

# Events

## The First International Symposium on Cool Earth via Microbes in Agriculture

Co-organized by NEDO, Tohoku University, and NARO

**COOL EARTH VIA MICROBES IN AGRICULTURE**  
**March 1st, 2021 | Digital**

**The 1st International Kick-off Symposium**

**Logos:** MOONSHOT, EJP SOIL, NEDO, INRAE, NARO, TOHOKU UNIVERSITY

**Speakers and Topics:**

Speaker	Affiliation	Topic
Kiwamu Minamisawa	Tohoku University, Japan	Mitigation of GHG by optimizing N and C cycles
Laurent Philippot	INRAE, France	Microorganisms acting as a N <sub>2</sub> O sink in soil
Xavier Le Roux	INRAE, France	Ecological niche theory for inoculant
Claire Chenu	INRAE, France	Towards climate-smart and sustainable agriculture
Marta Goberna	INIA, Spain	Trade-offs between C, GHG, and nutrient losses
Akihiko Okada	TSC, NEDO, Japan	Rising to the challenge of N <sub>2</sub> O suppression
Hiroko Akiyama	NARO, Japan	Mitigation of N <sub>2</sub> O emission from agricultural fields

**Logos:** NEDO, INRAE, NARO, TOHOKU UNIVERSITY

[Attention] Symposium website will be unavailable because of network system maintenance from February 19 (Fri.) 20:00 to February 21 (Sun) 19:00.

### Purpose

On March 1, we will hold an on-line international symposium entitled "Cool Earth via Microbes in Agriculture", co-organized by New Energy and Industrial Technology Development Organization (NEDO), Tohoku University, and National Agriculture and Food Research Organization (NARO).

NEDO is pursuing ambitious research and development activities to achieve the goal of the 'Moonshot Research & Development Program', coordinated by the Cabinet Office of Japan. As one of the projects, Tohoku University and NARO launched the project, "Mitigation of greenhouse gas emissions from agricultural lands by optimizing nitrogen and carbon cycles", in 2020.

Meanwhile, several soil-related studies of the EU's Research and Innovation Programme 'Horizon Europe', are currently being implemented as the 'SOIL' Project of the European Joint Program.

In this symposium, the goals of the above projects and the trends in research on the mitigation of greenhouse gas emissions from agricultural lands by leading international research institutes will be shared. In addition, we will discuss "Cool Earth", how to stop global warming by optimizing carbon and nitrogen cycling".

If you are interested, please pre-register and join us.

## Date

Monday, March 1, 2021 08:00-11:10 [France, UTC+1]  
16:00-19:10 [Japan, UTC+9]

\* This symposium will be held online (ZOOM).

## Aims of the Symposium

Disseminating innovation research strategies that balance agricultural production and global environmental conservation

Japan, France, and the EU research collaborations on developing technologies for the mitigation of greenhouse gases from agricultural land, soil, and microbiological research

## Program

\* Please note that the program is subject to change without notice.

Opening		
France	Japan	
8:00-8:05	16:00-16:05	<b>-Opening</b> ..... <b>Kiwamu Minamisawa</b> , Tohoku University, Japan & <b>Laurent Philippot</b> , French National Research Institute for Agriculture, Food and Environment (INRAE), France

8:05-8:20	16:05-16:20	<p><b>-Greetings from NEDO</b></p> <hr/> <p><b>Kenji Yamaji</b>, Program Director, Moonshot Goal 4 &amp; Senior Vice President, Director-General, Research Institute of Innovative Technology for the Earth (RITE), Japan</p> <p><b>-Greetings from INRAE</b></p> <hr/> <p><b>Jean-Francois Soussana</b>, Vice-President of the INRAE, France</p> <p><b>-Greetings from NARO</b></p> <hr/> <p><b>Kazuo Kyuma</b>, President, National Agriculture and Food Research Organization (NARO), Japan</p>
8:20-8:25	16:20-16:25	<p><b>-Opening remarks from Tohoku University</b></p> <hr/> <p><b>Motoko Kotani</b>, Executive Vice President for Research, Tohoku University, Japan</p>
Presentations		
8:25-8:45	16:25-16:45	<p>Moonshot Project: "Mitigation of greenhouse gas emissions from agricultural lands by optimizing nitrogen and carbon cycles"</p> <p><b>Kiwamu Minamisawa</b>, Tohoku University, Japan</p>
8:45-9:05	16:45-17:05	<p>European Joint Programme SOIL: "Towards climate-smart, sustainable, agricultural soil management"</p> <p><b>Claire Chenu</b>, INRAE, France</p>
9:05-9:25	17:05-17:25	<p>European Joint Programme SOIL Project: "TRACE-Soils: Mechanisms underlying trade-offs between carbon sequestration, greenhouse gas emissions, and nutrient losses in soils under conservation agriculture in Europe"</p> <p><b>Marta Goberna</b>, Spanish Institute for Agricultural Research, Spain</p>
9:25-9:40	17:25-17:40	(Break)

9:40-10:00	17:40-18:00	Rising to the challenge of N <sub>2</sub> O suppression by stimulating the biogeochemical circulation of nitrogen for a sustainable society  <b>Akihiko Okada</b> , Technology Strategy Center (TSC), NEDO, Japan
10:00-10:20	18:00-18:20	Mitigation of N <sub>2</sub> O emission from agricultural fields: The challenges of the Moonshot project  <b>Hiroko Akiyama</b> , NARO, Japan
10:20-10:40	18:20-18:40	「Microorganisms acting as a N <sub>2</sub> O sink in soil  <b>Laurent Philippot</b> , INRAE, France
10:40-11:00	18:40-19:00	Building on the ecological niche theory to understand the success of bacterial inoculants in agricultural soil  <b>Xavier Le Roux</b> , INRAE, France
11:00-11:05	19:00-19:05	Presentation of the Joint Linkage Call: INRAE-NARO  <b>Florent Chazarenc</b> , INRAE, France
11:05-11:10	19:05-19:10	<b>Wrap-up</b> ..... <b>Kiwamu Minamisawa &amp; Laurent Philippot</b>
Closing		

## Organizers

New Energy and Industrial Technology Development Organization (NEDO), Japan  
Tohoku University, Japan  
National Agriculture and Food Research Organization (NARO), Japan

## Fees

No charge

## Language

English

## Capacity

500 participants

## Registration

Please pre-register using the on-line form below.

The server will be closed when capacity is reached, irrespective of the deadline.

[https://prd.form.naro.go.jp/form/pub/naro01/sympo\\_en](https://prd.form.naro.go.jp/form/pub/naro01/sympo_en)

The personal information provided at the time of registration will be used for the purpose of informing participants about this symposium and understanding the participants of this symposium. During the retention period, the information will be handled appropriately according to [the Privacy Policy of NARO](#), and it will not be used for any other purpose.

## Web Reception(19:10-20:30)

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After the symposium, we will have a reception for free participation using the web conference system "Remo" where you can talk while moving around "tables" freely.

Entrance and exit are free during the time.

Please feel free to join in.

The participation address for the web reception will be released during the symposium.

## Registration deadline

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Monday, February 22, 2021

## For inquiries

### [General inquiries]

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Symposium Secretariat (Tohoku University, NARO)

E-mail: [CoolEarth@ml.affrc.go.jp](mailto:CoolEarth@ml.affrc.go.jp)

### [Technical issues for on-line connection]

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Tohoku University

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## [Inquiries on March 1, 2021 only]

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