

## Table of contents

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<b>Content</b>	<b>Page no.</b>
<i>Certificate</i>	<i>iii</i>
<i>Declaration by the candidate &amp; Certificate by the supervisor</i>	<i>iv</i>
<i>Copyright transfer certificate</i>	<i>v</i>
<i>Acknowledgement</i>	<i>vi</i>
<i>Table of contents</i>	<i>viii</i>
<i>List of figures</i>	<i>xv</i>
<i>List of Tables</i>	<i>xx</i>
<i>List of abbreviations/symbols</i>	<i>xxiii</i>
<i>Preface</i>	<i>xxv</i>
<b>Chapter 1: Introduction</b>	<b>1-26</b>
1.1 Introduction	1
1.2 Dyes: sources and their adverse effects	1
1.3 Aromatic hydrocarbons (AHCs): sources and their adverse effects	5
1.4 Treatment methods	9
1.5 Biological method	9
1.5.1 <i>In-situ</i> biodegradation	10
1.5.2 <i>Ex-situ</i> biodegradation	10
1.6 Factors affecting the biodegradation	11
1.6.1 Effect of pH	11
1.6.2 Effect of temperature	12

---

---

1.6.3	Effect of concentration	13
1.6.4	Effect of nutrients	13
1.6.5	Microbial adaptation	14
1.7	Bioreactors	14
1.7.1	Continuous stirred tank bioreactor (CSTBR)	17
1.7.2	Up-flow anaerobic sludge blanket (UASB)	18
1.7.3	Membrane bioreactor (MBR)	19
1.7.4	Fluidized bed biofilm reactor (FBBR)	20
1.7.5	Packed bed bioreactor (PBBR)	22
1.7.6	Moving bed biofilm reactor (MBBR)	24
1.7.7	Rotating biological contactor (RBC)	25
<b>Chapter 2: Literature review</b>		<b>27-48</b>
2.1	Biodegradation of dye <i>via</i> bacteria, fungi, and algae	27
2.1.1	Biodegradation of dye <i>via</i> bacteria	27
2.1.2	Biodegradation of dye <i>via</i> fungi	29
2.1.3	Biodegradation of dye <i>via</i> algae	29
2.2	Review on biodegradation of dye	30
2.3	Biodegradation of PAHs <i>via</i> bacteria, fungi, and algae	37
2.3.1	Biodegradation of PAHs <i>via</i> bacteria	37
2.3.2	Biodegradation of PAHs <i>via</i> fungi	39
2.3.3	Biodegradation of PAHs <i>via</i> algae	39
2.4	Review on biodegradation of PAHs	40
2.5	Summary of the literature and research gap	46

---

---

2.6	Objective of the research work	48
<b>Chapter 3: Process optimization of naphthalene biodegradation using surface response methodology: Kinetic study and performance evaluation of an integrated aerobic treatment plant</b>		49-78
3.1	Introduction	49
3.2	Materials and methods	50
3.2.1	Chemicals and materials	50
3.2.2	Collection of soil sample for the isolation of bacterial species	51
3.2.3	Enrichment and isolation of potential bacterial species	51
3.2.4	Identification of bacterial species and phylogenetic tree	53
3.2.5	Selection of potential bacterial species	53
3.2.6	Design of experiments using response surface methodology	54
3.2.7	Biodegradation study in integrated aerobic treatment plant	55
3.2.8	Analytical methods	57
3.2.9	Kinetic growth model	58
3.2.10	Phytotoxicity study	59
3.3	Results and discussion	60
3.3.1	Selection of potential bacterial species	60
3.3.2	Characterization of potential bacterial species	61
3.3.3	Analysis by response surface methodology (RSM)	62
3.3.4	Interactive effect of process parameters	65
3.3.4.1	Effect of pH and naphthalene conc.	65
3.3.4.2	Effect of temperature and naphthalene conc.	66

---

---

3.3.4.3	Effect of pH and temperature	66
3.3.5	Model validation	67
3.3.6	Performance of laboratory-scale IATP	69
3.3.7	Analysis of metabolites by GC-MS	71
3.3.8	Kinetic study	72
3.3.9	Phytotoxicity analysis	76
3.4	Conclusions	77
<b>Chapter 4: Performance evaluation of a packed bed bioreactor: Bio-</b>		<b>79-102</b>
<b>kinetics and external mass transfer study</b>		
4.1	Introduction	79
4.2	Mass transfer Model	80
4.2.1	Biodegradation of naphthalene and observed rate constant	80
4.2.2	Combined mass transfer and biochemical reaction	81
4.2.3	An empirical model for naphthalene degradation	83
4.3	Materials and methods	84
4.3.1	Chemicals and materials	84
4.3.2	Potential bacterial culture	84
4.3.3	Packing media in packed bed bioreactor	84
4.3.4	Biodegradation of naphthalene in packed bed bioreactor	85
4.3.5	Bioreactor study	86
4.3.6	Analytical methods	87
4.3.7	Growth kinetic study	87
4.4	Results and discussion	88

