# **Symposiums**

Dec. 13 (Fri.)

Keynote speech 13:30-14:30 < Main Convention Hall>

# An overview of the honeybees, other pollinators and their environment in Japan.

Masami Sasaki (Tamagawa Univ.)

Symposium 1 < Main Convention Hall > 15:30-18:00

### Indigenous knowledge and latest knowledge on Japanese honey bee.

Lecture 1 A comprehensive study and visualization of traditional Japanese honeybee (*Apis cerana Japonica*) beekeeping in mountainous areas in Japan. —Creating a platform for further studies. Mari Shinkai (The Research Institute for Humanity and Nature)

Lecture 2 A survey of the dawn of beekeeping in Japan (Part 1): The starting point of raising European honeybees is Shinjuku Gyoen. Shuichi Kase (Kaise Apiary), Hidehiro Hoshiba (APISIS)

Lecture 3 Semi-domestication as a process, semi-domestication as a mold. Yasushi Saji (The Folklore Society of Japan)

Lecture 4 Diversity of Japanese honey bee keeping strategies between wild and domestic — comparing techniques and beehive types in Kyushu Mountain site. Daisuke Takegawa (Univ. Kitakyushu)

Organizer: Daisuke Takegawa (Univ. Kitakyushu)

Symposium 2 < Convention Hall 200 > 15:30-16:30

### Decoding the genome of the honey bee

Lecture 1 The draft genome sequence of Japanese honey bee. Kakeru Yokoi (National Agriculture and Food Research Organization)
Lecture 2 Toward functional analyses of genes in the honey bee by using genome editing. Hiroki Kohno (Tokyo Univ.)

Lecture 3 New approach to improving functions of the honey bee, *Apis mellifera* by using genome editing. Masatsugu Hatakeyama (NARO, NIAS)

Organizer: Hiroki Kohno (Tokyo Univ.)

Symposium 3 < Convention Hall 200 > 17:00-18:00

### World Beekeeping

Lecture 1 Beekeeping in the Arabian Countries – present practices and challenges I found on my visit to UAE. Hitomi Enomoto (APISIS)

Lecture 2 Beekeeping in Mongolia: Opportunities and challenges. Maiko Mori (JAICAF)

Lecture 3 Bee projects on CSR all over the world. Hajime Suzuki (Bounouchi Youhouen)

Organizers: Hitomi Enomoto (APISIS), Hajime Suzuki (Bounouchi Youhouen)

### Dec. 14 (Sat.)

Symposium 4 < Main Convention Hall > 10:00-11:30

### Exploring the brain of the honeybee, a genius insect.

Lecture 1 Brain mechanism of olfactory learning in the honeybee. Ryuichi Okada (Kobe Univ.)

Lecture 2 Visualization of neural activity in the honeybee brain using immediate early genes. Taketoshi Kiya (Kanazawa Univ.)

Lecture 3 DNA methylation and age-dependent division of labor in the honeybee. Tetsuhiko Sasaki (Tamagawa Univ.)

Organizers: Ryuichi Okada (Kobe Univ.), Tetsuhiko Sasaki (Tamagawa Univ.)

Symposium 5 < Convention Hall 200 > 10:00-11:30

### Importance of pollination services and conservation of wild pollinators in ecosystems.

Lecture 1 Foraging of bees in forests: effects of forest landscapes on bee performance. Teruyoshi Nagamitsu (Forest Research and Management Organization)

Lecture 2 Your photographs save bumblebees!? Citizen science monitoring program "Hanamaru-Maruhana national census (Bumblebee national census in English)" Yukari Ohno (Tohoku Univ.)

Lecture 3 Unnoticed connection between human society and bees. Tomoyuki Yokoi (Tsukuba Univ.)

Organizers: Masahiro Mitsuhata (Arysta LifeScience), Tomoyuki Yokoi (Tsukuba Univ.)

