

CONTENTS

SR. NO.	TITLE	PAGE NO.
	CHAPTER – I INTRODUCTION AND BASIC PRINCIPLE	1 TO 12
1.1	INTRODUCTION	1 – 2
1.2	SOME DEFINITION AND BASIC PRINCIPLE IN ELCTROPLATING	2 – 8
1.3	CONTROLLING FACTORS IN ELECTROPLATING OF METALS	8 – 11
1.4	AIM AND SCOPE OF PRESENT WORK	11 – 12
	CHAPTER – II EXPERIMENTAL	13 TO 21
2.1	EXPERIMENTAL SET-UP	13
2.2	PREPARATION OF BATH SOLUTION	13
2.3	ANODE AND CATHODE MATERIAL	13
2.4	CLEANING OF THE BASE METAL	13 – 14
2.5	COPPER COULOMETER	14 – 15
2.6	MEASUREMENT OF pH	15
2.7	ELECTRODEPOSITION-WORKING PROCESS	15 – 16
2.8	MEASUREMENT OF OVER VOLTAGE	17 – 18
2.9	ADHESION TEST	19
2.10	TERNISH AND CORROSION RESISTANCE TEST	19
2.11	MEASUREMENT OF THROWING POWER	20 – 21

	CHAPTER – III ELECTRODEPOSITION OF NICKEL	22 TO 40
3.1	INTRODUCTION AND REVIEW OF THE EARLIER WORK	22 – 23
3.2	ELECTRODEPOSITION OF NICKEL FROM AMMONICAL ACETATE BATH	23
3.3	A PROBABLE MECHANISM OF ELECTRODEPOSITION OF NICKEL FROM AMMONICAL ACETATE BATH	23 – 24
3.4	INFLUENCE OF VARIOUS CONTROLLING PARAMETER ON CCE & CHARACTER OF THE DEPOSIT	25 – 40
	CHAPTER – IV KINETIC OF ELECTRODE PROCESSES DURING ELECTRODEPOSITION OF NICKEL	41 TO 71
4.1	INTRODUCTION	41 – 43
4.2	ELECTRODE KINETIES DURING ELECTRODEPOSITION OF NICKEL FROM AMMONICAL ACETATE BATH	43 – 70
4.3	CONCLUDING REMARKS ON ELECTRO DEPOSITION OF NICKEL AND CATHODIC POLARISATION	70 – 71
	SUMMARY	72 – 74
	REFERENCES	75 – 79