---

---

4.4.1	Identification of potential species	88
4.4.2	Morphological analysis of packing media	88
4.4.3	Process optimization	89
4.4.4	Performance of a continuous packed bed bioreactor	92
4.4.5	Mass transfer studies	93
4.4.6	Biodegradation kinetic	100
4.5	Conclusions	101
<b>Chapter 5: A comparative study of modified carriers in moving bed biofilm reactor for the treatment of wastewater: Process optimization and kinetic study</b>		103-118
5.1	Introduction	103
5.2	Materials and Methods	104
5.2.1	Chemicals and bacterial culture	104
5.2.2	Carriers used in bioreactor	104
5.2.3	Experimental set-up	104
5.2.4	Design of experiments using response surface methodology	106
5.2.5	Analytical methods	106
5.2.6	Kinetic model	107
5.3	Results and discussion	108
5.3.1	Characterization of carriers	108
5.3.2	Optimization of process parameters	110
5.3.3	Optimization study in moving bed biofilm reactor	112
5.3.3.1	Effect of pH	112

---

---

5.3.3.2	Effect of retention time	113
5.3.3.3	Effect of type of carriers	113
5.3.3.4	Simultaneous effect of pH and retention time	114
5.3.3.5	Optimization and validation of the model	116
5.3.4	Kinetic evaluation by modified Stover-Kincannon model	116
5.4	Conclusions	118
<b>Chapter 6: Biodegradation of Congo red dye in a moving bed biofilm reactor: Performance evaluation and kinetic modeling</b>		119-140
6.1	Introduction	119
6.2	Materials and methods	120
6.2.1	Dye and chemicals	120
6.2.2	Bacterial species and carriers	120
6.2.3	Optimization by response surface methodology	121
6.2.4	Biodegradation study	121
6.2.5	Analytical techniques	122
6.2.6	Kinetics model and phytotoxicity analysis	123
6.3	Results and discussion	123
6.3.1	Selection of potential bacterial species	123
6.3.2	Identification of dye degrading bacterial species	124
6.3.3	Morphological analysis of packing media	125
6.3.4	Statistical analysis	126
6.3.5	Optimization study using central composite design	128
6.3.5.1	Interactive effect of pH and dye concentration	128

---

---

6.3.5.2	Interactive effect of pH and carrier filling ratio	129
6.3.5.3	Interactive effect of dye and carrier filling ratio	129
6.3.6	Model validation	130
6.3.7	Biodegradation of Congo red dye in continuous bioreactor	132
6.3.8	Rate control mechanism in dye degradation	133
6.3.9	Kinetic study by modified Stover-Kincannon model	135
6.3.10	Biodegradation analysis	136
6.3.11	Phytotoxicity study	139
6.4	Conclusions	140
<b>Chapter 7: Summary of the thesis and scope for future work</b>		141-144
<b>References</b>		145-160
<b>Appendix</b>		161-170
<b>List of research publications</b>		171-173

---

## List of figures

---

<b>Figure no.</b>	<b>Figure caption</b>	<b>Page no.</b>
Figure 1.1.	Chemical structures of 16 polycyclic aromatic hydrocarbons	8
Figure 1.2.	Schematic diagram of a stirred tank bioreactor	17
Figure 1.3.	Schematic diagram of an Up-flow anaerobic sludge blanket	19
Figure 1.4.	A schematic diagram of membrane bioreactor (MBR): (a) submerged MBR; (b) external MBR	20
Figure 1.5.	Schematic diagram of an anaerobic fluidized bed biofilm reactor	21
Figure 1.6.	A schematic diagram of a packed bed bioreactor	23
Figure 1.7.	A schematic diagram of a moving bed biofilm reactor (MBBR) set-up	25
Figure 1.8.	A schematic diagram of a rotating biological contactor	26
Figure 2.1.	Proposed biodegradation pathway of naphthalene	38
Figure 3.1.	Process flow diagram of enrichment and isolation of bacterial species	52
Figure 3.2.	Schematic diagram of the pilot-scale integrated aerobic treatment plant	56
Figure 3.3.	Process flow diagram of phytotoxicity analysis in distilled, untreated, and treated wastewater	60
Figure 3.4.	Removal efficiency of naphthalene by various bacterial species	61

