

2. AGROBIOTECHNOLOGY IN THE AGE OF CLIMATE CHANGE

1. PURPOSE OF THE COURSE

The purpose of this course is to develop biotechnology experts, who create the applied techniques for food, agriculture and stock farming, fisheries, forest, and medical care and eventually the course would contribute to improvement of agriculture productivity through a research project organized by these experts. This technology is especially useful in the age of climate change.

2. TRAINING PROGRAM

(1) General Orientation and Japanese Language Program

The General Orientation and Japanese Program are organized at the Osaka International Centre(OSIC) of JICA prior to the technical training, to assist participants in understanding Japan and adjusting themselves to life in Japan, and thus to facilitate effective training.

(2) Technical Training

- 1) Role of biotechnology in agriculture
 - a. Outline of the difference between conventional breeding and genetic engineering
 - b. Overview of the biotechnology industry
- 2) Biotechnology in plant breeding
 - a. General steps in recombinant DNA technology
 - b. Landmark discoveries in the application of molecular biology
 - c. Introduction to genetic mapping
 - d. Gene transfer
 - e. Plant genomics
- 3) Issues in the application of biotechnology in plant breeding
 - a. Patents in plant breeding and biotechnology
 - b. Protecting plant varieties

3. NUMBER OF PARTICIPANTS TO BE ENROLLED

Maximum 2 persons

4. TRAINING DURATION From March 7, 2011 to October 29, 2011

(1) Arrival in Japan

March 7, 2011

(2) Briefing

March 8, 2011

(3) General Orientation

From March 19, 2011 to March 11, 2011

(4) Japanese Language Program

From March 14, 2011 to May 2, 2011

(5) Technical Training

From May 6, 2011 to October 28, 2011

(6) Departure from Japan

October 29, 2011

5. TRAINING INSTITUTION

(1)General Orientation / Japanese Language Program

JICA Osaka

No.25-1, Nishi-Toyokawa-cho, Ibaraki-shi, Osaka 567-0058, Japan

Tel: +81(*)-72(**)-641-6900 Fax: +81(*)-72(**)-641-6910

URL: <http://www.jica.go.jp/english/contact/domestic/>

(2)Technical Training

JICA Osaka

No.25-1, Nishi-Toyokawa-cho, Ibaraki-shi, Osaka 567-0058, Japan

Tel: +81(*)-72(**)-641-6900 Fax: +81(*)-72(**)-641-6910

URL: <http://www.jica.go.jp/english/contact/domestic/>

Osaka Prefecture University

1-1 Gakuen-cho, Nakaku, Sakai, Osaka 599-8531, Japan

URL: <http://www.osakafu-u.ac.jp/english/index.html>

(*) country code of Japan (**) area code

6. CONDITION OF APPLICATION

(1)Applicants must be experts working in either governmental organization, university, research Institute or business enterprise which take active roles in the area of agro biotechnology.

(2)Applicants must be university graduate or equivalent.

(3)Applicants must have an adequate ability in English conversation to be able to perform satisfactorily in the course.

(4)Applicants must be of sound mind and body. (pregnant women can not be accepted.)

(5)Applicants must not be presently serving in the military.

(6)Applicants must attach a research report (summary) together with the application form.

Note: Applicants who do not observe above conditions may be subject to cancel.