Animal Science-2013

OMICS Group Conferences
Accelerating Scientific Discovery

International Conference on
Animal & Dairy Sciences

July 23-24, 2013 Embassy Suites Las Vegas, USA

Rapid methods and automation in microbiology: 25 years of trends and predictions to the future

Daniel Y C Fung

Kansas State University, USA

Abstract

Rapid Methods and Automation in Microbiology is a dynamic field in applied microbiology dealing with improved microbiological methods and applications to obtain valuable information about microbial numbers and kinds in water, food, air, medical, industrial, and other samples to determine the potential positive and maybe negative influence of microbial activities in the analyzed samples.

This presentation traces the early developments of the field from improving conventional methods by miniaturization, automation, mechanization, and ingenious procedures to obtain microbiological, immunological, biochemical, and related technologies to rapidly obtain valuable information so that researchers and scientists can make important decisions to use the data for positive disposition of the results for the betterment of the microbiological decisions at hand.

The presentation will conclude with presentation of the trends of national and international Food Microbiology –2008-2013 testing on Industrial Microbiology Market, Number of Tests and Market Values, Review of Organisms tested, Pathogen Tests by Microorganisms, and Microbiological Tests in USA as well as in other Geographic Regions.

The Author's ten point Predictions of Microbiological testing made in 1995 will be reviewed and Up-dated in the context of 2012 utilizations.

Biography

Daniel Y. C. Fung received his PhD from Iowa State University in 1969 and started his career as an Assistant Professor of Microbiology at Pennsylvania State University. He then moved to Kansas State University in 1978 and advanced to Full Professor in 1985 in Food Science and Animal Sciences and Industry where he performs research and teaching. He has about 800 publications to his credit and he won numerous national and international awards due to his research achievements as well as leadership in the general field of Food Science and Applied microbiology.