# Post-Doctoral Position at NARO-National Agriculture and Food Research Organization (Japan):

# Control mechanism for the decomposition of new biodegradable plastic polymers in cultivated soils using a semi-automatic CO<sub>2</sub> measuring system: laboratory approach

Applications are invited for a Post-Doctoral fellowship/scholarship at Soil Biogeochemistry and Modeling Unit, Division of Climate Change, Institute for Agro-Environmental Sciences, NARO, Japan (Tsukuba City, Ibaraki Prefecture). The position is available from 1 September 2019 or later. Contract can be renewed annually, based on the previous year activities and achievement, up to the end of the project at 31st March, 2022.

### Title:

Control mechanism for the decomposition of new biodegradable plastic polymers in cultivated soils using a semi-automatic CO<sub>2</sub> measuring system: laboratory approach

### Research area and project description:

The position will be working for the working group "Developing a semi-automatic CO2 measuring system for evaluating the biodegradability of biodegradable plastics (BPs) in cultivated soils in laboratory. This is a part of the project "Development and demonstration program for the implementation of agricultural mulch films made by new biodegradable plastics derived from biomass". The position should response for two missions: (1) Developing a semi-automatic CO<sub>2</sub> measuring system using EGM-5 (PP system, USA) attached to chambers designed for the BPs decomposition; and (2) Evaluating the biodegradability of new BPs developed by a Japanese BP maker.

# Qualifications and specific competences:

Candidates should have a PhD's degree in environmental science, agronomy, soil ecology or any relevant field of study. Experience in relevant laboratory and/or fieldwork and a basic knowledge on soil respiration and greenhouse gas emissions are appreciated. The experience on measuring soil respiration with EGM-series Portable CO<sub>2</sub> Gas Analyzer and published the results in a top-name scientific paper is especially welcome. A flair for planning and statistical treatment of data is also highly relevant. The candidates should have good command of oral and written English, be able to write scientific publications, be independent, and should be enthusiastic about working in an interdisciplinary international academic environment.

# Place of employment:

The place of employment is Soil Biogeochemistry and Modeling Unit, Division of Climate Change, Institute for Argo-Environmental Sciences, NARO-National Agriculture and Food

Research Organization. The place of work is 3-1-3 Kannondai, Tsukuba City, Ibaraki Prefecture, Japan.

## The conditions of employment:

- <u>The period of contract:</u> 1 September 2019 to 1 March 2020 (※ The contract can be renewed annually, based on the previous year activities and achievement, up to the end of the project at 31st March, 2022. The starting date could be later than 1st September if there is any reason due to visa application issue.)
- <u>Day of duty:</u> Five days a week (Monday to Friday)
- Working hours: 7 hours and 45 minutes per day (8:30 to 17:15)
- <u>Break time:</u> 1 hour per day (12:00 to 13:00)
- Holidays: Saturday, Sunday, Public holidays, New Year (29 December to 1 Janury)
- <u>Others:</u> Details based on rules of employment at NARO.

#### The payment and insurance:

- <u>Salary:</u> ¥ 15,291 JPY per day
- <u>Insurances:</u> Social insurance, Employment insurance, Labor accident insurance.
- <u>Commutation allowances</u>: Pay separately based on rule of NARO (Up limits: ¥ 55,000 JPY)
- <u>Date of payment:</u> Every 16<sup>th</sup> of the month
- <u>Others:</u> No raise in pay, No bonus, No retirement allowance.

#### Applicants seeking further information on research project are invited to contact:

Dr. Ayaka W. Kishimoto Soil Biogeochemistry and Modeling Unit, Division of Climate Change, Institute for Argo-Environmental Sciences, NARO Tel: +81-29-838-8194 or +81-29-838-7944 Email: mow"at"affrc.go.jp (Please change "at" to @)

#### How to apply:

Please fill in the following information (no special requirement for the format). Please note that all information in the application must be in English or Japanese.

- <u>Curriculum Vitae</u> (a picture and email address are required)
- <u>A copy of the Certification of PhD's degree</u>
- <u>Publications</u> (If candidates have published a scientific paper (first author) on measuring soil respiration with EGM-series Portable CO<sub>2</sub> Gas Analyzer, please include <u>a reprint</u> or pdf file).
- <u>Outline of research achievements and results</u> (max. A4 1 page)

#### Deadline:

All application materials should be arrived before the midnight (Tokyo time) of **1st August**, **2019**. Applicants applying from outside of Japan is highly recommended to send the application materials with EMS and at the same time, email to the bellowed contacts. Please indicate "Application material for the Soil Unit post-doctoral position" at EMS and email title.

## Contacts:

Ms. Y. Takagi Institute for Agro-Environmental Sciences, NARO 3-1-3 Kannondai, Tsukuba City, Ibaraki 305-8604, Japan Tel: +81-29-838-8157 Email: takayu"at"affrc.go.jp (Please change "at" to @)

# Assessment procedures:

- <u>Primary selection</u> (Document screening): Applicants who passed the primary selection will be informed the date of interview directly via email.
- <u>Second selection</u> (Interview screening): The results of second selection will be informed to the applicant directly.
- ♦ Please note that all application materials will be not returned to the applicant.
- $\diamond$  The personal information will be only used for this application.
- ♦ Applicants should pay the travel fee for attending interview by themselves. Applicants applying from outside Japan could ask for interview via Skype.