





Subject: PG Elective course for Environmental Science/biological science/chemistry/Agriculture

Course: Biomass characterization

Development Team

Course Coordinator: Dr.K. Arunkumar, Ph.D

Associate Professor & Head, Department of Plant Science, Central University of Kerala, Kasaragod-671320, Kerala, India

Content Writer: Dr.K. Arunkumar, Ph.D

Associate Professor& Head, Department of Plant Science, Central University of Kerala, Kasaragod-671320, Kerala, India

Content Reviewer: Prof. (Dr.) Muthukumar Muthusamy, Ph.D

Professor& Head

Department of Environmental Science, Central University of Kerala, Kasaragod-671320, Kerala,

India

Module Title :29. Fermentation(Principles and types)- I

Id : **FM/FHTP/29**

Objectives: To study the history, principles and types of fermentation and preferred biomass for fermentation.

Prerequisites: Fermentation; Gycolysis; TCA cycle; anaerobic fermentation; bacterial fermentation.

Key words: Gycolysis; anaerobic respiration; Fermentation;

Outcome: At the end of the module learners come know about history and principles of fermentation and various microorganisms that used to convert sugar molecules present in biomass to alcohol or organic acid under anaerobic condition. The major products derived by vareous types of fermentation and major raw materials used for fermentation.