ACKNOWLEDGEMENTS	3
ABSTRACT	4
ABSTRAKT	5
INTRODUCTION	6
1. THEORETICAL PART:	7
1.1 POLYMERS IN FOOD AND PHARMACEUTICAL PACKAGING	7
1.1.1 Key properties of polymeric materials used in packaging	8
1.1.2 Interactions between packaging materials and products	8
1.1.3 Plastic packaging technologies	10
1.2 BIOACTIVE PACKAGING	10
1.2.1 Migratory and non-migratory bioactive packaging	10
1.2.2 Antibacterial packaging	11
1.3 MICROENCAPSULATION	13
1.3.1 Microcapsules	14
1.3.2 Microencapsulation techniques	15
1.3.3 Release mechanisms	17
1.3.4 Coating materials for microencapsulation	17
AIMS OF WORK	19
2. EXPERIMENTAL PART:	20
2.1 MATERIALS AND SAMPLE PREPARATION	20
2.2 CHARACTERIZATION METHODS	22
3. RESULTS AND DISCUSSIONS:	27
3.1 Polyvinyl alcohol/lactic acid (PVA/LA) compounded polymeric films:	
effect of PVA hydrolysis degree on resulting properties	27
3.2 The effect of crosslinking on mechanical properties and solubility of the	
PVA/LA polymer films	34
3.3 Optimization of crosslinking agent concentration in PVA/BCAR	
microcapsules preparation	38
3.4 Effect of LA on PVA/BCAR microcapsules preparation and properties	49
CONCLUSIONS	53
CONTRIBUTIONS TO SCIENCE AND PRACTICE	56
REFERENCES	57
LIST OF FIGURES	63
LIST OF TABLES	65
LIST OF ABBREVATIONS	66