

# **Plant Cell Signaling 2023 (PCS2023)**

**Kitakyushu, Japan  
(Nov. 18-Nov.23, 2023)**

## **Organized by**

- **International Photosynthesis Industrialization Research Center, The University of Kitakyushu**
- **University of Florence LINV Kitakyushu Research Center (LINV@Kitakyushu), Kitakyushu, Japan**
- **Kitakyushu Smart-Agri Network**
- **Yahata Rotaract Club**
- **Japanese Society of Agricultural Biological and Environmental Engineers and Scientists: Kyushu Branch**

**The International Symposium “Plant Cell Signaling” series (PCS) is a framework of international symposiums on plant cell biology research initiated by France-based researchers (belonging to the Universities Paris VII and Universities Paris 11) in 2013. Since the event (PCS2013) was held in the Orsay area near Paris (Paris 11 University Orsay campus), it has been held three times in France, twice in China, and once in Japan, and PCS2023 is the second occasion to host PCS in Japan.**

## DAY -1 (Nov. 18<sup>th</sup>, evening)

### Reception

## DAY 0 (Nov. 19<sup>th</sup>)

### Ecotour and Discussion:

### PLANTS, CULTURE & HISTORY IN PLANTS AND FUKUOKA, JAPAN



## DAY 1 (afternoon) (Nov. 20<sup>th</sup>)

### SESSION: PLANTS AND ECOSYSTEM



Meeting Room, The University of Kitakyushu

## INVITED TALKS

### SESSION: PLANTS AND ECOSYSTEM

- #01**            **“Evaluation of Fire Suppression and Environmental Performance of Environment Friendly Soap-Based Firefighting Foam for Peat Fires in Indonesia”**  
by T. KAWAHARA and T. KANYAMA (Shabondama Soap. Corp., Kitakyushu, Japan)
- #02**            **“Cellular and metabolic regulation of the halophyte *Cakile maritima* in response to salt”**  
by Delphine BONNIN (Univ. Paris-Cite)
- #03**            **“Anesthesia, a mechanism common to the living”**  
by Lucia SYLVAIN-BONFANTI, François BOUTEAU and Etienne GRESILLON (Univ. Paris-Cite)

## DAY 2 (morning) (Nov. 21<sup>st</sup>)

### OPEN LECTURES

INVITED  
TALKS

#### OPEN LECTURE (with Japanese Translation)

- #01 “Social and cultural distance between human and plants: Casess in Japan(植物との距離が近い日本)  
by Tomonori KAWANO
- #02 “Frontiers in plant science: “Data that changes our perception of plants” (植物科学の最先端「植物に対する認識を変えるデータ」)  
by Lucia SYLVAIN-BONFANTI (Univ. Paris-Cite)
- #03 “Frontiers in plant and environments: “Science of halophytes” (植物と環境の最先端「塩性植物の科学」)  
by Delphine BONNIN (Univ. Paris-Cite)



Lecture Hall, The University of Kitakyushu

## **DAY 2 (afternoon) (Nov. 21<sup>st</sup>)**

### **KEYNOTE LECTURE**

**INVITED  
TALKS**

### **KEYNOTE LECTURE**

**#01 “Primitive Photosynthesis in Ancestral Cyanobacteria”**

By Prof. Katsunori YANAGAWA (Univ. Kitakyushu)



**SPACE ODORIVA, Kitakyushu Science & Research Park**

## DAY 2 (afternoon) (Nov. 21<sup>st</sup>)

### POSTER SESSION & DISCUSSION PAPERS



SPACE ODORIVA, Kitakyushu Science & Research Park

#### POSTER No.

POSTER #01

#### POSTER PRESENTATIONS

**“Hypoosmotic modulation of cytosolic and nucleic free calcium concentrations involving superoxide anion in tobacco cells”**

by H. T. H. Nguyen, A. Sei, F. Bouteau, T. Kawano (DaNang Univ., Univ. Kitakyushu, Univ. Paris-Cité)

