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ELECTRODEPOSITION OF COPPER ON POLISHED COPPER ELECTRODE

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ELECTRODEPOSITION OF COPPER ON POLISHED COPPER ELECTRODE

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ABSTRACT

This project studies the surface morphology of the copper deposit from three different bath solutions on polished copper (3.1 mm in diameter) electrode by using Scanning Electron Microscopy. The behaviour of glycine as an additive in a bath solution containing 0.3 M of copper (II) sulphate and 2.2 M of sulphuric acid was studied by using cyclic voltammetry. In this project, glycine did not involved directly in the reaction of Cu^{2+}/Cu couple but increased the potential and current density of the plating process. However, glycine has the properties for inhibiting the deposition of copper onto the copper disc. Moreover, block growth and nodules growth is observed on the surface of the copper disc.

CONTENTS

Page Number

ACKNOLDEGEMENT i

ABSTRACT ii

CONTENTS iii

LIST OF TABLES vi

LIST OF FIGURES vii

LIST OF APPENDIXS ix

CHAPTER 1: INTRODUCTION

1.1 General Principles of Electrodeposition 1
1.1.1 Standard Potentials of Copper 1
1.1.2 Electroplating 3
1.1.3 Rate of Deposition 6
1.1.3.1 Faraday's Laws 6
1.1.3.2 Current Efficiency 6
1.1.3.3 Current Density 7
1.2 Nucleation and the Mechanism of the Electrodeposition of Metals 8
1.2.1 Nucleation 8
1.2.2 The Mechanism of the Electrodeposition of Metals 10
1.3 Electrode Kinetics 15
1.3.1 The Rate of Electron Transfer 16
1.4 Mass Transport 20
1.4.1 Diffusion 21
1.4.2 Convection 22
1.4.3 Migration 23
1.5 Voltammetry 24
1.5.1 Cyclic Voltammetry 24
1.5.2 EC Reaction 25
1.6 Scanning Electron Microscopy 28
1.6.1 Instrumentation 28
1.6.1.1 Electron Sources 29
1.6.1.2 Electron Optics 30
1.6.1.3 Detector 31
1.6.2 The Interactions of Electron Beams with Solids 32
1.6.2.1 Elastic Scattering 32
1.6.2.2 Inelastic Interaction 33
1.7 Properties of Copper 34
1.7.1 Chemical Properties 34

1.7.2 Physical Properties 35
1.7.2.1 Malleable 35
1.7.2.2 Electrical Conductivity 36
1.7.2.3 Thermal Conductivity 37
1.7.2.4 Corrosion Resistant and Application 38
1.8 Application of Copper Plating 40
1.8.1 Electrodeposition 41
1.8.2 Electropolishing 44
1.9 Objective 45

CHAPTER 2: METHODOLOGY AND MATERIALS

2.1 Chemicals and Materials 46
2.2 Apparatus and Instruments 48
2.3 Fabrication and Polishing of Copper Working Electrode 50
2.3.1 Fabrication of Copper Working Electrode 50
2.3.2 Polishing of Copper Working Electrode 51
2.4 Experiment 52
2.4.1 Bath Solution Preparation 52
2.4.2 Instruments Setting and Operation 53
2.4.2.1 Operation of BAS 100 B/W Electrochemical Workstation (Cyclic voltammetry Mode) 53
2.4.2.2 Operation of Model 363 Potentiostat/ Galvanostat (Plating) 56
2.4.2.2.1 Control E Operation 56
2.4.2.2.2 Control I Operation 58

CHAPTER 3: RESULTS AND DISCUSSION

3.1 Cyclic Voltammetry 60
3.2 The R Square Coefficient 66
3.3 The Mechanism Study 68
3.3.1 Reversible Reaction 68
3.3.2 Irreversible Reaction 72
3.3.3 Effect of Additive 74
3.3.4 Effect of Chloride Ion 75
3.4 Plating Process 77
3.5 Rate of Copper Deposition 89
3.6 Effect of Additive 91
3.7 Surface Morphology of Plated Electrode 93
3.7.1 Dissolution of Copper 95
3.7.2 Plating at Constant Potential 96
3.7.3 Plating at Constant Current 99
3.8 EDX 100
3.9 Problems and Suggestion 101