Dec. 14 (Sat.) pm

Special Lecture < Main Convention Hall > 13:30-14:30

# Front-line of ecological risk assessment of pesticide in Japan.

Koichi Goka (National Institute for Environmental Studies)

Symposium 6 < Main Convention Hall > 15:00-17:00

### Toward understanding the pesticide risk assessment for honey bees and wild bees in Japan.

Lecture 1 Regulatory circumstance concerning bees in US and EU. Kazuhiko Motoba (NIHON NOHYAKU CO.,LTD.)

Lecture 2 Revision of the Agricultural Chemicals Act and the efforts of preventing or mitigating potential negative impacts of pesticides on honey bees. Tomohiro Ishioka (Ministry of Agriculture, Forestry and Fisheries)

Lecture 3 Consideration of the risk assessment policy for wild bees conservation. Naofumi Hamatani (Ministry of the Environment Government of Japan)

Lecture 4 The risk assessment for wild bees by investigating residues and toxicities of pesticides. Yoshiko Sakamoto (National Institute for Environmental Studies)

Lecture 5 Bee-friendly management of insect pests and plant diseases. Atsushi Yamamoto (Nippon Soda Co. Ltd.)

Organizer: Yoshiko Sakamoto (National Institute for Environmental Studies)

Symposium 7 < Convention Hall 200 > 15:00-16:30

### **Student Summit for Apiculture 2019**

10 high schools and 6 universities

Organizers: Junichi Takahashi (Kyoto Sangyo Univ.), Akio Mizuno (Nagoya Gakuin Univ.), Atsushi Fujise (Soai Gakuen)

### Dec. 15 (Sun)

Symposium 8 < Main Convention Hall > 9:30-11:00

## Bee keeping: present and future

Lecture 1 Automatic decoding of honey bees: understanding spatio-temporal changes of forage area. Satoru Okubo (National Agriculture and Food Research Organization)

Lecture 2 Tips to reduce Varroa mite damages: the latest scientific findings. Shigeru Matsuyama (Tsukuba Univ.)

Lecture 3 A.I. tells you about the bees 'health. Daisuke Ito (ad-dice Co., Ltd.)

Organizer: Shigeru Matsuyama (Tsukuba Univ.)

Symposium 9 < Convention Hall 200 > 9:30-11:00

#### Insect pollinators are active in agricultural fields

Lecture I An introduction to a research project for monitoring and enhancement of pollinators for crop production: The aims and scope. Akihiro Konuma (National Agriculture and Food Research Organization)

Lecture 2 Diversity and similarity of flower-visiting insects of Japanese pears, apples and Oriental persimmons. Shoko Nakamura (Forest Research and Management Organization)

Lecture 3 Development of monitoring methods for cucurbit pollinators. Mito Ikemoto (Tsukuba Univ.)

Lecture 4 Who are the pollinators of *Diospyros kaki* (Japanese persimmon)? -An analytical approach using pollen on the pollinators-Aoi Nikkeshi (National Agriculture and Food Research Organization)

Lecture 5 Pollination service provided by insects in your backyards. Shigeki Kishi (National Agriculture and Food Research Organization)

Organizers: Tomoyuki Yokoi (Tsukuba Univ.), Masahiro Mitsuhata (Arysta LifeScience)

Symposium 10 < Main Convention Hall > 11:30-12:30

#### New frontiers of bee product research in Japan

Lecture 1 Composition and functional properties of propolis from tropical regions. Shigenori Kumazawa (Univ. Shizuoka)

Lecture 2 Prevention of brain aging and royal jelly: Novel beneficial activity of royal jelly and the underlying molecular mechanism. Tohru Yamakuni (Tohoku Univ.)

Organizers: Jun Nakamura (Tamagawa Univ.)

Symposium 11 < Convention Hall 200> 11:30-12:30

# Exploratory researches on honeybee social behaviors

Lecture 1 Biological clock in honey bees: daily rhythm in behavior. Taro Fuchikawa (Osaka City Univ.)

Lecture 2 Double edged heat: beneficial and adverse effect of a hot defensive bee ball. Atsushi Ugajin (JT Biohistory Research Hall)

Organizers: Hiroyuki AI (Fukuoka University), Ken Sasaki (Tamagawa University), Ken-ichi Harano(Tamagawa University)