MUSKHAZLI MUSTAFA

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EXPERTISE
Microbe Biochemistry, Environmental Microbiology

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Assoc. Prof. Dr. Muskhazli Mustafa research is focused on microorganism especially bacteria. He was interested in the physiology and biochemistry of bacteria activity on solid waste utilization and bioremediation. The prime attention of his research is to identify and understand the biochemistry activity involve in order to improve the process. Other aspect of his research involves physiological and molecular biological approaches to optimize yields and to understand the biology of secretion. Major sponsors of his research include the ScienceFund (Ministry of Science and Innovation of Malaysia (MOSTI) and Fundamental Research Grant Scheme (FRGS).

CURRENT RESEARCH INTEREST :

- **Utilization of local bacteria isolate as agro-waste decomposer**

Lignocelluloses as agricultural and forest residuals account for the majority of total biomass present in the world which usually considered as a waste due to slow natural decomposition and commonly disposed by open burn caused so many valuable fibrous materials are still available in ‘agricultural waste’ such as complex carbohydrates, polypheno-lics, proteins, cellulose, hemicellulose, lignin,pectin and other compounds.

- **Exploitation of crustacean waste deprotenization and demineralization**

To overcome the disadvantage of the chemical treatments, several studies have been conducted using microorganisms or proteolytic enzymes for deproteinization of marine crustacean wastes. Proteases are by far the most important group of enzymes produced commercially and are used in many areas of applications.

- **Optimization of bio-remediation of harzadous compound**

Microorganisms also possess an ability to transform hazardous compounds to non-hazardous compounds through bioremediation. Frequently, microorganisms abilities are limited by the availability of the pollutant or another sub-strate.

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LINK TO POSTGRADUATE FIELD OF STUDY:
Bacteriology, Microbiology, Biodiversity and Conservation of Natural Resources, Environment Quality and Conservation

ADDITIONAL INFORMATION: