



International Curator Lecture and Workshop on Emerging Technologies and Management of Microbial Resources

Date and Venue

- Lecture session:** 7 March 2017
Dusit Thani Bangkok Hotel, Thailand
- Workshop session:** 8 – 9 March 2017
Room BT-127, BIOTEC Building, Thailand Science Park, Pathum Thani

Organized by

- Thailand Bioresource Research Center (TBRC)
- National Center for Genetic Engineering and Biotechnology (BIOTEC)
- National Science and Technology Development Agency (NSTDA)
- Ministry of Science and Technology (MOST), Thailand

In Collaboration with

- National Institute of Technology and Evaluation (NITE), Japan
- Institute of Microbiology, Chinese Academy of Sciences, P.R. China
- World Data Centre for Microorganisms (WDCM)
- World Federation for Culture Collections (WFCC)
- ASEAN Network on Microbial Utilization (AnMicro)

Under Patronage of

- United Nations Education, Scientific and Cultural Organization (UNESCO), Asia and Pacific Regional Bureau for Education, Bangkok, Thailand

Rational Background

The bioeconomy refers to economic activities derived from biological processes and renewable bioresources to produce improved health and sustainable growth and development. Biological Resources Centers (BRCs) play one of the key elements for sustainable international scientific infrastructure, which is necessary to underpin successful delivery of the benefits of biotechnology, whether within the health sector, the industrial sector or other sectors, and in turn ensure that these advances help drive economical growth.

Thailand Bioresource Research Center (TBRC) operates under the National Center of Genetic Engineering and Biotechnology to preserve, provide, and facilitate the coordination of exchange of biological information and resources. With the advancement of information technologies, TBRC provides mechanisms to broaden access to biomaterials and information to public and scientific community. Fundamentally, TBRC engages the knowledge-based bioeconomy with the development of economy growth needed to improve human welfare in Thailand and within ASEAN region.

In the process of continuous integration with the ASEAN Economic Community's single market, ASEAN Member States are increasingly engaging in research into sustainable utilization of microbes to generate economic value of biological resources. Therefore, TBRC together with the National Institute of Technology and Evaluations (NITE) aim to connect research and analysis in many scientific disciplines as well as in biotechnology and industry not only to meet with a fast growing demand for the further advancement of bioeconomy but also to sustain the biodiversity of ASEAN ecosystems.

Aims

1. Identify key roles and management systems of bioresource research centers and possible contribution in development of bioeconomy in Thailand and ASEAN
2. Update the new knowledge and technology for bioeconomy
3. Strengthen national and international BRC networks
4. Promote bioresource utilization for fast growing bioeconomy to alleviate poverty and improve human welfare in such regions
5. Develop human resource through training course

Speakers

Overseas Speakers:

- **Dr. Phillippe Desmeth**
President, World Federation for Culture Collections (WFCC), Belgium
- **Dr. Juncai Ma**
President, World Data Centre for Microorganisms (WDCM), P.R. China
- **Dr. Roberto V. Oliva**
Executive Director, ASEAN Centre for Biodiversity (ACB), Philippine
- **Dr. Koji Mori**
Researcher, National Institute of Technology and Evaluation (NITE), Japan
- **Dr. Andrea Camattari**
Researcher, Bioprocessing Technology Institute (BTI), A*STAR, Singapore
- **Prof. Dr. Katsuhiko Ando**
Researcher, National Institute of Technology and Evaluation (NITE), Japan

Thai/BIOTEC Speakers:

- **Dr. Onruthai Pinyakong**
Assistant Professor, Department of Microbiology, Chulalongkorn University, Thailand
- **Dr. Wirulda Pootakham**
Researcher, Genome Technology Unit, National Center for Genetic Engineering and Biotechnology, Thailand

Workshop assistant

- **Ms. Kaoru Yamaguchi**
National Institute of Technology and Evaluation (NITE), Japan
- **Dr. Nattawut Boonyuen**
National Center for Genetic Engineering and Biotechnology (BIOTEC), Thailand

Language

The course will be given in English without translation

Number of participants

- Lecture Session: 80
- Workshop Session: 10

Registration fees

These fees are inclusive of 7% VAT, lunch and refreshment, workshop handout. However, all of the participants must be responsible for their own accommodation and transportation.