CHAPTER 4: CONCLUSION

4.1 Cyclic Voltammetry 103

4.2 Plating Process 104
4.3 SEM 104

REFERENCE 106

APPENDIX 108

LIST OF TABLES

Table		Page Number
1.1.1.1	Standard Potentials in Acidic Solution	2
2.1.1	Composition of copper (II) sulphate anhydrous	47
3.1.1	Peak currents obtained from different scan rates	60
3.1.2	Peak currents obtained from different scan rates	61
3.1.3	Peak currents obtained from different scan rates	62
3.1.4	Peak currents obtained from different scan rates	63
3.1.5	Peak currents obtained from different scan rates	64
3.1.6	Peak currents obtained from different scan rates	65
3.4.1	Current measured due to plating process on copper electrode at constant potential	77
3.4.2	Potential measured due to plating process on copper electrode at constant current	79
3.4.3	Current measured due to plating process on copper electrode at constant potential	81
3.4.4	Potential measured due to plating process on copper electrode at constant current	83
3.4.5	Current measured due to plating process on copper electrode at constant potential	85
3.4.6	Potential measured due to plating process on copper electrode at constant current	87
3.7	Appendix list for the SEM image for the surface of copper discs due to different plating condition	93

LIST OF FIGURES

Figure		Page Number
1.2.2.1	Types of site on a perfect crystal: 1, Kink site; 2, edge site; 3, adatom	11
1.2.2.2	A screw dislocation an its propagation leading to a spiral feature	13
1.2.2.3	Schematic of various growth forms observed in metal deposition: (a) layer growth, (b) ridge growth, (c) block growth, (d) pyramidal growth, and (e) dendritic growth	14
1.2.2.4	The variation of the characteristic growth modes on the normalised current density (I/I_L)	15
1.3.1.1	The variation of current as a function of the potential different	19
1.4.1	Schematic of some of the processed that influence the rate of an electrode reaction	20
1.4.1.1	Diffusion to a large planar surface	21
1.5.1.1	Cyclic voltammogram for a reversible electron transfer reaction	25
1.5.2.1	Cyclic voltammograms showing the influence of chemical reaction on the observed voltammetric behaviour	27
1.6.1.1	Schematic of a SEM	29
2.2.1	A photograph of the cell used. (A) Counter electrode, (B) Working electrode, (C) Nitrogen gas inlet and (D) Reference electrode	49
2.3.1.1	The fabricated copper working electrode	50
2.4.2.1.1	A photograph of a cell and the BAS 100B/W Electrochemical workstation	54
3.1.1	Graph of peak current versus square root of scan rate	61

3.1.2	Graph of peak currents versus square root of scan rates	62
3.1.3	Graph of peak currents versus square root of scan rates	63
3.1.4	Graph of peak currents versus square root of scan rates	64
3.1.5	Graph of peak currents versus square root of scan rates	65
3.1.6	Graph of peak currents versus square root of scan rates	66
3.2.1	Voltammograms	67
3.3.1.1	The potential sweep (a) and corresponding current response (b) for the forward scan fragment	69
3.4.1	Graphs of current versus time for A1, A2, A3, A4 and A5	78
3.4.2	Graphs of potential versus time for A6, A7, A8, A9, A10 and A11	80
3.4.3	Graphs of current versus time for B1, B2, B3 and B4	82
3.4.4	Graphs of potential versus time for B6, B7, B8, B9, B10 and B11	84
3.4.5	Graphs of current versus time for C1, C2 and C3	86
3.4.6	Graphs of potential versus time for C6, C7, C8, C9, C10 and C11	88
3.7.2.1	Surface of copper deposit viewed at 19.42 KX magnification	97
3.7.2.2	Nodules growth viewed at 801 X magnification	99
3.7.3.1	Surface of the copper deposit on copper disc, viewed at 15.61 KX magnification	100

LIST OF APPENDIXS

Appendix		Page Number
A	Voltammograms	108
B	Voltammograms	114
C	Voltammograms	119
D	Voltammograms	125
E	Voltammograms	131
F	Voltammograms	135
G	SEM images for A1, A2, A3, A4 and A5	139
H	SEM images for A6, A7, A8, A9, A10 and A11	144
I	SEM images for B1, B2, B3, B4 and B5	150
J	SEM images for A	155
K	SEM images for B6, B7, B8, B9, B10 and B11	156
L	SEM images for C1, C2, C3, C4 and C5	162
M	SEM images for C6, C7, C8, C9, C10 and C11	167
N	SEM-EDX spectrum	173
O	SEM-EDX spectrum	174
P	SEM-EDX spectrum	175