- POSTER #02     **“Possible inhibitory impact of blue light component in the solar light on the photosynthesis by *Tridacna crocea* Lamark, 1819”**  
by H. Tanaka, T. Sakemonot, and T. Kawano (Univ. Kitakyushu)
- POSTER #03     **“Ecotoxicity of fire-fighting agents in Green paramecia after infiltration through the soil”**  
by T. Yamaguchi, M. Nakashima, and T. Kawano (Univ. Kitakyushu)
- POSTER #04     **“Possible density effects on the growth of symbiotic algae from *Tridacna crocea*”**  
by A. Yamada, and T. Kawano (Univ. Kitakyushu)
- POSTER #05     **“Geographic variation in color tone and seasonal changes in pigments of the same species of *Cryptomeria japonica*”**  
by R. Shinoka and T. Kawano (Univ. Kitakyushu)
- POSTER #06     **“Evidence for light-stimulated fluid intake and output through the surface of shoots in Japanese cedar trees (*Cryptomeria japonicum*)”**  
by M. Kubota, T. Kawano, R. Shinoka, R. Uchida (Univ. Kitakyushu)
- POSTER #07     **“Story of My Failed Cell Growth Inhibition Studies”**  
by M. Metin and T. Kawano (Univ. Kitakyushu)
- POSTER #08     **“Tooth morphology of herbivorous fish: From the palaeobiological point of view”**  
by M. Chida and T. Kawano (Univ. Kitakyushu)
- POSTER #09     **“Monitoring of the Inward and Outward Water Movements across the Intact Surface of Post-Harvest Tomato Fruits Using Stable Isotope Technology and H-**



**NMR”**

by S. Hirakawa and T.. Kawano (Univ. Kitakyushu)

POSTER #10 **“Hysteresis-like Phenomenon Observed During Photosynthesis by Tomato Plants”**

by Y. Otsu, K. Nakao, and T.. Kawano (Univ. Kitakyushu)

POSTER #11 **“Evaluation of competitive community photosynthesis among the same and different species using Hibikino campus plants as a model”**

by R. Uchida and T. Kawano (Univ. of Kitakyushu)

**DISCUSSION**

**DISCUSSION PAPERS**

**No.**

<Discussion #01> **“Canopy leaf-inspired paired cognition automata and derived paired Hill-type functions for probability weighting in prospect theory”**

by T. Kawano (Univ. Kitakyushu)

<Discussion #02> **“Plants have TWO MINDS as we do”**

by T. Kawano (Univ. Kitakyushu)

**DAY 2 (Nov. 21<sup>st</sup>)**  
**(evening in Japan / morning in France)**  
**PCS2023 / KEYS2023B JOINT SESSION**  
**CONNECTED-ONLINE (PARIS-KITAKYUSHU)**



**PCS2023 / KEYS2023B JOINT SESSION**  
**“Introduction to KEYS”** Tomonori KAWANO, Yoshiaki USHIFUSA, Kazuhiro  
 MANABE, Etienne GRÉSILLON, François BOUTEAU, Patrick LAURENTI

**Presentation**  
**No.**  
**#01**

**PCS2023 / KEYS2023B JOINT SESSION**  
**Presentations from Kitakyushu Venue**  
**“Reconnecting sciences and society : the**  
**challenges of popularizing science”**  
 by Delphine ARBELET-BONNIN

**#02** “From the plant as a scientific object to the sensitive plant, a trajectory that questions the practices of the life sciences and the socio-spatial context of researchers.”

by Lucia SYLVAIN-BONFANTI

**#03** “New urbanization, coordinated development, and urban carbon emissions efficiency in China”

by YIN QIANG

**#04** “Tooth morphology of herbivorous fish: From the palaeobiological point of view”

by Mori CHIDA

**Presentation PCS2023 / KEYS2023B JOINT SESSION**

**No. Presentations from Paris Venue**

**#05** “How SMEs can achieve sustainability for themselves and the society” ~From a survey of 1000 UK SMEs”

by Manabe KAZUHIRO

**#06** “From jackhammers to sycamores : less asphalte, more plants”

by Imène BELZAREG, Olivia DE LAAGE, Rodolphe QUÉNARD, and Zoé MICHEL

**#07** “Practical activities to balance university education and solving regional issues”

by Manadi HIDAKA, Nanako HAMANISHI, and Akari MIZOKAMI

**#08** “Experimental gardens in a +1 to +6° scenario”

by Aurélien Savarit CLÉMENT, Lenormand Lorette HAMON, Thomas BOISSONNADE, and Andréa BOUALAVONG

## **PCS2023 / KEYS2023B JOINT SESSION**

**“Closing remarks”** Tomonori KAWANO and François BOUTEAU

### **KEYS 2023b : Paris - Kitakyushu**

Knowledge Exchange by Young Scholars (KEYS) and researchers on Green Cities (**This seminar was mixed in face-to-face and distance learning, in Paris and Kitakyushu**).

The cities of Paris, Kitakyushu have been selected with Chicago and Stockholm by the Organization for Economic Co-operation and Development (OECD) as model cities for green growth around the world (Green Cities). A memory of understanding was established in 2017 with the aim to favorize exchanges and develop collaboration on this topic between universities of Kitakyushu and Paris.

