Modelling and simulation in engineering

Table Of Content:

Foreword

Editor’s Introduction

List of Contributors

Chapter 1 Dynamic Modelling For Heavy Lift Operations Offshore

Particular consideration in the problem

Establishment of dynamic model

Chapter 2 Digital Simulation Of Sedimentation Discharge Of Some Malaysian Streams

Approaches to the modelling of sediment discharge

Results of application

Chapter 3 Simulation Of Overland Small Channel Flows

Model development

Model verification

Chapter 4 A Model Of Polluted Insulator String Under 2 Khz Voltage Surge

Background

Linear model of the leakage current of the polluted “V” - suspension insulator string

Chapter 5 Modelling And Simulation Of Telecommunication Systems With Time-Dependent Call Arrival Rates

Modelling a loss system

Approximation of blocking and simulation

Chapter 6 An Emperical Modelling Approach In Internal Mixing Of Rubber Compounds

The mixing process

Experimental design

Chapter 7 Modelling Of An Alternative Mortar Launcher Using Robotic Approach

Placement of coordinate frames

Definition of movements

Chapter 8 Modelling Of Real Rotors For Dynamic Analysis

Analysis using transfer matrix

Modelling of a real steam turbine rotor

Chapter 9 Simulation Of A Solar Pond For Malaysian Environment

Solar data

Model of solar pond

Chapter 10 Modelling And Simulation In Engineering For Military Application

Some military applications

Flight simulation

Index