---

---

Figure 3.5.	Phylogenetic tree of the isolated <i>Bacillus cereus</i> RKS4 (MH681588.1)	62
Figure 3.6.	Surface and contour plots of naphthalene removal: (a, b) effect of pH and naphthalene concentration (at 32.5 °C temperature); (c, d) effect of temperature and naphthalene concentration (at 7.0 pH); (e, f) effect of pH and temperature (at 30 mg/L concentration)	68
Figure 3.7.	The performance of pilot-scale integrated aerobic treatment plant for the treatment of naphthalene	70
Figure 3.8.	GC–MS profile (a) naphthalene control and (b) intermediate metabolites identified in naphthalene biodegradation	72
Figure 3.9.	Experimental and predicted plots at different naphthalene concentrations: (a) Monod growth model; (b) Teissier-Edwards inhibition model	74
Figure 3.10.	Images of <i>Cicer arietinum</i> seeds germinated in (a) distilled water, (b) untreated wastewater, and (c) treated wastewater	77
Figure 4.1.	Low density polyethylene used as packing media in packed bed bioreactor	85
Figure 4.2.	Schematic diagram of the experimental set-up for the biodegradation of naphthalene	86
Figure 4.3.	Phylogenetic tree of <i>Exiguobacterium</i> sp. RKS3 isolated from petroleum-contaminated site	88

---

---

Figure 4.4.	SEM image packing media: (a) LDPE before immobilization; and (b) LDPE immobilized with biofilm of <i>Exiguobacterium</i> sp. RKS3	89
Figure 4.5.	Effect of pH (5-9), temperature (25-40 °C), and salinity (0-8 g/L) on naphthalene removal efficiency	91
Figure 4.6.	The performance of packed bed bioreactor at various flow rates.	93
Figure 4.7.	Effect of flow rate on the biodegradation rate constant; (b) The observed profile of $1/kp$ vs. $1/Gn$ at different n values ( $n= 0.2, 0.5, 0.7, \text{ and } 0.9$ ).	95
Figure 4.8.	The variation of external mass transfer coefficient with mass velocity	96
Figure 4.9.	Profile of the kinetics and experimental data fitted with Andrews-Haldane model	101
Figure 5.1.	Schematic diagram of the moving bed biofilm reactor	105
Figure 5.2.	SEM image of MBBR carriers: (a) before and (b) after biofilm developed on PP; (c) before and (d) after biofilm developed on LDPE-PP; (e) before and (f) after biofilm developed on PUF-PP	109
Figure 5.3.	(a) Effect of pH (5-9) on COD removal (%); (b) Effect hydraulic retention time (HRT) (1-5 day) on COD removal (%) with various carriers: PP, LDPE-PP, PUF-PP	113

---

Figure 5.4.	Simultaneous effect of retention time (1-5 day) and pH (5-9) on COD removal efficiency: (a, b) with PP; (c, d) LDPE-PP; (e, f) with PUF-PP as carriers in MBBR	115
Figure 5.5.	Modelling of COD removal in MBBR by modified Stover–Kincannon model for different carriers	118
Figure 6.1.	Schematic representation of experimental set-up for the biodegradation of Congo red dye	122
Figure 6.2.	Removal efficiency of Congo red dye by isolated bacterial species	124
Figure 6.3.	A phylogenetic tree of <i>Bacillus</i> species (MH587030.1) isolated from dye contaminated sites	124
Figure 6.4.	Scanning electron microscope image of PUF-PP carrier: (a) before immobilization (control); and (b) after biofilm development	125
Figure 6.5.	Figure 6.5. Surface and contour plots for the removal (%) of Congo red dye: (a, b) effect of pH (5-9) and dye concentration (10-100 mg/L) (at 35% carrier filling); (c, d) effect of carrier filling (10-60%) and pH (5-9) (at 55 mg/L Congo red concentration); (e, f) effect of carrier filling (10-60 %) and dye concentration (10-100 mg/L) (at 7.0 pH)	131
Figure 6.6.	(a) Performance of a continuous moving bed bioreactor at different inlet loading rate	134

---

Figure 6.6.	(b) Relation between mass transfer and bio-reaction controlling zone at various inlet loading rates	135
Figure 6.7.	Stover–Kincannon model plots for the biodegradation of Congo red dye	136
Figure 6.8.	The spectral profile of control and biodegraded sample of Congo red dye in MBBR	137
Figure 6.9.	The FT-IR spectrum of (a) Congo red dye; (b) biodegraded sample of Congo red dye	138
Figure 6.10.	<i>Vigna radiata</i> seeds germinated in (a) Distilled water, (b) Untreated dye solution, (c) Treated dye solution	139