In this context, the objective of this KEYS 2023b workshop is to promote exchanges between students and researchers of our universities around scientific and interdisciplinary issues or case studies developed in our respective universities.

**Tuesday, November 21 (Japan time, = -8h in France)**

**Salle 209 bâtiment Olympe de Gouges, in PARIS**

**SPACE ODORIVA in Kitakyushu**

## DAY 3 (evening) (Nov. 22<sup>nd</sup>)

### PCS2023 / Rotaract ClubYahata Joint Session

(with Japanese Translation)

Knowledge exchange between French botanists and Rotaractors in Yahata (Kurosaki YAKATA Co-working space)



Presentation No. **PCS2023 / Roteract ClubYahata Joint Session**  
**Knowledge exchange between French**  
**botanists and Rotaractors in Yahata**

#01 **“Activities and aims of Yahata Rotaract Club:  
Revitalization of communities by young generations”**  
by K. NAKAO (Rotar act club Yahata).

#02 **“Reconnecting sciences and society : the challenges  
of popularizing science”**  
by Delphine ARBELET-BONNIN

## DAY 4+

### PCS2023 / Roteract Wakamatsu Joint OUTREACH

Wakamatsu ward, Kitakyushu, Japan



# DAY 4+

## EXCURSION

### PLANTS, CULTURE & HISTORY IN JAPAN

(Green park, Kitakyushu)



## DAY 4+

### EXCURSION & INTERVIEW

PLANTS, CULTURE & HISTORY IN JAPAN (Shintoist shrines)





# DAY 4+

## EXCURSION & INTERVIEW

### PLANTS, CULTURE & HISTORY IN JAPAN

(Buddhist temples)



# History of PCS Symposia

**1st Symposium (PCS2013) April 2013**

Orsay area near Paris, France

Hosted by University of Paris 11

**2nd Symposium (PCS2014) June 2014**

Paris, France

University of Paris 7

**3rd Symposium (PCS2015) December 2016**

Beijing, People's Republic of China

Hosted by Institute of Botany, Chinese Academy of Sciences

**4th Symposium (PCS2017) July 2017**

Kitakyushu City, Japan

Hosted by The University of Kitakyushu,  
venue: Kitakyushu Performing Arts Center

**5th Symposium (PCS2018) July 2018**

Paris, France

Hosted by Univ. Paris-Diderot

**6th Symposium (PCS2019) June 2019**

Beijing, People's Republic of China

Hosted by Institute of Botany, Chinese Academy of Sciences, etc.

**7th Symposium (PCS2023) November 2023**

Kitakyushu City, Japan

(Co-hosted by Research Center for International Photosynthesis  
Industrialization (RCIPI), The University of Kitakyushu &  
LINV@Kitakyushu, Florence University)

# 国際シンポジウム Plant Cell Signaling 2023 (PCS2023) について

(2023年11月18日～23日、北九州市)

主催： ○北九州市立大学国際環境工学部・国際光合成産業化研究センター  
共催： ○フィレンツェ大学国際植物ニューロバイオロジー研究所 (LINV) 北九州研究センター (LINV@Kitakyushu)、○北九州スマートアグリネットワーク、○八幡ローターアクトクラブ、○日本生物環境工学会九州支部

国際シンポジウム「Plant Cell Signaling」シリーズ (以下 PCS) は、パリ第7大学およびパリ 11 大学が主導しスタートさせた植物分野の細胞生物学研究に関する国際シンポジウムの枠組みであり、2013年に第1回のシンポジウムをパリ市近郊オルセー地区 (パリ 11 大学オルセーキャンパスキャンパス) で開催して以降、フランス国内で3回、中国で2回、日本で1回開催されており、今回で日本開催は2回目となる。

PCS の歴史	
第1回	(PCS2013) 2013年4月 フランス・パリ近郊オルセー地区 (パリ 11 大学)
第2回	(PCS2014) 2014年6月 フランス・パリ市 (パリ第7大学主催)
第3回	(PCS2015) 2016年12月 中華人民共和国・北京市 (中国科学院植物研究所主催)
第4回	(PCS2017) 2017年7月 日本・北九州市 (北九州市立大学主催・北九州芸術劇場)
第5回	(PCS2018) 2018年7月 フランス・パリ市 (パリ・ディデロ大学主催)
第6回	(PCS2019) 2019年6月 中華人民共和国・北京市 (中国科学院植物研究所等主催)
第7回	(PCS2023) 2023年11月 日本・北九州市 (北九州市立大学・フィレンツェ大学 LINV@Kitakyushu 共催)