

# Workshop on Agriculture Science and Life Mechatronics in 2024 at NUBB

**Date:** June 10th, 2024

**Time:** 7:30-12:00

**Place:** National University of Battambang (NUBB), Battambang, Cambodia

**Organizers:**

National University of Battambang (NUBB) and Committee of Life Mechatronics Symposium (LMS), Perceptual Information on C-branch (CPI) in the institute of electrical engineers of Japan (IEEJ)

**Chairperson:** *Dr. Chan HUM*

**Co-chairperson:** *Professor Motoharu FUJIGAKI*

**Schedule:**

Time	Activities	Person(s) in charge
7:30-8:20 am	<b>Registration</b>	IR Team
<b>Chair: Chan HUM, NUBB</b>		
8:20-8:50 am	<b>Welcome Remarks</b>	<b>H.E Sok Khorn</b> , Rector of NUBB
8:50 -9:10 am	<b>1. Introduction</b> (1) Introduction to C-Agri's Joint Research Program with NUBB: Starting with the Installation of an Environmental Sensing System  (2) Report on Cases of PhD Thesis Reviews at Several Japanese Universities	<ul style="list-style-type: none"> <li>• <b>Motoharu FUJIGAKI</b> (University of Fukui),</li> <li>• <b>Takashi HOSOI</b> (I.A Imaging LLC)</li> <li>• <b>Motoharu FUJIGAKI</b> (University of Fukui)</li> </ul>
9:10-9:25 am	<b>2. Presentation 01</b> Development of Monitoring and Control System of Smart Greenhouses in Cambodia	<ul style="list-style-type: none"> <li>• <b>Kay Sopheap</b> (Department of Electrical Engineering, Faculty of Science and Technology, Technology, NUBB)</li> </ul>
9:25-9:40 am	<b>Presentation 02</b> Introduction to Computer Analysis of Sensor Signals	<ul style="list-style-type: none"> <li>• <b>Tsuyoshi MORIYAMA</b> (Tokyo Polytechnic University)</li> </ul>
9:40-9:55 am	<b>Presentation 03</b> Khmer Text Semantic Similarity: Developing a Deep Learning Model for Sentence Vectorization and Comparison	<ul style="list-style-type: none"> <li>• <b>Huon Sophy</b> (Faculty of Science and Technology, NUBB)</li> </ul>
9:55-10:10 am	<b>Presentation 04</b> Smart Inspection Monitoring Using High-speed Vision	<ul style="list-style-type: none"> <li>• <b>Kohei SHIMASAKI,</b></li> <li>• <b>Feiyue WANG,</b></li> <li>• <b>Shaopeng HU,</b></li> <li>• <b>Idaku ISHII</b> (Hiroshima University)</li> </ul>
10:10-10:30 am	<b>Break</b>	

<b>Chair: Tsuyoshi MORIYAMA (Tokyo Polytechnic University)</b>		
10:30- 10:45 am	<b>Presentation 05</b> Assessment of Agricultural Supply and Demand in Battambang Province	<ul style="list-style-type: none"> <li>• <b>Set Vinit</b> (Provincial Department of Agriculture, Forestry and Fisheries)</li> <li>• <b>Hum Chan</b> (RDC &amp; Graduate School, NUBB)</li> </ul>
10:45-11:00 am	<b>Presentation 06</b> Real-time Measurement of 3D Shape and Deformation Using Image Analysis	<ul style="list-style-type: none"> <li>• <b>Motoharu FUJIGAKI</b> (University of Fukui)</li> </ul>
11:00-11:15 am	<b>Presentation 07</b> Enhancing Agricultural Effectiveness Smart Farming with IoT-Based Smart Irrigation and Nutrient Management System in Greenhouse	<ul style="list-style-type: none"> <li>• <b>Vang Sovann</b> (Faculty of Science and Technology, National Meanchey University)</li> </ul>
11:15-11:30 am	<b>Presentation 08</b> Impacts of Land Use on Soil Organic Carbon Stocks in Sangha Village, Rattanak Mondoul	<ul style="list-style-type: none"> <li>• <b>Samarith Leang</b>, ISOC Project Manager</li> <li>• <b>Srean Pao</b> (Faculty of Agriculture and Food Processing)</li> </ul>
11:30- 12:00 pm	<b>3. Discussion</b> - Exchange of opinions and ideas - Potential for developing frameworks for research collaboration - Others	Japanese and NUBB research team
Time and place (to be confirmed)	<b>4. Social gathering</b> (evening)	IR Team