION OF APPLICANT** (1) have more than five years of practical experience in the production of prosthetic and orthotic devices (2) expected to become a leader in this field (3) under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) National Rehabilitation Center for the Disabled
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for four weeks (85 hours).

## REHABILITATION OF PERSONS WITH DISABLED (VOCATIONAL REHABILITATION AND WORKSHOP MANAGEMENT)

Oct. 14, '97 - Dec. 7, '97, 10 participants

障害者リハビリテーション指導者(リハビリテーション専門家) J-97-00429

- 1. PURPOSE** The purpose of this training course is to introduce the participants to Japanese rehabilitation systems for disabled persons, especially in vocational rehabilitation and workshop management, through a variety of lectures, study visits and practical training, and to provide opportunities to exchange idea and information among the participants in order to enable them to contribute to further development of their respective services.
- 2. MAIN FEATURES OF CURRICULUM** (1) The following major subjects will be covered in the course: (a) introduction to institutional activities and framework of Japanese rehabilitation services for disabled persons (b) Country Report (present status of disabled persons and rehabilitation services in participating countries) (c) workshop management (d) observations (community-based services) (e) wrapping-up (future action plan) (2) Through the training programme, the participants are expected to obtain efficient and practical theory and technique for managing a sheltered workshop established for the purpose of vocational and/or social rehabilitation. In order to achieve the above-mentioned objective, the participants are also requested, during the course programme, to create a better understanding on the present status in Japan on medical and educational rehabilitation, social services and the relevant laws and regulations for people with disabilities.
- 3. QUALIFICATION OF APPLICANT** (1) vocational rehabilitation center/workshop manager or rehabilitation expert such as an instructor, supervisor, social worker, vocational counsellor, vocational evaluator, or those who resume duties corresponding to the above-mentioned positions in such facilities as a sheltered workshop, work preparation centre, vocational/work evaluation centre, vocational training centre or other relevant facilities for disabled persons with occupational experience of more than two years (should not be a medical doctor or a nurse) (2) not less than 28 and no more than 40 years of age (3) be independent in daily activities (NOTE: No attendant shall be assigned for the participant during the course.)
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japanese Society for Rehabilitation of the Disabled

## LEADERSHIP OF PERSONS WITH DISABILITIES

Oct. 7, '97 - Nov. 23, '97, 10 participants

障害者リーダーコース

J-97-00430

- 1. PURPOSE** The purpose of this training course is to introduce the participants to Japanese rehabilitation system for disabled persons and their activities and organizations in Japan, and to provide an opportunity to enhance leadership skills through exchanging idea and information among the participants and Japanese relevant personnel in order to enable them to contribute to further development of their services and further promotion of social participation of disabled persons in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** Through the training programme, (lecture, practical training, country report presentation, etc.) the participants are expected to create a better understanding on the following: (1) analysis of the present status of disabled persons and identification of their requirement (2) promotion of institutional activities of disabled persons (3) improvement of a comprehensive public information programme on the rights and requirements of disabled persons (4) vigorous activities by organizations of disabled persons in Japan in collaboration with the government and the public for promoting social participation of disabled persons
- 3. QUALIFICATION OF APPLICANT** (1) disabled person who is leader of organization/group of disabled persons with more than three years of experience in the relevant field (2) not less than 25 and no more than 40 years of age (3) be independent in daily activities (NOTE: No attendant shall be assigned for the participant during the course.)
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japanese Society for Rehabilitation of the Disabled

### SPORTS INSTRUCTOR OF PHYSICALLY DISABLED PERSONS

Oct. 7, '97 - Nov. 23, '97, 10 participants

身障者スポーツ指導者

J-97-00456

- 1. PURPOSE** The purpose of this training course is to introduce the participants who are presently engaged in social welfare activities for physically disabled people to the present situation of sports activities as well as sports leadership and game administration for disabled persons in Japan in order to contribute to further development of sports activities for the disabled in their respective countries.
- 2. MAIN FEATURES OF CURRICULUM** (1) The following major subjects will be covered in the course: (a) social welfare and rehabilitation system in Japan (lectures and study visits) (b) sports for the disabled (lectures, practices and study visits) (c) discussions to exchange information (2) Through the training programme, the participants are expected to: (a) educate sports leaders for the disabled in their respective countries, (b) plan and develop sports activities and recreational programmes for people with various types of disabilities, and (c) contribute to advancing athletic skills of disabled people to a competitive level.
- 3. QUALIFICATION OF APPLICANT** (1) workshop manager or a rehabilitation expert with more than three years experience such as a social worker, therapist, sports or rehabilitation trainer for the physically disabled (except medical doctors and nurses). Special school teacher and the leading disabled athletes are applicable if their participation satisfied the purpose of this course (2) not less than 25 and not more than 40 years of age (3) be independent in daily activities (NOTE: No attendant shall be assigned for the participants during the course.)
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre, JICA (2) Japanese Sports Association for the Disabled

### SEMINAR ON IMPROVEMENT OF THE STATUS OF WOMEN II

Aug. 26, '97 - Oct. 11, '97, 12 participants

女性の地位向上セミナー II

J-97-00114

- 1. PURPOSE** The purpose of the seminar is to provide knowledge of Japan's public system for dealing with women's problems, especially working women's problems. The aim of the seminar is to examine problems in the areas of employment, education and training, family life and child-care, social participation, etc., and to examine possible solutions.
- 2. MAIN FEATURES OF CURRICULUM** In this seminar, the emphasis is put on presentation and discussion by participants and introduction of Japanese administration. The participants will also have opportunities to visit Japanese women in farming communities besides various public organizations.
- 3. QUALIFICATION OF APPLICANT** (1) woman who is either (a) engaged in work related to women's problems (especially working women's problems) at a government bureau or research institute specialized in women's affairs, (b) engaged in planning work at a NGO specialized in improvement of women's status, (c) playing a leading role among working women, or (d) in charge of women's problems at a labour union (2) have more than five years of occupational experience in this field (3) university graduate or equivalent (4) over 26 but under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Women's Bureau, Ministry of Labour (3) Japan Women and Young Workers Society
- 5. OTHER** Participants are request to attend and make presentation at open seminar.

### LABOUR STATISTICS FOR POLICY PLANNING SEMINAR

June 2, '97 - July 13, '97, 9 participants

労働統計・政策セミナー

J-97-00224

- 1. PURPOSE** The purpose of this seminar is to introduce participants to the present situation of compilation and utilization of labour statistics for policy planning in Japan with reference to its development process, and to offer an opportunity for making a comparative study between Japan and their countries, as well as among the participating countries, and thereby to contribute to the development of labour statistics and labour administration in the countries.
- 2. MAIN FEATURES OF CURRICULUM** This seminar aims to present Japanese experience in this field as a case study and it mainly covers: (1) outline of the system and the operative condition on the labour statistics in Japan (2) utilization of the labour statistics for labour policy planning (3) comparative study
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in labour statistics administration or in labour administration with labour statistics administration career (2) university graduate or equivalent (3) not more than 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) Policy Planning and Research Bureau, Ministry of Labour

## TRAFFIC POLICE ADMINISTRATION SEMINAR

(not conducted in JFY 1997)

### 交通警察行政研修

- 1. PURPOSE** The purposes of the seminar are as follows: (1) introduce to participants traffic police administration in Japan through lectures and visits, (2) provide opportunity to exchange information on traffic police in participating countries, (3) study measures to solve traffic problems of mutual concern, thus to contribute to the betterment of traffic police administration in the each country.
- 2. MAIN FEATURES OF CURRICULUM** This seminar covers the following topics: (1) general subjects (lecture) (a) Japanese police system (b) chronological summary of road traffic measures (c) application of computers by the police (2) specialized subjects (lectures) (a) Japanese police system (b) traffic accidents statistics and analysis (c) traffic law enforcement (d) method for disposition of road traffic law violation (e) actuality and definitive implementation of traffic control (f) traffic control & monitoring system and traffic safety facilities (g) traffic police activities on expressways (h) outline of driver licence system (i) measures to be taken for drivers (j) prevention of traffic accidents and traffic engineering (k) structure, maintenance and management of road (l) vehicle safety standards (m) aid to victims of automobile accidents and automobile insurance system (n) traffic count (3) presentation of Country Reports by participants and exchange of views on them among participants and related staff of NPA
- 3. QUALIFICATION OF APPLICANT** (1) director or chief police superintendent who supervises or deals with traffic police affairs in the central police organization (2) university graduate or equivalent
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Traffic Planning Division, Traffic Bureau, National Police Agency (NPA)
- 5. REMARKS** The course is conducted every other year. This year (in Japanese Fiscal Year 1996) this course will be conducted.

