Excellent Center of Waste Utilization

and Management

Excellent Center of Waste Utilization and Management (ECoWaste) is a collaborative research center between Pilot Plant Development and Training Institute (PDTI), King Mongkut's University of Technology Thonburi (KMUTT), School of Bioresources and Technology (SBT), KMUTT, and National Center for Genetic Engineering and Biotechnology (BIOTEC), National Science and Technology Development Agency (NSTDA). ECoWaste has particularly strong expertise in waste water treatment for over 20 years, with an emphasis on high rate anaerobic digestion system to develop technology and gain a deeper insight into the fundamental aspects of waste treatment systems. It has been initiated in the year 1980 by academic professors, researchers, and engineers who were interested and specialized in wastewater treatment. The center then emphasized in the anaerobic technology for the treatment of agro-industrial wastewaters, such as wastewater from cassava starch, rice starch, palm oil mill, food, and canned fruit industries. (Read more)

Algal Biotechnology

It has been known that Spirulina has significantly potential as sources of protein and high-value chemicals such as essential fatty acids, e.g. linoleic acid and g-linolenic acid (GLA), including the photosynthetic pigments e.g. chlorophyll a and phycocyanin. Currently, Spirulina has more widely markets for health food, animal food, cosmetics and pharmaceutical product. (Read more)

Remediation laboratory

Our laboratory are concerned to prepare the cheap, specific and high capacity adsorbents for serving wastewater treatment by adsorption process, which is an alternative way to eliminate all of heavy metals, organic substances and highly soluble dyes. Accordingly, agricultural wastes (i.e. corncob, coir pith, shrimp shell, macadamia nut-shell, and rice husk) are appropriate to be the raw materials for preparing the special adsorbents for heavy metals, organic substances and dyestuffs. Lab scale and pilot plant are regularly tested and studied to obtain the essential parameters for supporting the operation. (Read more)

BEC

Biochemical Engineering and Pilot Plant Research and Development Unit

The Biochemical Engineering and Pilot Plant Research and Development Unit (BEC) was established in 1986 under cooperative program between the National Center for Genetic Engineering and Biotechnology (BIOTEC) and King Mongkut's University of Technology Thonburi (KMUTT). The Unit serves as a center for research and development in biochemical engineering and pilot plant design, with a strong emphasis on applications suitable to local industrial needs. During the initial phase, BEC bec ame one of a number of independent satellite research units of BIOTEC. This allowed the research group to work independent of the bureaucratic system. (Read more)