Response Surface Methodology

INTRODUCTION

For an optimal process design and operation of bioprocessing, it is essential to select the best product producer to be used through its genetic modification as well as appropriate physical-chemical environment factor. The methodology of optimization of environmental factors have been traditionally based on very extensive costly experimental work and time consuming. This experimental method involved change–one-factor–at-a-time in which a single factor is varied while other factors kept at a specific set of conditions. This method may lead to unreliable results and wrong conclusions, and is inferior to the factorial design method.

In order to overcome the difficulties of this methodology, which is basically a collection of statistical techniques for designing experiments, building models, evaluating the effect factors for desirable responses. Its better deal with multifactor design as well as regression.

Response Surface Methodology

The response surface methodology is generally a methodology of constructing approximations of the system behavior using results of the response analyses calculated at a series of points in the variable space. This method is applied in various field such as chemistry, physic, engineering as well as biotechnology to find the optimum response.

WHO SHOULD PARTICIPATE

Postgraduate students, scientist, personnel in research and development and those who want to get experience in the application of the Response Surface Methodology in bioprocess optimization.

OBJECTIVES

The objective of this workshop is to provide both theoretical and practical aspects, especially in computing experience to their ability to use this methodology for process optimization in the field of biotechnology.

This workshop is mainly deal with problems associated with application of statistical methods as a tool system optimization in bioprocessing.

Workshop Schedule

20th October 2015 (Tuesday)	
0830 - 0900	Registration
0900 - 1000	**Lecture 1:** Introduction to Process Optimization
1000 - 1030	Coffee / Tea Break
1030 - 1230	**Lecture 2:** Response Surface Methodology- Overview
1230 - 1400	Lunch Break
1400 - 1700	**Practical 1:** Design Expert
21st October 2015 (Wednesday)	
0900 - 1000	**Lecture 3:** Planning and Screening
1000 - 1030	Coffee / Tea Break
1030 - 1130	**Lecture 4:** Optimization and Verification
1130 - 1230	**Lecture 5:** Case Study
1230 - 1400	Lunch Break
1400 - 1630	**Discussion** Real Time Practical Issues
1630 - 1700	Closing Ceremony & Certificate Presentation

VENUE

Institute of Tropical Forestry and Forest Products
Universiti Putra Malaysia
43400 UPM Serdang, Selangor

WORKSHOP SECRETARIAT

Laboratory of Biopolymer and Derivatives (BADs)
Institute of Tropical Forestry and Forest Products (INTROP),
Universiti Putra Malaysia
43400 UPM Serdang
Selangor
Telephone : 03 - 8946 7009 / 8947 1887
(Attn: Mrs. Nazlia Girun / Mrs. Nor Azizah Haron)

E-mail: ***rsmupm@gmail.com***

FEE AND REGISTRATION

RM600/participant

Registration fee covers the workshop materials, breakfast, refreshment and lunch. The fee may be paid by bank draft, cheque or money order, payable to '**KIRA-KIRA AM UPM'**. Please send the payment slip and registration form to the Workshop Secretariat.

APPLICATION FORM

Complete the following form and email to

rsmupm@gmail.com

or

fax to ***03 - 89471896***

RESPONSE SURFACE METHODOLOGY IN BIOPROCESS WORKSHOP

20th-21st October 2015

Name (with title) : _____

_____

Organisation / Institution : _____

_____

Address : _____

_____

_____

_____

Telephone : _____

Email : _____

Mode of Payment :

- ☐ Bank Draft
- ☐ Cheque
- ☐ Money Order
- ☐ Jurnal (for UPM student/staff)

Vote No. :_____

Category :

- ☐ Student
- ☐ Government Agency
- ☐ Private Agency

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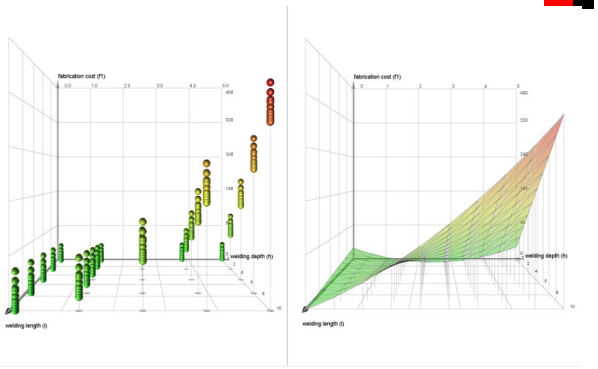
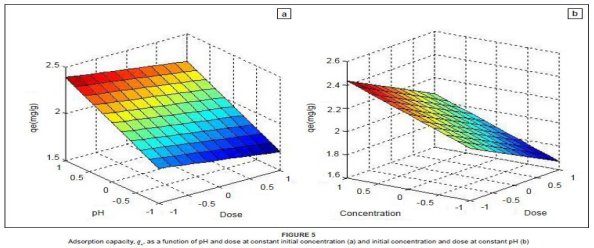
RESPONSE SURFACE METHODOLOGY IN BIOPROCESS WORKSHOP

20th-21st October 2015





Organized by :
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