## NURSING MANAGEMENT

(not conducted in JFY 1997)

### 看護管理

- 1. PURPOSE** The purpose of the course is to give promising nurses an opportunity to be well-equipped administrators who will be able to upgrade the quality of nursing services in their respective countries through the study of theory and observation on nursing management.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course: (1) health and medical situation in Japan (2) principles of management/administration (3) hospital management/administration (4) nursing management/administration
- 3. QUALIFICATION OF APPLICANT** (1) have enrolled and completed either of the below-mentioned courses during the period specified, (a) JICA group training course "Clinical Nursing" (1984 - 1992) (b) JICA's group training course in Specialized Nursing; 1986 - 1992 (c) Advanced Nursing Study Course for Southeast Asian nurses, which the Ministry of Health and Welfare entrusts its operation to INFJ (1973 - 1992) (2) hold an administrative position in nursing of their countries at present, and have 1 - 5 years experience.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) International Nursing Foundation of Japan (INFJ)
- 5. REMARKS** This course is conducted every other year in principle. This year (in Japanese Fiscal Year 1996), it will be conducted.

## SEMINAR ON SEISMOLOGY AND EARTHQUAKE ENGINEERING

(not conducted JFY 1997)

### 地震工学セミナー

- 1. PURPOSE** The purpose of this seminar is to renew the knowledge and expertise of engineers and seismologists who have previously participated in "The Group Training Course in Seismology and Earthquake Engineering" in International Institute of Seismology and Earthquake Engineering, or an equivalent course, by introducing up-to-date and advanced knowledge on earthquake disaster prevention technology in Japan and other countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on report presentation and discussion by participants. The main themes are; (1) earthquake disaster prevention (2) restoration technology
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent with professional experience in the field of earthquake engineering for more than ten years, and preferably be engaged in a job suitable to the aim of this seminar (2) over 35 and under 55 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** This course is conducted every other year in principle. This year (in Japanese Fiscal Year 1997) it is not to be conducted.

## SEMINAR ON COMMUNITY-BASED FAMILY PLANNING STRATEGY

(not conducted in JFY 1997)

### 家族計画組織活動セミナー

- 1. PURPOSE** Japanese efforts to improve maternal and child health care in local communities under leadership and extensive activities by capable public health nurses or midwives after the Second World War have brought new and innovative ideas and strategies to all the relevant personnel engaged in field programmes of family planning. This seminar intends to provide the participants with an opportunity to understand the Japanese experience in this field and to mutually share their respective expertise in order to contribute to the promotion of reproductive health/family planning with active participation by local community.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course: (1) general outline on population, maternal and child health (MCH) and family planning in Japan (2) strengthening of community participation (3) exchange of participant countries' situation and experiences through topics discussions (4) adolescent health and reproductive health
- 3. QUALIFICATION OF APPLICANT** (1) responsible for planning and implementing field programme by a governmental/non-governmental organization engaged in family planning (2) responsible person for developing IEC materials and IEC approaches for reproductive health and family planning (3) between 25 and 50 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Japanese Organization for International Cooperation in Family Planning, Inc. (JOICFP)
- 5. REMARKS** This course is conducted every other year in principle. This year (in Japanese Fiscal Year 1996) it will be conducted.

## ***TRAINING COURSES SPECIALLY OFFERED***

**(一般特設コース)**

## FORM 100-1 (REV. 11-15-60) REPORT OF INVESTIGATION (CRIMINAL CASES)

1. Name of subject: [REDACTED]

2. Date of birth: [REDACTED]

3. Place of birth: [REDACTED]

4. Sex: [REDACTED]

5. Race: [REDACTED]

6. Height: [REDACTED]

7. Weight: [REDACTED]

8. Eyes: [REDACTED]

9. Hair: [REDACTED]

10. Complexion: [REDACTED]

11. Present address: [REDACTED]

12. Previous addresses: [REDACTED]

13. Education: [REDACTED]

14. Occupation: [REDACTED]

15. Social Security Number: [REDACTED]

16. Date of arrest: [REDACTED]

17. Place of arrest: [REDACTED]

18. Name of arresting agency: [REDACTED]

19. Name of investigating agency: [REDACTED]

20. Name of investigator: [REDACTED]

21. Date of report: [REDACTED]

22. Title of report: [REDACTED]

23. Summary of facts: [REDACTED]

24. Details of investigation: [REDACTED]

25. Conclusion: [REDACTED]

26. Remarks: [REDACTED]



### SEMINAR ON ODA LOANS

Sep. 10, '96 - Oct. 10, '96, 22 participants

ODAローンセミナー

J-97-03316

- 1. PURPOSE** This seminar is designed: (1) to facilitate smooth and effective implementation of OECF loans, by enhancing participants' understanding of its system and procedures through lectures and discussions, (2) to exchange views on operation of OECF loans among participants and the officials of the OECF.
- 2. MAIN FEATURES OF CURRICULUM** The curriculum is made up of the following subjects: (1) seminar on OECF loans: (a) roles and activities of OECF in Japan's economic cooperation (b) types of OECF loans (c) OECF project cycle and loan procedures (d) presentation and discussion of Country Report prepared by participants (e) "International Symposium on Economic Cooperation on the occasion of International Cooperation Day", etc.
- 3. QUALIFICATION OF APPLICANT** (1) senior officer of a competent government office in charge of matters directly related to overall administration of OECF loans, (2) have work experience of at least two years in the field of foreign aid receiving and development project (3) university graduate or equivalent (4) desirably between 30 and 45 years old of age.
- 4. TRAINING INSTITUTIONS** (1) Institute for International Cooperation (IFIC), JICA (2) Overseas Economic Cooperation Fund (OECF)

### SEMINAR ON INTRODUCTION TO JAPAN'S INTERNATIONAL COOPERATION ACTIVITIES

Aug. 18, '97 - Sep. 6, '97, 14 participants

国際協力事業紹介セミナー

J-97-03328

- 1. PURPOSE** This seminar is designed: (1) to familiarize participants with the policy and programmes of Japan's international cooperation; (2) to familiarize participants with the concept, mechanism, and procedures of programmes of Japan International Cooperation Agency; (3) to exchange views on operation of international cooperation with Japan among participants and Japanese officials concerned and (4) to expose participants to Japan and the Japanese people to develop friendship and mutual understanding.
- 2. MAIN FEATURES OF CURRICULUM** The following topics will be covered in the seminar: (1) general introduction to Japan and the Japanese people, (2) general introduction to Japan's international cooperation (a) Ministry of Foreign Affairs and Japan's policy (b) JICA and her role (c) Overseas Economic Cooperation Fund (OECF) and her role (d) other agencies (e) country-wise/region-wise approach by JICA (f) future of JICA's international cooperation programmes with developing countries (3) JICA's programmes and procedures, (a) introduction (b) case study on some project-type technical cooperation projects (c) observation of affiliated organizations of JICA including JOCV Secretariat and its Training Institute (4) discussion for better cooperation implementation
- 3. QUALIFICATION OF APPLICANT** (1) official in the rank of director of the division in charge of the international cooperation programmes in the central government
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Osaka International Centre (OSIC), JICA

