



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



HANAA ALY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



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كلية العلوم – قسم الكيمياء



**Comparative study between conventional and
electrical coagulation in the removal of organic matter
from some wastewater**

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**For the requirement of Ph.D. Degree of Science in
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To

Department of Chemistry

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2021



كلية العلوم – قسم الكيمياء



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Menna tallah hesham fathy

Dedication

This work is dedicated to my family with love.

First and foremost, to my father, who has always been a source of inspiration for me. He instilled in me the motivation and discipline to tackle any task with passion and determination.

To my backbone and my life partner, my success would not have been possible without my honest husband's love and support. Thanks for believing in me, strengthen me in my weak moments. I hope this work make you proud

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With warm gratitude and deep love ...

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Contents

	Pages
List of Abbreviations	i
List of Figures	ii
List of Tables	v
Aim of the work	viii
Abstract	ix
Summary	x
1.General Introduction	
1.1.Water classification	1
1.2.Raw water characteristics	2
1.3.Water and Pollution	3
1.4.Water treatment processes	5
1.4.1.Coagulation and Flocculation process:	6
1.4.1.1.Nature of negatively charged colloidal particles	7
1.4.1.2.Flocculation process	7
1.4.1.3.Coagulation process	8
1.4.1.4.Disadvantages of the coagulation - flocculation process	9
1.4.1.5.Flocculants for the Coagulation Process	11
1.4.1.6.Coagulant Aids	12
1.4.1.7.Rapid mix for complete Coagulation	13
1.4.1.8.Natural polymers	13
1.4.2.Sedimentation process	14
1.4.3.Filtration Process	15
1.5.Theory of electrocoagulation	17
1.5.1.Main reactions	18

1.5.2.Side reactions	22
1.5.3.Properties of the sludge	24
1.5.4.Treatment parameters	25
1.5.5.Comparison of electrocoagulation and chemical coagulation	30
1.6.Practical considerations of electrocoagulation	32
1.6.1.Constructions of electrocoagulation systems	32

2.Experimental work

2.1.Chemicals	35
2.2.Materials	35
2.2.1.lignin	35
2.2.2.Electrodes	35
2.2.3.Industrial water specification	36
2.3.Methodology	36
2.3.1.Isolation of lignin	36
2.3.2.Instrumentations	36
2.3.2.1.The constructed electrochemical cell	36
2.3.3.Analyses	38
2.3.3.1.Elemental analysis	38
2.3.4.FT-IR measurements	38
2.3.5.Determination of Turbidity	38
2.3.6.Determination of Organic matter	38
2.3.7.Determination of total suspended solid (TSS) and total dissolved solid (TDS)	38
2.3.8.Determination of metal ions in water	39
2.3.9.Determination of pH	39
2.3.10.Determination of BOD	39
2.3.11.Determination of COD	39
2.3.12.Determination of Total hardness	39
2.3.13.Determination of Calcium hardness	39

2.3.14.Determination of Magnesium hardness	39
2.3.15.Determination of Total alkalinity	39
2.3.16.Determination of Oil and grease	40
2.3.17.Removal efficiency	40
2.4.Jar test method for chemical coagulation	40

3.Result and discussion

3.1.Characterization of lignin and industrial wastewater specifications	43
3.1.1.Characterization of lignin	43
3.1.1.1.FTIR of isolated lignin	43
3.1.1.2.Energy dispersive x-ray (EDX)	45
3.1.1.3.Elemental analysis of lignin	46
3.1.2.Determination of lignin in water	46
3.1.3.Specifications of industrial waste water	48
3.1.3.1.Specifications the water used in this work	48
3.1.4.Effect of chemical coagulation method on the treatment of industrial wastewater	49
3.1.4.1.Using of Jar test for the removing of (BOD), (COD) and (TSS) from wastewater represented as percentage removal	50
3.2.A Comparative study of electro and chemical coagulation for efficient removal of lignin and some other pollutants from industrial wastewater using aluminum electrode	52
3.2.1.Electrocoagulation mechanism	52
3.2.2.Effect of applied potential	53
3.2.3.Effect of applied potential and applied current density on the properties of cell electrodes	56
3.2.4.Effect of distance between aluminum electrodes on the properties of cell	66
3.2.5.Cost estimation	73
3.2.6.Effect of electro, chemical and both on the specifications of treated water	74

3.3.A Comparative study of electro and chemical coagulation for efficient removal of lignin and some other pollutants from industrial wastewater using iron electrode	76
3.3.1.Electrocoagulation mechanism using iron electrodes	77
3.3.2.Factor affecting the efficiency removal of lignin and other pollutants from water using of electrocoagulation using iron electrode.	78
3.3.2.1.Effect of applied potential	78
3.3.3.Effect of applied potential and applied current density on the properties of cell electrode	83
3.3.4.Effect of distance between iron electrodes on the properties of cell	91
3.3.5.Comparison between chemical and electrochemical coagulation methods using iron electrodes on the removal percentage of (BOD), (COD) and (TSS) from wastewater	97
3.3.6.Effect of electro and chemical coagulation and the combination of both on the specifications of treated water	97
3.3.7.Cost estimation	99
4.References	100
Arabic summary	١
Arabic abstract	٥

List of Abbreviations

STPs	sewage treatment plants
NOM	natural organic matter
COD	chemical oxygen demand
PAM	polyacrylamide
PDADMAC	Poly (diallyldimethylammonium chloride)
CPAMs	Polyacrylamides
ECH/DMA	Epichlorohydrin/dimethylamine polymers
ORP	oxidation-reduction potential
EF	electro flotation
EC	electrochemical
DAF	dissolved air flotation
DC	direct current
AC	alternating current
FTIR	Fourier transform infrared system
TOC	total organic carbon
TSS	total suspended solid
TDS	total dissolved solid
BOD	Biological oxygen demand
EPA	environmental protection agency
EDX	Energy dispersive x-ray
E	Energy consumption

