

The 8th Asian Symposium on Microbial Ecology

Taipei, Taiwan

Sep. 30-Oct. 2, 2016

(Circular 1)

Venue

Center for Condensed Matter Sciences, National Taiwan University, No. 1, Sec. 4, Roosevelt Road, Taipei 10617, Taiwan



Organized by

Taiwan Society of Microbial Ecology (TSME)
The Microbiological Society of Korea (MSK)
Japanese Society of Microbial Ecology (JSME)

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Local organizer

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National Central University
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Tunghai University
Fu-Jen Catholic University
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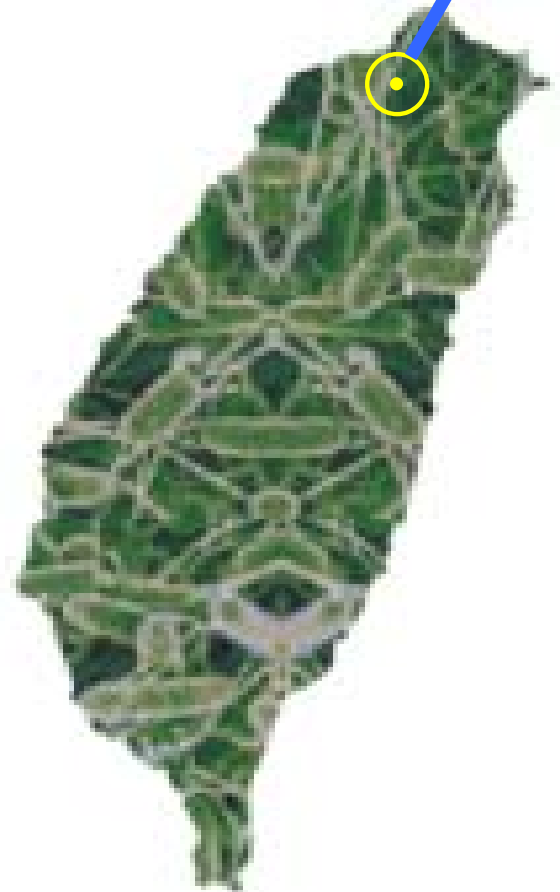
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Local sponsor

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Executive advisors:

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Access

NTU : <https://visitorcenter.cloud.ntu.edu.tw/eng/p5-transportation.php>
Taiwan Taoyuan International Airport : <http://www.taoyuan-airport.com/english/Index/>
Taipei Songshan Airport : <http://www.tsa.gov.tw/tsa/en/home.aspx>

Language

English

Homepage

(Note: The homepage will be confirmed in circular 2)

Registration and Abstract Submission

Regular participant 5,000 TWD (including 1 banquet and 1 lunch)
Student (excluding postdoc) 2,000 TWD (including 1 banquet and 1 lunch)

Note:

1. All participants are welcome to attend all invited talks in the Annual Meeting of TSME on 9/30 (For the Annual Meeting of TSME, all talks in the table shaded with “green” are in Chinese except for Round Table Discussion with Prof. Rebecca Parales).
2. For Taiwanese participants only attending the Annual Meeting of TSME on 9/30:
Regular participant 1,000 TWD (including 1 lunch)
Student (excluding postdoc) 500 TWD (including 1 lunch)

(Note: The on-line registration will be confirmed in circular 2)

Important Deadlines

Online registration: August 31, 2016
Abstract submission: August 31, 2016

Accommodation

There are many hotels to choose in Taipei city and their information is available online. Please reserve hotel rooms by visiting their websites.