### ECONOMIC DEVELOPMENT SEMINAR FOCUSING ON WOMEN (SEMINAIRE SUR LE DEVELOPPEMENT ECONOMIQUE CENTRE SUR LES FEMMES) (AFRICAN COUNTRIES)

Oct. 29, '96 - Nov. 23, '96, 8 participants

女性に視点を当てた経済開発セミナー(仏語アフリカ)

J-97-03228

- 1. PURPOSE** This seminar is designed to introduce Japan's experiences of economic development policies through lectures, report presentations, discussions and field trip. It also aims to upgrade participants' knowledge on each country's economic development planning, especially focusing on women's roles in promoting their social status and welfare.
- 2. MAIN FEATURES OF CURRICULUM** The following subjects will be covered in the seminar: (1) lecture-cum-discussion to Japan's economic development backgrounds and the meaning of Japan's policy of economic development, (2) study visits to women's organizations, (3) Country Report presentation and discussion: presentation of historical backgrounds and present conditions of economic development in respective countries, focusing on women's role and status in each nation
- 3. QUALIFICATION OF APPLICANT** (1) central government planning officials engaged in economic development planning and have at least 5 years' occupational experience in this field, (2) have an academic background in economics or those having proper experience and knowledge on economic policy and planning, (3) between 30 and 40 years of age, (4) have sufficient command of written and spoken French.
- 4. TRAINING INSTITUTIONS** (1) Economic Planning Agency (EPA), (2) Institute for International Cooperation (IFIC), JICA.
- 5. REMARKS** THIS COURSE WILL BE CONDUCTED IN FRENCH.

### SEMINAR ON "WOMEN IN ENVIRONMENT AND DEVELOPMENT" (Women's Role In Environmental Protection)

Feb. 2, '98 - Mar. 15, '98, 5 participants

「環境と開発と女性」セミナー

J-97-03263

- 1. PURPOSE** Environmental issues are becoming more serious, especially in developing countries. In order to overcome these problems, it is essential to define the role of women in global environmental preservation, as well as in the achievement of sustainable development of countries. By taking the idea of WID (Women in Development) into consideration, this seminar will enable the participants to understand the importance of balancing environmental conservation and national development. It will also help participants to implement effective countermeasures against environmental pollution, according to their respective positions (from NGO to government levels).
- 2. MAIN FEATURES OF CURRICULUM** Participants will be able to upgrade their knowledge and capabilities necessary for the management of environmental protection from women's point of view through lectures, discussions and observation. The main themes in the course are: (1) global environmental problems, (2) environmental administration in Japan, (3) measures for living environment control, (4) women in development (WID), (5) public health and reproductive rights, (6) environmental history of Kitakyushu City and anti-pollution movement promoted by women, (7) environmental impact assessment, and (8) environmental education.
- 3. QUALIFICATION OF APPLICANT** (1) government officer or staff of a non-governmental organisation currently in charge of environmental problems or women's issues, (2) have 3 years occupational experience in the field, and (3) be university graduates or the equivalent
- 4. TRAINING INSTITUTIONS** (1) Kyushu International Centre (KIC), JICA, (2) Kitakyushu Forum on Asian Women

### SEMINAR ON ECONOMIC DEVELOPMENT AND INDUSTRIAL PROJECT APPRAISAL

Sep. 1, '97 - Oct. 12, '97, 10 participants

工業プロジェクト評価と経済開発セミナー J-97-03310

- 1. PURPOSE** This seminar is designed for senior official engaged in planning of economic policy. The purpose of this seminar is to introduce (i) the latest issues of financial, economic, and social economic analysis of industrial projects, and (ii) an overview of theory, practice of industrial development, related policy issues, small and medium enterprises and Japanese production management system drawing upon the development experience of Japan, and thereby to contribute to planning of policy in developing countries.
- 2. MAIN FEATURES OF CURRICULUM** This seminar emphasizes policy issues and discussions based on the latest issues of development, and mainly covers: (1) project appraisal (2) economic development and Japanese experience (3) workshop and presentation of reports (4) presentation of Country Report (5) Observation tours to factories and, study tours.
- 3. QUALIFICATION OF APPLICANT** (i) university graduate or equivalent, (ii) senior official having both basic knowledge and experience of industrial project appraisal, (iii) between 37 and 45 years of age, (iv) should submit a report on industrial project appraisal or experience of industrial development.
- 4. TRAINING INSTITUTIONS** (1) Hachioji International Training Centre (HITC), JICA (2) International Development Center of Japan (IDCJ)

### SEMINAR ON COMPREHENSIVE REGIONAL DEVELOPMENT AND PLANNING FOR THE INDO-CHINA COUNTRIES

Feb. 23, '98 - Mar. 25, '98, 31 participants

インドシナ地域総合開発計画管理セミナー J-97-03350

- 1. PURPOSE** This course is designed to provide the participants with a practical knowledge and wide-range perspectives for planning and management of regional development policies through the effective combination of case studies, lectures, discussions and field-trips regarding regional development in Hokkaido.
- 2. MAIN FEATURES OF CURRICULUM** The following subjects are covered in this course through lectures, discussion and study tours; (1) Development Administration (2) Outline of Development Plan (3) Analysis of Regional Economic Structure (4) City Planning (5) Financial System for Regional Development (6) Hokkaido Development Projects (7) Industrial Policy and Regional Promotion (8) Case Study (9) Presentation of Country Report (10) Preparation and Presentation of Study Report
- 3. QUALIFICATION OF APPLICANT** (1) a technical officer or a core administrative official who is engaged in the planning or implementation of national or regional development projects and policy (2) a university graduate or equivalent (3) over 25 and under 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS) (2) Hokkaido Development Bureau

### GENERAL MANAGEMENT SEMINAR FOR REGIONAL DEVELOPMENT AND PLANNING

Oct. 6, '97 - Dec. 7, '97, 7 participants

地域開発計画管理セミナー

J-97-03153

- 1. PURPOSE** This course is designed to provide the participants with a practical knowledge and wide-range perspectives for planning and management of regional development policies through the effective combination of case studies, lectures, discussions and field-trips regarding regional development in Hokkaido.
- 2. MAIN FEATURES OF CURRICULUM** Main themes of this course are as follows: (1) familiarity with basic policies and systems of regional development in Hokkaido (2) study of planning and managing regional development policies based on the case studies of relevant projects (3) knowledge of methods in planning and promoting regional development projects on a local level (4) basic knowledge of the relation between development planning and environmental problems
- 3. QUALIFICATION OF APPLICANT** (1) engaged in the planning or implementation of national or regional development projects and policy (2) university graduate or equivalent (3) over 25 and under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Hokkaido Development Agency

### PARTICIPATORY LOCAL SOCIAL DEVELOPMENT; THEORIES AND PRACTICES

Jan. 26, '98 - Mar. 29, '98, 10 participants

参加型地域社会開発の理論と実践 J-97-03352

- 1. PURPOSE** The purpose of the course is to provide governmental officials (especially, regional or local governmental officials) or non-governmental organizations' staffs with theories and practices of "Participatory Local Social Development" that aim to integrate people's participatory approach and particular characteristics of a local community / society system. It is expected to improve the effectiveness of local social development projects in developing countries.
- 2. MAIN FEATURES OF CURRICULUM** The course consists of lectures, group discussions, workshops and field trips as follows. The participants participate in workshops, group discussions and field trips, and so they learn as if they would experience cases. (1) people's participatory approach with analytical framework of local community / society system (2) introduction and analysis of sector-wise local social development projects (environmental protection, local welfare, poverty prevention, health care strategy and women in development) (3) the participants' presentation of case studies of local social development projects in developing countries (4) introduction of case studies of Japanese local social development projects and Japanese local activities (5) introduction of participatory project management method and its workshop (6) workshops to improve local social development projects in participant countries (7) field trips at sites of local projects and activities in Japan
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent with occupational experience of more than 3 years (2) governmental officials (especially, regional or local governmental officials) or non-governmental organizations' staffs (3) between twenty-eight (28) and forty-five (45) years of age
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) NIHON FUKUSHI University
- 5. REMARKS** A compulsory 25 hours Japanese language course will be continued prior to the technical training.