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## List of Tables

---

<b>Table no.</b>	<b>Table caption</b>	<b>Page no.</b>
Table 1.1	A summary of dyes and their properties	4
Table 1.2	Toxicity of polycyclic aromatic hydrocarbons reported by various environmental agencies	7
Table 1.3	Classification of bioreactors with their merits and demerits	15
Table 2.1	A summary of microorganisms and process conditions used in the biodegradation of dyes	35
Table 2.2	A summary of microorganisms used in the biodegradation of PAHs	44
Table 3.1	Experimental ranges of independent variables used in optimization process	55
Table 3.2	Experimental design for naphthalene biodegradation by <i>Bacillus cereus</i> RKS4 (MH681588.1) based on CCD of RSM	63
Table 3.3	Analysis of variance for quadratic model for naphthalene removal (%) by <i>Bacillus cereus</i> RKS4 (MH681588.1)	64
Table 3.4	Effect of process flow rate, and Inlet loading rate (ILR) on the performance of pilot-scale integrated aerobic treatment plant	70
Table 3.5	Monod growth kinetics and Teissier-Edwards inhibition model	74
Table 3.6	A summary of kinetics constants obtained for naphthalene biodegradation	75

---

Table 3.7	Summary of phytotoxic analysis of the treated and untreated wastewater on <i>Cicer arietinum</i> seeds	76
Table 4.1	Profile of packed bed bioreactor performance at various inlet flow rates	93
Table 4.2	Profile of the operational parameters of bioreactor: experimentally determined values of $kp$ and calculated data at various values of $n$	97
Table 4.3	Profile of slope and intercept estimated from the plot of $1/kp$ vs. $1/Gn$ for different values of $n$	97
Table 4.4	Calculated values of external mass transfer area ( $a_m$ ), external mass transfer coefficient ( $k$ ), and $N$ at different values of $n$ and $K$	98
Table 4.5	The profile of $km$ at different mass velocities for $n= 0.9$ and $K= 5.7$	99
Table 4.6	Comparison of experimental $kp$ values and calculated $kp$ values obtained at various flow rates in relation to $n$	99
Table 4.7	Different mass transfer correlation reported in previous studies in packed bed biofilm reactor	100
Table 5.1	Summary of process variables and their range in optimization process	106
Table 5.2	Experimental conditions and results obtained by the central composite design of response surface methodology	111
Table 5.3	Model Summary by ANOVA analysis	112

---

Table 5.4	ANOVA for quadratic model by central composite design of response surface methodology	112
Table 5.5	Optimum conditions for the COD removal in moving bed biofilm reactor	116
Table 5.6	Summary of kinetics parameter obtained by modified Stover–Kincannon model during biodegradation of naphthalene	117
Table 6.1	The range of the operating parameters in the biodegradation of Congo red dye	121
Table 6.2	Central composite design of experimental runs and their outcomes for the removal of Congo red dye	127
Table 6.3	Summary of model statistics	127
Table 6.4	ANOVA summary for the quadratic model	127
Table 6.5	Comparison of Congo red dye removal at various concentrations with the previous literature	130
Table 6.6	Performance of a moving bed bioreactor for the biodegradation of CR dye	134
Table 6.7	Profile of kinetics constants calculated during biodegradation of Congo red dye	136
Table 6.8	Summary of phytotoxic analysis of <i>Vigna radiata</i> seeds grown in treated and untreated wastewater	139

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## List of Abbreviations and Symbols

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<b>Abbreviation</b>	<b>Nomenclature</b>
AHCs	Aromatic hydrocarbons
BOD	Biochemical oxygen demand (mg/L)
CCD	Central composite design
COD	Chemical oxygen demand (mg/L)
DO	Dissolved oxygen (mg/L)
EC	Elimination capacity (mg/L.d)
HRT	Hydraulic retention time (d)
IATP	Integrated aerobic treatment plant
ILR	Inlet loading rates (mg/L.d)
LDPE	Low-density polyethylene
LDPE-PP	Low-density polyethylene-polypropylene
MAH	Monocyclic aromatic hydrocarbon
MBBR	Moving bed biofilm reactor
OVAT	One variable at a time
PAH	Polycyclic aromatic hydrocarbon
POP	Persistent organic pollutant
PBBR	Packed bed bioreactor
PP	Polypropylene
PUF	Polyurethane foam
PUF-PP	Polyurethane foam-polypropylene
RE	Removal efficiency (%)
RSM	Response surface methodology

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<b>Symbol</b>	<b>Nomenclature</b>
$K_B$	Saturation constant (mg/L.day)
$K_i$	Substrate inhibition constant (mg/L)
$K_s$	Half-saturation rate constant (mg/L)
$Q$	Volumetric flow rate (mL/h)
$S$	Substrate concentration (mg/L)
$S_0$	Inlet concentrations of substrate (mg/L)
$S_e$	Out concentrations of substrate (mg/L)
$t$	Time (day)
$U_{max}$	Maximum substrate removal rate (mg/L.day)
$V$	Bioreactor volume (L)
$X$	Biomass concentration (mg/L)
$\mu$	Specific growth rate of microorganism (per day)
$\mu_{max}$	Maximum specific growth rate of microorganism (per day)