



Lily Eurwilaichitr

**Director of Thailand Bioresource Research Center (TBRC) ,
BIOTEC**

Professional Experience:

- 2015-present Director of Thailand Bioresource Research Center (TBRC) , BIOTEC
- 2012-present Deputy Executive Director, BIOTEC
- 2002-present Adjunct Assistance Professor, Mahidol University, Thailand

Committee Service:

- 2015-present Thailand Focal Point on ASEAN Sub Committee on Biotechnology under ASEAN Committee on Science and Technology
- 2015-present Member, The Subcommittee on the Convention on Biological Diversity, Office of Natural Resources and Environmental Policy and Planning (ONEP)
- 2015-present Chair, The Working Group on Access and Benefit Sharing for Microorganisms, ONEP
- 2014-present Member, The Board of Biocatalysis and Protein Engineering Division, Asian Federation of Biotechnology (AFOB)
- 2014-present Member, the Committee on the Biodiversity Finance Initiative (BIOFIN) Project, Office of the National Economic and Social Development Board (NESDB) and the United Nations Development Programme (UNDP)
- 2014-present Member, The Working Group on Biological Access and Benefit Sharing, ONEP
- 2014-present Member, The Sub-Committee on the Preparation of the Master Plan on Bioresource List Project, the Biodiversity Based Economy Development Office (Public Organization) (BEDO)
- 2014-present Member, The Working Group on the Strategic Research on Biodiversity, the National Research Council of Thailand (NRCT)
- 2014-present Chair, The Institutional Animal Care and Use Committee, BIOTEC
- 2013-present Chair, The Institutional Biosafety Committee, BIOTEC
- 2013-present Member, The Technical Committee on Biosafety, BIOTEC
- 2012-present Member, The Committee on the Plant Genetic Conservation Project, Under the Royal Initiatives of Her Royal Highness Princess Maha Chakri Sirindhorn, BIOTEC

Education:

- 1995 Ph.D. in Biochemistry. Research School of Biosciences, University of Kent at Canterbury, UK.
- 1991 M.Sc. in Biotechnology. Research School of Biosciences, University of Kent at Canterbury, UK.
- 1989 B.Sc. in Microbiology. Department of Microbiology, Chulalongkorn University, Bangkok, Thailand

Awards:

- 2013 Golden Medal Award from the Seoul International Invention Fair (SIIF), held at Seoul, The Republic of Korea, from November 29th – December 3rd, for “ENZease: A duo-activity enzyme for one-step biodesizing and bioscouring process of cotton fabrics”
- 2013 Golden Medal Award from 41th Invention Exhibition of Geneva held at Geneva, Switzerland, from April 10th-14th, for “ENZbleach: an alkaline-tolerant enzyme for pulp bleaching process”
- 2013 The NRCT Invention Award 2013 from National Research Council of Thailand, for “ENZbleach: an alkaline-tolerant enzyme for pulp bleaching process”

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TBRC: Infrastructure for bioeconomy development in Thailand

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Since 2001, OECD has introduced an important concept of the Biological Resource Center (BRCs) where they provide not only microbes but also the knowledge of exploration, preservation, and distribution of bioresources for academic, research, and biotechnological application for emerging global bio-based economies. Thailand is currently being transformed into an innovation-driven society which focuses on bio-based industries including bioenergy, biofuels, biochemicals and bioplastics. Strategically, Thailand will employ biotechnology to utilize Thailand's rich biodiversity in order to deliver high value bio-products and innovative bioprocesses. Culture collections as BRCs therefore, play key roles in providing the microbial resources to support the advancement of bioprocesses to make economically feasible and environmentally compatible bio-based products for Thailand.

According to the information from WFCC, Thailand ranks the second in the number of culture collections (63 culture collection) and is the sixth in the number of microbial strains (118,728 strains). Of 63 collections in Thailand, the largest number of microbes, more than 80,000 strains, has been preserved at the National Center for Genetic Engineering and Biotechnology (BIOTEC) and managed by Thailand Bioresource Research Center (TBRC). Moreover, TBRC has initiated the establishment of national and regional networks to maximize the use of bioresource in the industrial and scientific communities. To assemble such diverse and high quality materials, TBRC collaborates with microbiologists and culture collections across the country and region. Recently, TBRC and National Vaccine Institute (NVI), Ministry of Public Health have agreed to setup the National Biomedical Resource Network called V-Resource that will serve as a network of depository and service centers for vaccine R & D and biomedical industry in Thailand

Recognizing the potential application of microorganisms, TBRC and TBRC's partners are engaging in research into microbial utilization in various degree, some looking into the development of industrial enzymes, while others exploring the potential of microorganisms in pharmaceutical or green industrial applications. Several enzymes, microbial products and related microbial technologies from TBRC network have been transferred to business sectors thereby benefiting the economy as a whole. TBRC Network ultimately represents the commitment to serve the industrial needs of a growing bioeconomy.