### ADVANCED COURSE FOR SENIOR POLICE ADMINISTRATORS

May 19, '97 - June 13, '97, 14 participants

上級警察幹部研修

J-97-03118

- 1. PURPOSE** This course is not a technical course for specific knowledge or skill in police service. Its purpose is rather to provide participants who are expected to be top leaders of respective countries' police authorities with opportunities for study of overall aspects on Japanese police service such as police organization and management, police activities and various investigative techniques, and for discussion of issues on respective countries' police affairs, thus to contribute to the further improvement of each country's police service and development of society.
- 2. MAIN FEATURES OF CURRICULUM** This course is designed to cover the following themes: (1) Japanese police and current situation of participating countries' police activities (a) organization, authority of police of Japan and presentation of papers prepared in advance by participant (2) overall aspects of police service (a) community policing (b) criminal investigation, identification (c) administration of the police organization (d) crisis management (3) problems and cue for the solutions (a) report making and presentation (participants are expected to select appropriate topic for the research paper individually) (4) international solidarity and cooperation (a) field observation of prefectural police
- 3. QUALIFICATION OF APPLICANT** (1) assistant director of division in the central police organization, or in an equivalent position, who is expected to be one of the top leaders in the central police organization in the future (approximately from Police Inspector to Superintendent at present) (2) aged between 27 and 40 years (3) have never been trained in Japan under the JICA technical cooperation scheme
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) International Research and Training Institute for Criminal Investigation (IRTCI), National Police Academy (3) Education and Training Division, Police Administration Bureau, National Police Agency (NPA)
- 5. REMARKS** (1) This course is organized for Asian Pacific regions and Oceanian countries. (2) A compulsory intensive Japanese language course will be conducted prior to the main training for two weeks. (3) Starting Japanese Fiscal Year 1996, this course will be conducted alternately with the course "Seminar for Senior Police Managers" every other year. This year (Japanese Fiscal Year 1996), this course will not be offered.

### SEMINAR IN CRIMINAL INVESTIGATION (ORGANIZED CRIME)

Jan. 12, '98 - Feb. 8, '98, 7 participants

国際鑑識セミナー(組織犯罪)

J-97-03222

- 1. PURPOSE** This seminar aims at meeting the requests from abroad to transfer the identification techniques by systematically introducing Japanese identification activities in criminal investigation including advanced science techniques and collection of evidence at a crime scene, through lectures and practical training with the emphasis on case studies.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on workshop practice at laboratory experiments and introduction of Japanese experience through: (1) lectures and observations for outlining the system of scientific criminal identification in Japan, (2) practical training in identification activities applicable to criminal investigation
- 3. QUALIFICATION OF APPLICANT** Senior police officer: (1) in charge of criminal identification or investigation in central police organization (2) in a position to give instruction in identification techniques acquired through this seminar (3) university or college graduate, or the equivalent (4) over 35 and under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) Identification Division, National Police Agency (3) International Research and Training Institute for Criminal Investigation, National Police Academy

### SEMINAR FOR SENIOR POLICE AND LAW ENFORCEMENT (LATIN AMERICAN COUNTRIES)

Nov. 13, '97 - Dec. 7, '97, 10 participants

上級警察幹部セミナー(中南米諸国)

J-97-03241

- 1. PURPOSE** The course is designed for those who are expected to be top leaders of police authorities in Latin American countries. The participants will study overall aspects of Japanese police services. They will also discuss recent police issues of participating countries.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the seminar: (1) international cooperation in criminal justice (2) drug and firearm offences (3) organized crime (4) criminal identification (5) community police activities
- 3. QUALIFICATION OF APPLICANT** (1) senior police officer or senior law enforcement officer, superintendent, major or at higher position (2) generalist with knowledge and practical experience in a broad aspect of police activities (3) over 35 and under 50 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) International Research and Training Institute for Criminal Investigation (IRTCI)

### SEMINAR ON INTERNATIONAL LAW ENFORCEMENT COOPERATION

Feb. 16, '98 - Feb. 27, '98, 15 participants

国際捜査共助セミナー

J-97-03340

- 1. PURPOSE** This purpose of this course is to level up the practical ability of police detectives of participating nations in order to activate and smooth the international law enforcement cooperation.
- 2. MAIN FEATURES OF CURRICULUM** It mainly covers: (1) present condition of international organizational crime such as small arms and drug (2) the method of a way of quick and proper cooperation (3) the framework of the international law enforcement cooperation.
- 3. QUALIFICATION OF APPLICANT** (1) presently engaged in international law enforcement with more than ten years occupational experience (2) high school graduate or equivalent (3) more than 35 years of age and less than 50 years of age.
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) National Police Agency

**LOCAL GOVERNMENT ADMINISTRATION AND PUBLIC SERVICES**

Apr. 21, '97 - July 13, '97, 9 participants

地方自治体行政

J-97-03192

- 1. PURPOSE** This course is intended to introduce the general framework of Japanese local governments and public services to officials of medium-scale local governments in participating countries. The course provides them with lectures in topics such as taxation system, educational administration, public welfare, health, medical care, environmental sanitation, etc.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following topics will be covered by lectures and study tours: (1) local government systems (2) administrative practice: environmental sanitation, water supply and sewage work, health and medical care, public welfare, education, agriculture and forestry, promotion of commerce and industry (3) system of parliamentary election
- 3. QUALIFICATION OF APPLICANT** (1) college graduate or equivalent (2) sectional or department head of administration sections responsible for overall functions of local governments (3) less than 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Ibaraki City Hall
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for two weeks.

**LOCAL GOVERNMENT ADMINISTRATION AND PUBLIC SERVICES (OCEANIAN COUNTRIES)**

May 12, '97 - July 28, '97, 5 participants

地方自治体行政実務(大洋州諸国)

J-97-03274

- 1. PURPOSE** This course provides the participants of medium-sized local governments in Oceanian countries with general information on Japanese local government administration, including systems of local autonomy, public service personnel and public finance. It also introduces specifics of policy-making, public services and personnel management in local public bodies. The participants are expected to acquire basic and practical knowledge on the framework of Japanese local government, so as to improve the social welfare, health care and education of each country.
- 2. MAIN FEATURES OF CURRICULUM** The following subjects are covered in this course through lectures, discussion and study tours: (1) local autonomy system (2) local public services and personnel system (3) local taxation and finance system (4) organization and function of local bodies (5) assembly and election system (6) case studies on the public services in Hiroshima Prefecture (education, industry promotion, regional planning, etc.)
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) administrative official with more than ten years of experience (3) section or department head in charge of local government administration (4) under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Local Public Service Training Institute, Hiroshima Prefectural Government (3) Hiroshima International Centre
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hour).

