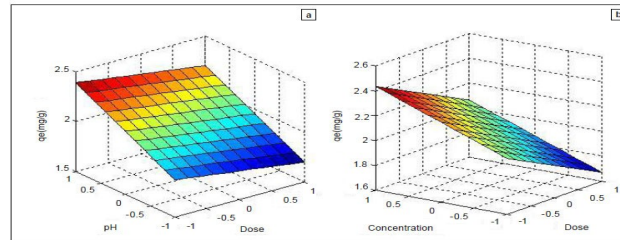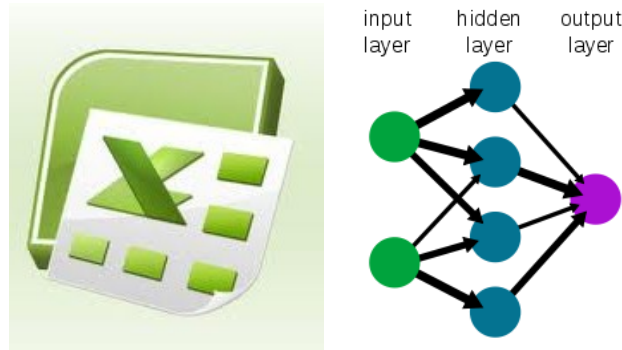UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

FEES

Student
RM300

Staff
RM400

Registration fee covers the workshop materials, refreshment breaks and lunches. The fee may be paid by cheque, local order, jurnal or cash payable to "KIRA-KIRA AM UPM".

LIMITED TO 35 PARTICIPANTS ONLY!!!

input layer   hidden layer   output layer

EXPERIMENTAL DESIGN AND DATA ANALYSIS WORKSHOP

29 – 30 January 2013
INTROP, UPM

Organized by:
Laboratory of Biopolymer and Derivatives (BADs)
Institute of Tropical Forestry and Forest Products (INTROP)
Universiti Putra Malaysia

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EXPERIMENTAL DESIGN AND DATA ANALYSIS WORKSHOP

WORKSHOP SCHEDULE

29th January 2013 (Tuesday)

0830 – 0900 : Registration
0900 – 1000 : **Lecture 1:**
    Introduction to Experiment
    Design and Data Analysis
1000 – 1030 : Break
1030 – 1230 : **Lecture 2:**
    Principle of Experimental
    Design and Basic Statistic
1230 – 1400 : Lunch
1400 – 1700 : **Practical:**
    Modelling, Curve Fitting,
    Optimization by using Excel

30th January 2013 (Wednesday)

0900 – 1000 : **Lecture 3:**
    Artificial Neural Network
    (ANN) – Part 1
1000 – 1030 : Break
1030 – 1230 : **Lecture 4:**
    Artificial Neural Network
    (ANN) – Part 2
1230 – 1400 : Lunch
1400 – 1530 : **Discussion:**
    Real Time Practical Issues
1630 – 1700 : Closing Ceremony and
    Certificate Presentation

INTRODUCTION

Experimental design is a specific set of directions for designing and carrying out an experiment, so that the results are as valid as possible. Experimental design seeks to eliminate experimental error and to insure that the results are due to the factor being tested.The design of a suitable experiment to test an hypothesis often requires some ingenuity and a suspicious nature. In summary these are:

Discrimination: Experiments should be capable of discriminating clearly between different hypotheses. It often turns out that two or more hypotheses give indistinguishable results when tested by poorly–designed experiments.

Replication and generality: Usually experiments must be repeated enough times for the results to be analysed statistically.

Controls: The experiment must be well controlled. We must eliminate by proper checks the possibility that other factors in the overall test situation produce the effect we are observing, rather than the factor we are interested in.

OBJECTIVES

- Provide the theoretical aspects and practical, especially in the computing experience for participants to enhance the ability to design their experiment, model and analize their data using Excel and ANN.

- Provide participants to clever handle related problems through the application of statistical methods as system optimization tools in research works.

WHO SHOULD PARTICIPATE

Postgraduate students, scientist, personnel in research and development and those who want to get experience in the experimental design and data analysis.