Here are some nearby hotels:

Just Sleep

<http://justsleep.com.tw/NTU/en>

Taipei Fullerton Hotel-South

<http://www.taipeifullerton.com.tw/south/en/>

Contact

Scientific information:

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Program

September 30th, Friday	
Time	1 st Floor Lobby & Room 111 (Center for Condensed Matter Sciences, NTU)
8:30	Registration: Annual Meeting of TSME (in Chinese)
9:00-9:20	Opening: Prof. Cheng-Fang Lin, Director of the Graduate Institute of Environmental Engineering, National Taiwan University Prof. Shir-Ly Huang, National Yang-Ming University, Present of Taiwan Society of Microbial Ecology (Introduction of TSME)
9:20-10:00	Invited speech 1 Prof. Yuan-Chi Su, National Taiwan University
10:00-10:30	Invited speech 2 Prof. Chu-Ching Lin, National Central University
10:30-10:50	Coffee Break
10:50-11:30	Invited speech 3 Prof. Chiu-Chung Young, National Chung Hsing University
11:30-12:00	Invited speech 4 Prof. Chun-Yao Chen, Tzu Chi University
12:00-12:30	TSME member assembly (TSME board member voting: 8:30-12:30)
12:30-13:30	Lunch lecture Sponsored by Yourgene Bioscience
13:30-14:00	TSME board meeting
14:00-14:30	Invited speech Dr. Gwo Fang Yuan, Bioresource Collection and Research Center
14:30-15:20	Round Table Discussion: Scientific writing for Journal Submission (in English) Guest speakers: Prof. Rebecca Parales, Applied and Environmental Microbiology Editor, University of California-Davis Prof. Jidong Gu, International Biodeterioration & Biodegradation Editor, The University of Hong Kong
13:30-18:00	Registration for Asian symposium; Poster; Company Exhibition (set up)
15:30-18:00	Young scientist meeting Advisor: Yin-Ru Chiang, Academia Sinica, Taiwan Student Organizer/Convener:

	Yi-Lung Chen, Ph.D. candidate, Academia Sinica (Taiwan) Hyun Jung Kim, Ph.D. student, Korea University (Korea) Satoshi Hiraoka, Ph.D. student, The University of Tokyo (Japan) Yohei Kumagai, Ph.D. student, The University of Tokyo (Japan) Jiangwei Li, Ph.D. student, Chinese Academy of Sciences (China)
18:30-21:00	Welcome Reception (by invitation) Young scientist party

October 1 st , Saturday			
	2 nd International Conference Hall (Center for Condensed Matter Sciences, NTU)		1 st Floor Lobby
8:40 – 8:50	Opening: Prof. Shir-Ly Huang, National Yang-Ming University, Present of Taiwan Society of Microbial Ecology		
8:50 – 9:30	Plenary speech 1 Convener: (will be announced in circular 2) Speaker: Dr. Sen-Ling Tang, Academia Sinica (Taiwan)		
9:30 – 10:45	Session 1. Marine microbiology, 75 min Organizer/ Convener: Prof. Hong-Thih Lai, National Chiayi University (Taiwan) Prof. Koji Hamasaki, The University of Tokyo (Japan) Speakers: Prof. Jidong Gu, The University of Hong Kong (Hong Kong) Prof. Akito Taniguchi, Kindai University (Japan) Prof. Pei-Ling Wang, National Taiwan University (Taiwan) Dr. Anyi Hu, Chinese Academy of Sciences (China)		
10:45 – 11:15	Coffee Break & Group photo		
11:15 – 12:00	Session 2. Life in extreme environments, 45 min Organizer/ Convener: Prof. Li-Hung Lin, National Taiwan University (Taiwan) Prof. Woojun Park, Korea University (Korea) Speakers: Prof. Sayaka Mino, Hokkaido University (Japan) Prof. Li-Hung Lin, National Taiwan University (Taiwan)		
12:00 – 13:30	Lunch	Women Scientists Round Table Organizer: Prof. Pi-Han Wang (Taiwan) Prof. Song-Ih Han (Korea)	Poster session (presentation)