**IMMIGRATION CONTROL ADMINISTRATION (ASIAN COUNTRIES)**

Jan. 20, '98 - Feb. 23, '98, 8 participants

出入国管理行政(アジア諸国)

J-97-03256

- 1. PURPOSE** The purpose of this course is to provide participants with practical knowledge and training on immigration control administration introducing the Japanese system, in order to contribute to the development of immigration control and mechanism of regional network in participating countries of Asia.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, discussions and observation trips: (1) law and regulation system, control administration mechanism (2) inspection service (3) computer service (4) document identification service (5) theme study
- 3. QUALIFICATION OF APPLICANT** (1) immigration officer (2) over 10 years' experience (3) under 40 years of age (4) university graduate or equivalent
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) Ministry of Justice, Osaka Regional Immigration Bureau,

**ASOSAI WORKSHOP**

July 2, '97 - July 13, '98, 19 participants

ASOSAIワークショップ

J-97-03224

- 1. PURPOSE** The purpose of the workshop is as follows:  
(1) to provide forum for seeking strategies and methodologies on the following themes and sub-themes:  
Theme: The Role of SAIs in Promoting Efficient and Effective Public Administration through Performance Auditing  
Sub-theme 1: Performance Auditing: Concepts, Mandates, Methodologies and Practices, Reporting and Problems  
Sub-theme 2: The SAIs Performance Audit Report and its Utilization by Legislature and Executive  
Sub-theme 3: Audit of Social Services  
(2) to introduce theories and experiences of the Board of Audit of Japan, and  
(3) to prepare the draft recommendation to be adopted in the 7th ASOSAI Assembly in Indonesia in October 1997.
- 2. MAIN FEATURES OF CURRICULUM** The tentative programme includes plenary session on the sub-themes, sub-group discussions, and observation tours.
- 3. QUALIFICATION OF APPLICANT** be senior official of the Supreme Audit Institution of ASOSAI member country with sufficient knowledge and audit experience on all or one of the sub-themes of the workshop.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Board of Audit of Japan

### MANAGEMENT OF PUBLIC ADMINISTRATION (ASIAN AND AFRICAN COUNTRIES)

Feb. 17, '98 - Mar. 15, '98, 5 participants

行政管理(アジア・アフリカ諸国)

J-97-03227

- 1. PURPOSE** The purposes of this course are (1) to introduce Japan's experiences of public management, comprehensive coordination for policies to the participants, and (2) to assist them in considering ways for better public management through lectures, report-presentations, discussions and field trips.
- 2. MAIN FEATURES OF CURRICULUM** This seminar is programmed for participants to increase knowledge on public management. Subjects of lectures are as follows: (1) politics, public administration, justice (outline) (2) detail on public administration (budget, audit, personnel system, local government system) (3) management of public administration (public administrative reform, management of organization structure & the number of staff, administrative inspection (counseling) system)
- 3. QUALIFICATION OF APPLICANT** (1) a national government official having an occupational experience in the field of public management, (2) university graduate or equivalent, (3) over 25 but under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA, (2) Management and Coordination Agency (MCA)

### SEMINAR ON TRANSITION TO A MARKET ECONOMY

May 8, '97 - June 7, '97, 5 participants

市場経済化促進セミナー

J-97-03183

- 1. PURPOSE** (1) to introduce Japan's experiences of economic development policies to the participants, and (2) to identify the appropriate models of economic transition for the respective countries through lectures, report-presentations, discussions and field trips.
- 2. MAIN FEATURES OF CURRICULUM** This seminar is programmed for participants to increase knowledge on various patterns of economic development and policies in the transition processes. Subjects of lectures are as follows: (1) industrial policy (2) monetary policy (3) human resource development (4) industrial relations and labour practices in Japan, etc.
- 3. QUALIFICATION OF APPLICANT** (1) those who have an academic background in economics or those having a proper experiences in and knowledge on economic policy and planning (2) between 30 and 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Institute for International Cooperation (IFIC), JICA (2) Economic Planning Agency (EPA)

### ANTI-MONOPOLY ACT AND COMPETITION POLICY

Aug. 25, '97 - Sep. 20, '97, 7 participants

独占禁止法と競争政策

J-97-03230

- 1. PURPOSE** This course is intended for leading members of the authorities of anti-monopoly act in participating countries. The participants will learn about Japan's Anti-Monopoly Act, its implementation and application and related legislation, with the aim of establishing or revising the competition act and its effective management in their countries.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures, discussion and observation. It mainly covers: (1) the legislation of Japan's Anti-Monopoly Act and its implementation, (2) case studies of the application of the Anti Monopoly Act (3) comparative studies of the Anti-Monopoly Act in participating countries
- 3. QUALIFICATION OF APPLICANT** (1) university/college graduate or equivalent (2) administrators of the authorities of Anti-Monopoly Act or the authorities drafting competition act, and, (3) have more than 2 years' occupational experience in the field.
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) Fair Trade Commission.

### FINANCIAL INDUSTRY INFORMATION SYSTEMS

Jan. 27, '98 - Feb. 18, '98, 7 participants

金融情報システム

J-97-03204

- 1. PURPOSE** In accordance with the rapid economic growth and development shown in developing countries, it is in urgent need to establish or enhance firm infrastructure for financial information systems for further development of the country. This course aims at providing the participants with the knowledge and techniques to ensure stable and efficient financial information systems.
- 2. MAIN FEATURES OF CURRICULUM** To enhance one's capabilities to formulate monetary information systems from the theoretical and practical point of view, the following subjects are referred: (1) financial structure of Japan (2) Japan's trend of financial information systems (3) security measures (4) outline of system audit (5) current issues on financial information systems.
- 3. QUALIFICATION OF APPLICANT** (1) be senior manager in designing information systems in major financial institutions and have more than 10 years' business career/or senior officials of the governments or central banks who are in charge supervision of the financial institutions (2) over 35 and under 45 years of age (3) be university graduates or who have equivalent knowledge and experience.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) The Center for Financial Industry Information Systems (Japan).

### STOCK EXCHANGE SEMINAR

Feb. 17, '98 - Mar. 12, '98, 7 participants

証券取引所セミナー

J-97-03257

- 1. PURPOSE** To provide opportunity to acquire basic knowledge of the Japanese Stock Exchange, in order to help the participants contribute to the development of capital markets of their countries.
- 2. MAIN FEATURES OF CURRICULUM** This seminar is aimed mainly at furnishing participants with general, basic information on the Japanese securities market. The program of the seminar is as follows: (1) outline of stock exchange (outline of Tokyo Stock Exchange, law, taxation, public administration) (2) detail of stock exchange (membership system, listing system, trading system, market surveillance and compliance system, clearing and settlement system)
- 3. QUALIFICATION OF APPLICANT** (1) staff members of stock exchanges or the competent regulatory authorities of securities markets, (2) between 25 and 35 years of age.
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Tokyo Stock Exchange (TSE)

### INTERNATIONAL CIVIL AND COMMERCIAL LAW (ASIAN COUNTRIES)

Jan. 26, '98 - Mar. 8, '98, 9 participants

国際民商事法研修(アジア諸国)

