

TABLE OF CONTENTS

ABSTRACT	1
1. Introduction	2
2. Aims of dissertation.....	3
3. Literature review.....	3
4. Experimental design	9
4.1 Matrices and reinforcements	9
4.2 Fabrication of geocomposites.....	10
4.3 Mechanical testing setup and data treatment.....	12
4.4 Microstructure of geocomposites	13
5. Results and discussion	13
5.1 Geopolymer matrices and reinforcements.....	13
5.2 Effects of curing temperature on mechanical properties of geocomposites	15
5.3 Effects of curing time on mechanical properties.....	21
5.4 Fire-resistance of geocomposites	24
5.5 Fabric reinforced geocomposites and pultruded geocomposite rods	25
6. Conclusions and recommendations	27
7. References	28
8. Publications of author.....	31
9. Curriculum Vitae	34