		Prof. Naoko Yoshida (Japan) Guest speakers: Prof. Kung-Hui Chu (USA) Prof. Jianzhong He (Singapore)	
13:30 – 14:10	Plenary speech 2 Convener: (will be announced in circular 2) Speaker: Prof. Pi-Han Wang, Tunghai University (Taiwan)		
14:10 – 15:10	Session 3. Ecology and evolution of host-associated microbes, 60 min Organizer/ Convener: Prof. Chun-Yao Chen, Tzu Chi University (Taiwan) Prof. Jin-Woo Bae, Kyung Hee University (Korea) Speakers: Prof. Patrick Lee, Hong Kong City University (Hong Kong) Prof. Jin-Woo Bae, Kyung Hee University (Korea) Dr. Hideomi Itoh, Bioproduction Research Institute AIST (Japan) Dr. Chih-Horng Kuo, Academia Sinica (Taiwan)		
15:10 – 15:30	Coffee break		
15:30 – 16:15	Session 4. Plant-associated microbes, 45 min Organizer/ Convener: Prof. Chi-Te Liu, National Taiwan University (Taiwan) Prof. Kiwamu Minamisawa, Tohoku University (Japan) Speakers: Prof. Seon-Woo Lee, Dong-A University (Korea) Prof. Tomoyasu Nishizawa, Ibaraki University (Japan) Prof. Chi-Te Liu, National Taiwan University (Taiwan)		
16:15 – 17:00	Session 5. Eukaryotic microorganisms, 45 min Organizer/ Convener: Prof. Roland Kirschner, National Central University (Taiwan) Prof. Yoon-E Choi, Korea University (Korea) Speakers: Prof. Jun Murase, Nagoya University (Japan)		
17:00 – 18:00			Poster session (presentation)
18:30 – 20:30	Banquet Location: (will be announced in circular 2)		

October 2 nd , Sunday	
Time	2 nd International Conference Hall (Center for Condensed Matter Sciences, NTU)

8:40 - 9:20	Plenary speech 3 Convener: (will be announced in circular 2) Speaker: Prof. Wen-Tso Liu, University of Illinois (USA)
9:20 – 10:35	Session 6. Biodegradation, 75 min Organizer/Convener: Prof. Jer-Horng Wu, National Cheng Kung University (Taiwan) Prof. Natsuko Hamamura, Kyushu University (Japan) Speakers: Prof. Rebecca Parales, University of California-Davis (USA) Prof. Jianzhong He, National University of Singapore (Singapore) Prof. Jong-Chan Chae, Chonbuk National University (Korea) Dr. Hiromi Kato, Tohoku University (Japan)
10:35-10:50	Coffee break
10:50 – 11:50	Session 7. Microbiology for environmental science and engineering, 60 min Organizer/ Convener: Prof. Hsion-Wen Kuo, Tunghai University (Taiwan) Prof. Kung-Hui Chu, Texas A&M University (USA) Speakers: Prof. Kung-Hui Chu, Texas A&M University (USA) Prof. Woojun Park, Korea University (Korea) Prof. Mamoru, Oshiki, Nagaoka National College of Technology (Japan)
11:50 – 12:20	Poster award and closing ceremony
12:30-2:00	TSME, MSK and JSME Business meeting (by invitation) Location: Graduate Institute of Environmental Engineering, NTU

Session scope:

- Session 1: Marine microbiology
Recent advances in molecular biology, metagenomics, remote sensing, ecological modelling, and deep-sea exploration have led to astonishing discoveries of the abundance and diversity of marine microbes and their ecological role in a wealth of distinct ecosystems in marine habitats. Continuing new discoveries in marine microbiology lead to new insights into their importance not only in primary production and element cycling, but also their susceptibility to environmental variability and climate change. Study of the interactions of marine microbes with other organisms is providing intriguing insights into the phenomena of symbiosis, pathogenicity, and food webs. This section sets the scene for the discussion of all these topics in this conference.
- Session 2: Life in extreme environments
Microorganisms have co-evolved with Earth for more than three billion years. With