J-97-03284

- 1. PURPOSE** The purpose of this course is to discuss reasons and solutions for various problems which the civil judiciary faces in respective countries; and give lectures on basic economic transaction laws in Japan (especially the ones which are indispensable in the transition to market-oriented economy and some topics needed in preparation of its operation system), and thereby to contribute to the improvement of strategies for prevention and solution of disputes concerning economic transaction.
- 2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course: (1) Japanese law system (2) structure and role of the Ministry of Justice (3) basic legislation of civil and commercial affairs (4) monitoring committee of stock exchange (5) International private law, and (6) court system
- 3. QUALIFICATION OF APPLICANT** (1) officials in department of justice in respective government, public prosecutors, registrars, judges (2) have more than 8 years' experience (3) under 50 years of age (4) university graduates from faculty of law (5) officials who are engaged in jobs relevant to the main topic of the course or middle-class executives with such experience who have good command of English (Applicants with judicial license are given priority.)
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Research and Training Institute, Ministry of Justice

### WATER QUALITY MANAGEMENT

Sep. 2, '97 - Oct. 24, '97, 10 participants

水質環境管理

J-97-03239

- 1. PURPOSE** The main purpose of the course is to provide technical officials with professional knowledge and techniques as well as comprehensive planning perspectives for water quality management. The course is also intended to introduce Japanese experience and the current conditions in the field of water quality management, to provide the participants with principles and approaches for solving problems, and to enhance participants' capability to contribute to environmentally sound socio-economic development and human welfare in their home countries.
- 2. MAIN FEATURES OF CURRICULUM** The course is focused on the introduction of Japanese administration in water pollution control and the exchange of information among participants. Therefore the course is conducted mainly in the form of lectures, discussions, and observation tours. The following major subjects will be covered in the course: (1) water quality management in Japan (2) effects of water pollution on water use and its countermeasures (3) planning and implementation of water quality management (4) technology for waste and wastewater management
- 3. QUALIFICATION OF APPLICANT** (1) technical officials presently in charge of water pollution control administration including domestic and industrial wastewater management in central or local governments with three or more years of experience in this field, (2) university graduates or possess equivalent technical qualifications in this field, (3) not more than 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Water Quality Bureau, Environment Agency (3) Japan Society on Water Environment

### PLANNING ON REGIONAL ENVIRONMENTAL PRESERVATION

Sep. 1, '97 - Nov. 19, '97, 5 participants

地域環境保全計画

J-97-03260

- 1. PURPOSE** The purpose of this course is to provide technical officials and researchers with comprehensive knowledge and techniques of measuring and analyzing environmental aspects such as air and water quality which is indispensable to the understanding of basic environmental factors. Consequently, the participants are expected to study the method of region-wise environmental management and thereby to contribute to the formulation of various measures for environmental management and preservation.
- 2. MAIN FEATURES OF CURRICULUM** This course mainly covers the following themes: (1) environmental legislation system (2) environmental impact assessment (3) pollution control plans, environmental management plans and other plans (4) regional activities that address global environmental problems (5) environmental measuring and analyzing pollution-related technology (6) environmental monitoring (7) measures to reduce the burdens of environmental pollution
- 3. QUALIFICATION OF APPLICANT** (1) technical official and researcher engaged in the environmental administration of the national and local government or related public organization (2) university graduate in science and engineering or equivalent (3) have more than 5 years' experience in the field of environmental preservation (4) not more than 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Hokkaido Environmental Science Research Center

### ENVIRONMENT MANAGEMENT SEMINAR (MIDDLE EAST, AFRICAN COUNTRIES)

June 9, '97 - July 20, '97, 8 participants

環境管理セミナー(中近東・アフリカ地域) J-97-03265

- 1. PURPOSE** In developing countries, countermeasures to industrial pollution and urban-life pollution from the viewpoint of prevention of global warming are to be promoted. The introduction of appropriate technology for sustainable development is also required.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the following major subjects will be covered through lectures, discussions and observation trips: (1) countermeasure to environmental problem and its history (2) environmental law system in Japan (3) establishment of environmental standard and discharge standard (4) monitoring of generation course (5) establishment of environmental management plan and regional pollution prevention plan (6) environmental assessment (7) sustainable development (8) preservation of global environment
- 3. QUALIFICATION OF APPLICANT** (1) middle-class officials in charge of planning project in the field of environment (2) have more than 10 years' experience (3) between 35 and 45 years of age (4) university graduates
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre, JICA, (2) Environment and Public Health Bureau, Osaka City Government

### TECHNOLOGY FOR INDUSTRIAL EXHAUST GAS TREATMENT AND ENERGY SAVING

May 12, '97 - June 29, '97, 8 participants

産業排ガス処理技術及び省エネルギー技術 J-97-03323

- 1. PURPOSE** (1) teach current theories, and introduce information and technology concerning industrial exhaust gas treatment and industrial energy utilization, (2) enhance ability to plan, execute and evaluate projects concerned, (3) acquire methods for solving the problems of control and treatment of industrial exhaust gas, and (4) provide participants with opportunities to exchange information about how to deal with problems concerning technology for industrial exhaust gas treatment and energy saving.
- 2. MAIN FEATURES OF CURRICULUM** This course will be conducted in the form of lecture/discussion, practice and observations of the organizations concerned. The main themes are: (1) general knowledge of historical background and present status of Yokkaichi city (2) history of environmental pollution in Yokkaichi and measures taken by government and industries (3) present status of environmental assessment and cooperation between administration and industry (4) information on the current trend in basic and advanced techniques and case study in operation control and exhaust gas treatment, and energy and resource saving and industrial waste treatment (5) exercise for measuring and monitoring of environmental pollution
- 3. QUALIFICATION OF APPLICANT** (1) university graduate or equivalent (2) presently engaged in this field at industries, research institutes or vocational institutes (3) have practical experience of more than 5 years in the field of industrial policy planning, business management of pollution control technology (4) under 45 years of age
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) International Center for Environmental Technology Transfer (ICETT)

### SAVING AND RE-USING INDUSTRIAL WATER

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

廃水の再生利用 J-97-03074

- 1. PURPOSE** Along with economic development, especially in the industrial sector, the emphasis should be placed upon saving water resources and prevention of water pollution. Thereby, the course aims at introducing the participants the effective countermeasures and new technology useful for the waste water management.
- 2. MAIN FEATURES OF CURRICULUM** The course covers following subjects; (1) outline of Japan's waste water management (2) laws and regulations concerning environmental protection (3) technology on water treatment and re-use, desalination, purification, building drainage sewage treatment (4) visits to research laboratories related plants and facilities for water treatment
- 3. QUALIFICATION OF APPLICANT** (1) university graduate majoring engineering, or equivalent (2) have more than five year practical experience in the waste water management (3) engaged in government office or public corporation (4) between 30 and 50 years of age
- 4. TRAINING INSTITUTIONS** (1) Tokyo International Centre (TIC), JICA (2) Water Re-Use Promotion Center (3) Ministry of International Trade and Industry
- 5. REMARKS** This course is offered alternately with the course "Industrial Solid Waste Recycling Technology". This year (in Japanese Fiscal Year 1996), this course will not be offered.

