

# Nagasaki University – National Chung Hsing University 2019 Joint Symposium

Wednesday, March 13, 2019  
FES Main Building, Conference Room,  
Faculty of Environmental Science,  
Bunkyo Campus, Nagasaki University



長崎大学  
NAGASAKI UNIVERSITY



國立中興大學  
National Chung Hsing University

# MESSAGE FROM THE DEAN

Welcome to Nagasaki University!



It is my great pleasure to give the opening address at this Joint International Symposium between National Chung Hsing University and Nagasaki University!

In March 2018, NU delegates visited NCHU for the first time, in a mission sent by the NU President, and talked about possible collaborations in both education and research for implementation in the next years/decades. The visit was to facilitate the conclusion of the agreement of exchange programs.

At that meeting, professors of the two institutions introduced their research topics to each other and found many interesting study fields common to both institutions, especially in the disciplines of agriculture and related environmental sciences. It was a very fruitful meeting which marked the very first step in establishing our friendship and collaborative relationship in research.

Definitely, this visit of NCHU delegates to Nagasaki to participate in this joint symposium organized by NU committee must be the second step. As can be seen from the titles of the papers, the symposium will present a variety of research topics, including coral reef conservation, environmental bioengineering, industrial ecology, environmental water science, and environmental impacts on plants, insects and fishes. In fact, NU speakers were individually chosen so that their research topics will match with the speakers from NCHU. It would be great if professors of the two institutions, speakers and participants, could find their “counterparts” in developing substantial collaboration in research.

I do hope that this symposium will not only provide an opportunity for the two institutions to exchange academic information and knowledge, but also serve as an affirmation of the ever-lasting friendship between the two institutions.

Tetsuji Muto  
Dean & Professor of Geology,  
Graduate School of Fisheries and  
Environmental Sciences,  
Nagasaki University



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**Wednesday, March 13, 2019**

Chairperson:

**Jiro Okada**, *Vice-Dean, Professor, Graduate School of Fisheries and Environmental Sciences, Nagasaki University*

1:30 p.m. Opening Address

**Tetsuji Muto**, *Dean, Professor, Graduate School of Fisheries and Environmental Sciences, Nagasaki University*

1:35 p.m. Carbon dioxide and temperature mediated changes in plant primary and secondary compounds alter food utilization of herbivores

**Shaw-Yhi Hwang**, *Vice-Dean, Professor, Department of Entomology, National Chung Hsing University*



1:55 p.m. Plant bioindicator system for the evaluation of adverse effects of tropospheric O<sub>3</sub> on plants in Nagasaki using snap bean

**Masahiro Yamaguchi**, *Assistant Professor, Graduate School of Fisheries and Environmental Sciences, Nagasaki University*



2:10 p.m. Chemolithoautotrophic living of *Escherichia coli* through reductive tricarboxylic acid cycle enzymes: a gateway for changing trophic-mode  
**Chieh-Chen Huang**, Associate-Dean, Professor, Department of Life Sciences, National Chung Hsing University



2:30 p.m. Characterization of manganese oxide-biomineralization by the psychrophilic marine bacterium, *Arthrobacter* sp. NI-2 and its spontaneous mutant NI-2' strains  
**Hideki Nakayama**, Professor, Graduate School of Fisheries and Environmental Sciences, Nagasaki University



2:45 p.m. Environment impact on acoustic behavior of the field cricket *Gryllus bimaculatus* De Geer, 1773 (Insecta: Orthoptera: Gryllidae) by road noisy  
**Jeng-Tze Yang**, Professor, Department of Entomology, National Chung Hsing University



3:05 p.m. **Coffee Break**

Chairperson:

**Cyril G. Satuito**, Vice-Dean, Professor, Graduate School of Fisheries and Environmental Sciences, Nagasaki University

3:20 p.m. Defensive strategy of a eusocial aphid *Ceratovacuna japonica*  
**Mitsuru Hattori**, Assistant Professor, Graduate School of Fisheries and Environmental Sciences, Nagasaki University



3:35 p.m. Willingness to pay for coral reef conservation of South China Sea: A conjoint analysis experiment with Taiwanese consumers  
**Yun-Ju Chen**, Assistant Professor, Department of Applied Economics, National Chung Hsing University



3:55 p.m. The role of lifestyle consumption on environment and sustainability  
**Yosuke Shigetomi**, Associate Professor, Graduate School of Fisheries and Environmental Sciences, Nagasaki University



4:10 p.m. Isolation and characterization of plant growth promoting bacteria in Onions  
**Wen-Ching Chen**, *Assistant Professor, Department of International Master Program in Agriculture, National Chung Hsing University*



4:30 p.m. Groundwater age dating using environmental tracers  
**Makoto Kagabu**, *Assistant Professor, Graduate School of Fisheries and Environmental Sciences, Nagasaki University*



4:45 p.m. Differential physiological responses and growth performance of fresh water- and seawater-acclimated Asian seabass (*Lates calcarifer*) under thermal stress  
**Tsung-Han Lee**, *Professor, Department of Life Sciences, National Chung Hsing University*



5:05 p.m. Closing Address  
**Kai-Jung Chi**, *Deputy Vice President for International Affairs, Associate Professor, Department of Physics & Life Sciences, National Chung Hsing University*