Lecture Session:

- General THB 2,000
- Student THB 1,500

Workshop Session:

- General/Student THB 2,500

Registration deadline

10 February 2017

Program: Lecture Session

Tuesday 7 March 2017

Welcome and introduction session

- 08.00 – 09.00 **Registration**
09.00 – 09.15 **Welcome Remarks**
By Dr. Lily Eurwilaichitr
 National Center for Genetic Engineering and Biotechnology,
 Thailand
09.15 – 09.30 Group photos

Microbial Management

- 09.30 – 10.10 **Biological Resources Centres: Full Services, No Waiting**
By Dr. Phillippe Desmeth
 World Federation for Culture Collections (WFCC), Belgium
10.10 – 10.40 Coffee break
10.40 – 11.20 **How can WDCM help microbial collection curators**
By Dr. Juncai Ma
 World Data Centre for Microorganisms (WDCM), P.R. China
11.20 – 12.00 **Presentation III**
By Dr. Roberto V. Oliva
 ASEAN Centre for Biodiversity (ACB), Philippine
12.00 – 13.30 Lunch

Microbial Preservation

- 13.30 – 14.10 **Preservation and maintenance of fastidious microorganisms**
By Dr. Koji Mori
 National Institute of Technology and Evaluation (NITE), Japan

Microbial Emerging Technologies

- 14.10 – 14.50 **Microbial resources and ready-to-use inoculum for bioremediation of petroleum hydrocarbon-contaminated environment**
By Assist. Prof. Dr. Onruthai Pinyakong
 Department of Microbiology, Chulalongkorn University, Thailand
14.50 – 15.20 Coffee break
15.20 – 16.00 **Exploring the lipid metabolism in unconventional yeasts: drug discovery and biotechnological applications**
By Dr. Andrea Camattari
 Bioprocessing Technology Institute (BTI), A*STAR, Singapore
16.00 – 16.40 **The best of both worlds: high-throughput sequencing of full-length 16S rRNA genes using the PacBio SMRT system**
By Dr. Wirulda Pootakham
 National Center for Genetic Engineering and Biotechnology, Thailand
16.40 – 17.00 Closing

Program: Workshop Session

08 – 09 March 2017

Identification of Mitosporic Fungi

- By Prof. Dr. Katsuhiko Ando

Wednesday 8 March 2017

- 08.30 – 09.00 Registration
09.00 – 09.10 Welcome remarks
09.10 – 10.30 Lecture on morphological identification of mitosporic fungi
10.30 – 11.00 Coffee break
11.00 – 12.00 Introduction of fungal observation method
12.00 – 13.00 Lunch
13.00 – 15.00 Practice on morphological identification of mitosporic fungi
15.00 – 15.30 Coffee Break
15.30 – 17.00 Continuation of morphological identification of mitosporic fungi

Thursday 9 March 2017

09.00 – 09.30	Lecture on Diversity of soil-born fungi in Asia
09.30 – 10.30	Practice on morphological identification of soil-born and mitosporic fungi
10.30 – 11.00	Coffee break
11.00 – 12.00	Continuation of morphological identification
12.00 – 13.00	Lunch
13.00 – 15.00	Continuation of morphological identification
15.00 – 15.30	Coffee Break
15:30 – 16.30	Explanation of the results of the identification of mitosporic fungi
16.30 – 16.50	Free discussion
16.50 – 17.00	Closing

Aims of workshop

- To train broad concepts for participants in the technical, and morphological skills required for fungal morphological identification
- To provide basic knowledge and offer tools to the beginner to intermediate mycologist or researcher based on preliminary molecular identification

Fungal workshop assistant and facilitator

- Ms. Kaoru Yamaguchi, National Institute of Technology and Evaluation (NITE), Japan
- Dr. Nattawut Boonyuen & Team; National Center for Genetic Engineering and Biotechnology (BIOTEC), Thailand

Contact us:

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