### MANAGEMENT OF INDUSTRIAL EFFLUENT AND WASTE

Jan. 19, '98 - Mar. 2, '98, 8 participants

産業系廃水及び産業廃棄物処理対策 J-97-03188

- 1. PURPOSE** The course is designed to contribute to upgrade knowledge and techniques of the participants in the field of the management of industrial effluent and waste through lectures and observations, so as to enable them to contribute to the promotion of the most effective and appropriate measures for the environmental protection.
- 2. MAIN FEATURES OF CURRICULUM** The objective of the technical sessions is to understand the balance between sustainable development and environmental conservation, and will consist of six sessions: (1) background and history of Japan's environmental policies and strategies, (2) environmental conservation in lakes, (3) industrial effluent management, (4) waste disposal management, (5) perspective strategies for environmental conservation, environmental monitoring system and impact assessment, and (6) review and discussion.
- 3. QUALIFICATION OF APPLICANT** (1) University graduates or possess equivalent knowledge and/or professional experience, (2) academic staff, administrative officers, professional engineers with more than 5 years experience of practical experience in the following work: (a) environmental monitoring stations, (b) water treatment industries, (c) technical engineers of factories, especially water pollution management and/or waste disposal management, (3) under 45 years of age.
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) International Center for Environmental Technology Transfer (ICETT)

### ENVIRONMENTAL AND SAFETY TECHNOLOGY IN PETROCHEMICAL INDUSTRIES

Jan. 12, '98 - Mar. 6, '98, 10 participants

石油化学工業における環境保安技術 J-97-03249

- 1. PURPOSE** The course is implemented with emphasis on the technology and countermeasure of environmental conservation and safety in petrochemical industry to contribute to the improvement of environment in participating countries.
- 2. MAIN FEATURES OF CURRICULUM** A series of lectures introduce (1) outline of the industry, (2) environmental countermeasures by administration (3) treatment technology and environmental protection measure by industry (4) disaster prevention countermeasure by industry (5) regional development and environmental conservation.
- 3. QUALIFICATION OF APPLICANT** (1) University graduates or possess equivalent knowledge and/or professional engineers, (2) presently holding senior positions involving high responsibility in the field of petrochemical industry or its development programme (3) under 45 years of age.
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA, (2) International Center for Environmental Technology Transfer (ICETT).
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

### WETLAND CONSERVATION AND PROTECTION OF MIGRATORY BIRDS

Sep. 30, '97 - Nov. 2, '97, 5 participants

湿地及び渡り鳥保全 J-97-03231

- 1. PURPOSE** The purpose of the course is to enhance professional knowledge and techniques required for middle-class government technical officials in participating countries who are in charge of the conservation of wetlands, especially protection of migratory birds. The course also intends to contribute to the promotion of international cooperative projects conforming to the Ramsar Convention, in pursuit of site-specific conservation, management, and wise use of wetlands and protection of migratory birds.
- 2. MAIN FEATURES OF CURRICULUM** The curriculum consists of the following five parts, (1) lectures: (a) historical background of nature conservation in Japan, (b) administration of nature conservation, including administration by local government in Japan, (c) wetland research techniques, (2) presentation and discussions: (a) presentation of Country Reports, (b) group discussions on the promotion of conservation and wise use of wetlands and protection of migratory birds, (3) research work: (a) survey on vegetation of wetlands, (b) techniques for bird-banding, (4) management work: (a) restoration of reed-beds, (5) field trip and study visit: (a) function of purification of reed-beds, (b) ecotourism activities in wetlands, (c) incubation activities of fish of wetlands, etc.
- 3. QUALIFICATION OF APPLICANT** (1) technical officials presently in charge of nature conservation and/or management administration in central or local government with 3 or more years of experience in this field, (2) university graduates or possess equivalent technical qualifications in this field, (3) not more than 45 years of age.
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Obihiro (HICO), JICA (2) Environment Agency (including National Park Office) (3) Kushiro International Wetland Center

### POLLUTION CONTROL OF COAL-FIRED THERMAL POWER PLANTS

June 2, '97 - July 28, '97, 5 participants

石炭火力発電公害防止 J-97-03271

- 1. PURPOSE** The purpose of this course is for participants to learn techniques for collection, measurement and analysis of exhaust gas emitted from a coal-fired thermal power plant and ambient air. Participants are expected to acquire the knowledge and technology required for air pollution control through Japanese experience and methods of the exhaust gas monitoring system and other pollution countermeasures.
- 2. MAIN FEATURES OF CURRICULUM** The curriculum consists of lectures, practices and observations in the proportion of 2:1:1. The main subjects are; (1) introduction of administrative regulations and guidance of pollution control (2) techniques of collection, measurement and analysis of air (3) a method to remove soot and dust generated by coal combustion (4) treatment technology on sulfur oxides, nitrogen oxides, etc. (5) visits to plants and related facilities.
- 3. QUALIFICATION OF APPLICANT** (1) university graduates or equivalent (2) engineers engaged in pollution control at a coal-fired thermal power plant or government administrators in charge of pollution control of coal-fired thermal power plant (3) have more than three years of practical experience (4) be between 25 and 40 years of age.
- 4. TRAINING INSTITUTIONS** (1) Nagoya International Training Centre (NITC), JICA (2) Environmental Affairs Bureau, City of Nagoya (3) Chubu Electric Power Co., Inc.
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for one week (25 hours).

### CONSERVATION AND SUSTAINABLE MANAGEMENT OF CORAL REEFS

May 15, '97 - July 16, '97, 5 participants

サンゴ礁保全 J-97-03240

- 1. PURPOSE** This course is designed to contribute to the promotion of coral reefs conservation. The purpose of the course is to provide administrative and/or technical officials in charge of conservation of coral reefs of tropic and sub-tropic countries with the knowledge and skills on research and planning methods and practical measures required for the promotion of sustainable management of coral reefs.
- 2. MAIN FEATURES OF CURRICULUM** This course is focused on the introduction of Japanese administration in nature conservation especially of coral reefs, national parks management and information exchange among participants. The course will be conducted in the form of lectures, practices, discussions and observation tours. The following major subjects will be covered in the course: (1) outline of environment conservation system and activity in Japan, (2) conservation and sustainable management of coral reefs ecosystem, (3) methods of research and conservation of coral reefs area, (4) techniques to produce educational materials.
- 3. QUALIFICATION OF APPLICANT** (1) be administrative and/or technical official presently engaged in coral reefs conservation and/or management administration in a central or local government or its attached organization, with practical experience of 5 or more years, (2) be university graduate or equivalent, (3) be skilled in snorkeling, (4) be not more than 40 years of age.
- 4. TRAINING INSTITUTIONS** (1) Okinawa International Centre (OIC), JICA (2) Environment Agency (3) Yaeyama Marine Park Research Station, Marine Parks Center of Japan



## HEAVY METAL POLLUTION CONTROL

May 12, '97 - July 27, '97, 6 participants

有害金属汚染対策

J-97-03304

**1. PURPOSE** The purpose of this course is to make participants understand the importance of harmful metal pollution measures through examples of pollution caused by harmful metal (i.e., lead in exhaust gas from automobiles, Minamata disease, and Itai-itai disease). The participants will master techniques to control source of pollutant techniques through practice and the analysis method of harmful metal in source of pollutant, the air industrial wastewater, river water, soil, and plants, and thereby to contribute to establish pollution measures in respective countries.

**2. MAIN FEATURES OF CURRICULUM** The following major subjects will be covered in the course; (1) toxicity evaluation of toxic substance (2) case study on harmful metal pollution and its influence on plants and health (3) standard of harmful metal in the air, water, soil, and food and its restriction by laws (4) harmful metal analysis and analytic practice on the air, water, wastes, soil, and food etc. (5) influence on plants and health such as growth disorder caused by harmful metal (6) recovery strategy of polluted soil, etc., and (7) treatment technology of toxic substance

**3. QUALIFICATION OF APPLICANT** (1) middle-class technical officials or researchers in the field of environment (2) have more than 3 years' experience (3) between 30 and 40 years of age (4) university graduate and equivalent (5) have experience in environmental analysis

**4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA (2) Environment and Public Health Bureau (3) Osaka City Government

## DOMESTIC WASTE WATER MANAGEMENT USING SEWAGE SYSTEM AND SEPTIC TANK (JOKASO)

Aug. 25, '97 - Nov. 19, '98, 12 participants

下水道と浄化槽などによる生活排水処理対策 J-97-03347

**1. PURPOSE** The purpose of this course is to learn planning skill of domestic waste water management based on future population estimate, which contributes to the improvement of environmental conservation in a respective country.