List of Figures

Figure 1.1-1 water classification on earth	1
Figure 1.3-1 Untreated effluent flows from a sugar factory to the river	4
Figure 1.4.1.3-1 The purpose of coagulant addition	9
Figure 1.4.2-1 Sedimentation process	15
Figure 1.4.3-1 Multimedia filter	17
Figure 1.5-1 Schematic representation of typical reactions during the EC treatment-t	18
Figure 1.5.1-1 E-pH diagrams of a) iron and b) aluminum at 25 °C, 1 bar and 10 ⁻⁶ M. system.	20
Figure 1.6.1-1 Connections and electrode polarity in a) bipolar and b) monopolar EC systems.	33
Figure 2.2.2-1 New polished Aluminum (A) and iron (B) electrodes	35
Figure 2.2.2-2 Aluminum (A) and iron (B) electrodes after electrocoagulation processes	36
Figure 2.3.2.1-1 scale, Electrochemical cell	37
Figure 2.3.2.1-2 Schematic diagram of treatment plant	37
Figure 2.4-1 Typical Jar test apparatus with ferric chloride for the clarification of raw water	40
Figure 3-1 structure of lignin	42
Figure 3.1.1.1-1 FTIR of pure and isolated lignin	44
Figure 3.1.1.2-1 Energy dispersive X-ray (EDX) of lignin	45
Figure 3.1.2-1 The variation of wavelength against absorption	46
Figure 3.1.2-2 Calibration curve of low standard concentration lignin	47
Figure 3.1.2-3 Calibration curve of high standard concentration lignin	47
Figure 3.1.4.1-1 BOD removal from wastewater at different ferric chloride	50
Figure 3.1.4.1-2 COD removal from wastewater at different ferric chloride	51

Figure 3.1.4.1-3 TSS removal from wastewater at different ferric chloride	51
Figure 3.2.3-1 The variation of current density (A) and weight loss of aluminum electrode for potential of 2v at 5 minutes	56
Figure 3.2.3-2 The variation of current density (A) and weight loss of aluminum electrode for potential of 2v at 10 minutes	57
Figure 3.2.3-3 The variation of current density (A) and weight loss of aluminum electrode for potential of 2v at 15 minutes	57
Figure 3.2.3-4 The variation of current density (A) and weight loss of aluminum electrode for potential of 2v at 20 minutes	58
Figure 3.2.3-5 The variation of current density (A) and weight loss of aluminum electrode for potential of 2v at 25 minutes	58
Figure 3.2.3-6 The weight loss of aluminum electrodes at 2v for different conditions	59
Figure 3.2.3-7 The variation of current density (A) and weight loss of aluminum electrode for potential of 4v at 5 minutes	59
Figure 3.2.3-8 The variation of current density (A) and weight loss of aluminum electrode for potential of 4v at 10 minutes	60
Figure 3.2.3-9 The variation of current density (A) and weight loss of aluminum electrode for potential of 4v at 15 minutes	60
Figure 3.2.3-10 The variation of current density (A) and weight loss of aluminum electrode for potential of 4v at 20 minutes	61
Figure 3.2.3-11 The weight loss of aluminum electrodes at 4v for different conditions	61
Figure 3.2.3-12 The variation of current density (A) and weight loss of aluminum electrode for potential of 8v at 5 minutes	62
Figure 3.2.3-13 The variation of current density (A) and weight loss of aluminum electrode for potential of 8v at 10 minutes	62
Figure 3.2.3-14 The variation of current density (A) and weight loss of aluminum electrode for potential of 8v at 15 minutes	63
Figure 3.2.3-15 The weight loss of aluminum electrodes at 8v for different conditions	63
Figure 3.2.3-16 The variation of current density (A) and weight loss of aluminum electrode for potential of 12v at 5 minutes	64

Figure 3.2.3-17 The variation of current density (A) and weight loss of aluminum electrode for potential of 12v at 10 minutes	64
Figure 3.2.3-18 The weight loss of aluminum electrodes at 12v for different conditions	65
Figure 3.3.3-1 The variation of current density (A) and weight loss of iron electrode for potential of 2v at 5 minutes	84
Figure 3.3.3-2 The variation of current density (A) and weight loss of iron electrode for potential of 2v at 10 minutes	84
Figure 3.3.3-3 The variation of current density (A) and weight loss of iron for potential of 2v at 15 minutes	85
Figure 3.3.3-4 The variation of current density (A) and weight loss of iron for potential of 2v at 20 minutes	85
Figure 3.3.3-5 The variation of current density (A) and weight loss iron electrode for potential of 2v at 25 minuets	86
Figure 3.3.3-6 The weight loss of iron electrodes at 2v for different conditions	86
Figure 3.3.3-7 The variation of current density (A) and weight loss of iron electrode for potential of 4v at 5 minutes	87
Figure 3.3.3-8 The variation of current density (A) and weight loss of iron electrode for potential of 4v at 10 minutes	87
Figure 3.3.3-9 Variation of current density (A) and weight loss of iron electrode for potential of 4v at 15 minutes	88
Figure 3.3.3-10 weight loss of iron electrodes at 4v for different conditions	88
Figure 3.3.3-11 Variation of current density (A) and weight loss of iron electrode for potential of 8v at 5 minutes	89
Figure 3.3.3-12 Variation of current density (A) and weight loss of iron electrode for potential of 8v at 10 minutes	89
Figure 3.3.3-13 weight loss of iron electrodes at 8v for different conditions	90
Figure 3.3.3-14 weight loss of iron electrodes at 12v at 5minuets	90