their versatile capability, microorganisms have managed to proliferate in nearly all surface and upper crustal environments, thereby impacting the atmosphere, hydrosphere and geosphere at various time scales. Uncovering the interactions between microorganisms and environments would enable better understanding of how microbial communities respond to or influence the dynamic Earth. To date, microorganisms and microbial processes have been detected in environments imposed by various extremes, such as pH, temperature, pressure, porosity, substrate supply, metal loading and radiation. However, issues, such as the exact limits to life, metabolic functions, eco-physiology, community compositions, activities, and networks, biogeography, biological energy quantum, strategies for long term survival, and successions of microbial communities, remain largely opaque. In this session, we would like to invite scientists to present works on issues described above and all other aspects relevant to life in extreme environments or under extreme conditions. We also welcome studies addressing the implementation of newly developed methods for detection of life at technological limits.

➤ Session 3: Ecology and evolution of host-associated microbes

Every multicellular creature has its own microbial story. The survival and health of these organisms rely on their proper interactions with microbes. Numerous microbes can live inside animals or attach on their surface. Microbes can also stay in rhizosphere and live within tissues as endosymbionts. The advance of multi-omic tools now empower us to explore these systems with greater resolution. This session will be devoted to the fascinating new studies in the ecology and evolution of these host-associated microbes.

➤ Session 4: Plant-associated microbes

The session covers the following topics: Symbiotic, pathological, and associative interactions of microbes (including epiphytes, rhizophytes or endophytes) with plants; plant growth-promoting rhizobacteria (PGPR) or bacteria (PGPB); genetic, biochemical or biophysical mechanisms, signaling, plant responses and bioactive metabolites in plant-microbe interactions; plant-associated microbial communities and ecology; applications for sustainable agriculture and environments.

➤ Session 5: Eukaryotic microorganisms

This session focuses on descriptive aspects of the species diversity and ecology of microorganisms. Contributions about eukaryotic microorganisms (e.g. fungi, algae, and protists) from non-marine habitats are particularly encouraged, because research in these organisms requires specific approaches not sufficiently covered by general microbiological methods. Fungi play most important roles in terrestrial habitats as mycorrhizal symbionts, by wood decomposition and as pathogens of plants and animals. Algae are important primary producers and indicators of freshwater quality. The diversity and ecological roles of protists as bacterial feeders, symbionts and parasites of other eukaryotes is still poorly understood. The aim of this session is to highlight organisms which are underrepresented in microbiological studies.

➤ Session 6: Biodegradation

Biodegradation is the biological activity to display the transformation, detoxification, and mineralization of organic chemicals with isolated strains, microbial consortia or recombinant organisms, from which the microbial cells gain energy, nutrient and benefit for growth or survival. It can occur aerobically and anaerobically at various natural and

engineered environments, and hence is important in the cycling of elements (C, N, and S) from naturally-occurring products and anthropogenic waste materials. The Biodegradation section can cover a broad range of scientific topics, such as biochemistry of biodegradation pathways with pure or mixed culture, genetics of biodegradative players, microbial-microbial interactions in the degradation microbial community, emerging theory/approach/tools, and also the featured applications. Special attentions may be emphasized on studies of the recalcitrant compounds such as polycyclic aromatic hydrocarbons, explosives, organohalogens, detergents, antibiotics, and plastics from industrial, agricultural and pharmaceutical sectors.

➤ Session 7: Microbiology for environmental science and engineering

The session of “Microbiology for environmental science and engineering” covers (but not limited) topics of biological treatment, bioremediation, biocatalysis, emerging contaminants, microbial community, microbial functionality, pathogenic microbes, and renewable energy (e.g., biofuel and microbial fuel cell) etc. A wide range of microbes in natural environments (e.g., soil, water, or air), under stress conditions, or in engineered systems are included. Other aspects related to microbiology or biotechnology for environmental science and engineering such as genomics, next-generation sequencing, proteomics, biosensing, electromicrobiology, bio-augmentation, bio-stimulation, or microbes associated with climate change etc are also welcome.