**2. MAIN FEATURES OF CURRICULUM** It mainly covers: (1) the physical and chemical measurement of water quality (2) the history of Japanese domestic waste water treatment and outline of countermeasures taken by the central or local government (3) the theory and practical treatment method (4) zoning of a collective treatment and a house scale treatment.

**3. QUALIFICATION OF APPLICANT** (1) presently engaged in planning of domestic waste water treatment with more than three years occupational experience (2) university graduate or equivalent (3) not more than 40 years of age.

**4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Higashi Hiroshima City

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

## BIOPRODUCTION AND ENVIRONMENTAL MANAGEMENT IN SEMI-ENCLOSED SEA

Mar. 23, '98 - July 15, '98, 8 participants

半閉鎖水域における生物生産と環境保全 J-97-03345

**1. PURPOSE** The purpose of this course is to learn how to control the natural environment and eco-system by producing the bio-organisms based on recognition of the instability of the eco-system. The participants will be expected to plan a suitable system for the production of marine bio-organisms which can be applicable to their respective country.

**2. MAIN FEATURES OF CURRICULUM** It mainly covers: (1) the present condition of the Inland Sea of Japan, especially in biomass, biological phase, eco-system, water quality and environmental condition (2) the theory and method of marine farm management while protecting environmental condition (3) the method of making up their own marine ranch program and environmental management for their countries.

**3. QUALIFICATION OF APPLICANT** (1) presently engaged in either planning, management or research of fisheries or marine environment with more than five years occupational experience (2) university graduate or equivalent (3) not more than 40 years of age.

**4. TRAINING INSTITUTIONS** (1) Chugoku International Centre (CIC), JICA (2) Faculty of Applied Biological Science, Hiroshima University

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

## TECHNOLOGY FOR SUSTAINABLE USE OF MARINE MICROBES AND MARINE CHEMICALS

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

海洋微生物・海洋天然化学物質利用技術 J-97-03343

**1. PURPOSE** The purpose of this course is to contribute to upgrading knowledge and techniques of researchers in the field of sustainable utilization of marine microorganisms and natural substances existing in Oceania and Southeast Asia

**2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on lectures and laboratory work, concerning marine biotechnologies. The curriculum consists of the following subject: (1) Outline of research of symbiotic phenomena etc. in marine ecosystems (2) Research in technologies for utilization of microalgae and other marine microorganisms (3) Research in finding and utilizing natural substances contained in sponges, soft coral, and other seabed-inhabiting organisms

**3. QUALIFICATION OF APPLICANT** (1) University graduates. Master's or doctoral degree is preferable (2) Researchers, technical administrators belonging to national research institute or universities (3) between 25 and 40 years of age

**4. TRAINING INSTITUTIONS** (1) Tohoku Branch, JICA (2) Marine Biotechnology Institute Co., Ltd.

## MONITORING AND CONTROL TECHNOLOGY OF ACID DEPOSITION

Jan. 12, '98 - Mar. 22, '98, 8 participants

酸性雨のモニタリングと対策技術

J-97-03339

- 1. PURPOSE** The purpose of the course is to provide the officials in administrative bodies which are engaged in environmental management such as monitoring of acid deposition and reduction of cause substance with the following: (1) Technical knowledge related to environmental management strategies which would give the participants opportunities to examine possible applicabilities of these strategies to acid deposition in their respective countries (2) An opportunity in which the participants can discuss with Japanese expert monitoring and measure techniques of acid deposition, and also exchange views and opinions.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on introduction of comprehensive knowledge on the following subjects through lecture, practice and field trip. (1) Outline of Environmental Problem (2) Impacts of Acid Deposition (3) Generation mechanism of Acid Deposition (4) Monitoring of Acid Deposition (5) Measures of Acid Deposition (6) Quality Assurance/Quality Control
- 3. QUALIFICATION OF APPLICANT** (1) Leading officers in administrative bodies engaged in the field of environmental management with an experience from more than 3 years to less than 10 years (2) University graduates and/or those who have equivalent practical experience (3) Those who have an elementary knowledge of data analysis by personal computer (4) Less than 35 years of age
- 4. TRAINING INSTITUTIONS** (1) Hyogo International Centre (HIC), JICA (2) Environment Bureau, Kobe Prefecture
- 5. REMARKS** A compulsory intensive Japanese language course will be conducted prior to the technical training for several days.

## WATERWORKS ENGINEERING FOR COLD REGIONS

Oct. 6, '97 - Dec. 7, '97, 8 participants

寒冷地水道技術者養成

J-97-03252

- 1. PURPOSE** Focused on the technical problems of waterworks caused by climatic characteristics in cold regions, this course is designed to train technicians by providing basic knowledge and comprehensive techniques of water-supply system, integrated planning and designing methods of waterworks, and techniques for operation/maintenance of waterworks facilities.
- 2. MAIN FEATURES OF CURRICULUM** This course is emphasizes on technical exercise: (1) water leakage prevention (2) water quality control (3) water treatment facilities (4) water distribution planning and pipe network (5) design and construction management (6) water service installations
- 3. QUALIFICATION OF APPLICANT** (1) technical official in charge of waterworks in central or local government, or in public bodies with more than three years of practical experience (2) university graduate or equivalent (3) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Sapporo Waterworks Bureau

## WATERWORKS ENGINEERING

June 16, '97 - Sep. 13, '97, 8 participants

水道技術者養成

J-97-03186

- 1. PURPOSE** The course is designed to provide participants with basic knowledge and comprehensive technology regarding overall water supply, including water resources, intake, treatment, and distribution facilities, and water service installations. It also provides information on the integrated methodology of planning and technology required for operation and maintenance. The final goal of the course is to contribute to improving and promoting the water supply in developing countries, ensuring a safe and potable drinking water supply for communities.
- 2. MAIN FEATURES OF CURRICULUM** In this course, the emphasis is put on technical exercises. It mainly deals with: (1) water leak prevention (2) water quality control (3) water treatment facilities (4) water distribution planning and pipe network (5) design and construction management (6) water service installations
- 3. QUALIFICATION OF APPLICANT** (1) a university graduate or a person who has equivalent technical qualifications in this field, and has more than three years of practical experience, (2) a technical official in charge of waterworks in central or provincial government, or in local bodies, (3) under 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Hokkaido International Centre, Sapporo (HICS), JICA (2) Sapporo Waterworks Bureau

## OPERATION AND MAINTENANCE OF URBAN WATER SUPPLY SYSTEM

May 19, '97 - Aug. 3, '97, 7 participants

都市上水道維持管理

J-97-03217

- 1. PURPOSE** This course is intended for experts and administrators who are expected to take responsible roles in the improvement of main waterworks in their respective countries where deterioration of water sources and the lack of water supply due to the increase of population in urban areas is a serious problem. The purpose of this course is to provide participants with broad knowledge such as the strategy for general maintenance and management of facilities, establishment of maintenance system, water purification technology, etc., while making effective use of existing facilities.
- 2. MAIN FEATURES OF CURRICULUM** This course is conducted mainly by practice and discussion, and report making is requested at the end of each session. Main contents are: (1) introduction of waterworks, (2) operation and maintenance of water supply facilities, (3) water purification technology, (4) planning of urban water supplying system
- 3. QUALIFICATION OF APPLICANT** (1) inspectors, chiefs, or superintendents of urban water supply schemes/authorities using surface water resources, (2) have experience of at least 3 years in the above mentioned field, (3) between 28 and 40 years of age
- 4. TRAINING INSTITUTIONS** (1) Osaka International Centre (OSIC), JICA, (2) Osaka Municipal Waterworks Bureau, (3) Osaka International House Foundation.