## TABLE OF CONTENTS

		Signat	ure Page iii
		List of	Figures
		List of	Tables viii
		Dedica	ation
		Ackno	wledgements
		Abstra	nct
Edit by4/19	Chapter 1 4/14-15	1.1 F 1.2 E	uction
edit by 4/26	Chapter 2	2.1 A 2.2 E 2 2 2.3 N 2.4 N 2 2 2 2.5 H 2.6 C	aggregate model
	Chapter 3  by 5/1  5/2 - 5/	3.1 C 3 3 3.2 N 3.3 F 3 3 3	g marine aggregates in a stratified fluid

Spacial convergence with varying (dx, dx/2, dx/4) , different domain size (smaller domains) time convergence - use just 10 cubes

## All chapter 3 send by 5/24

	7 th Shaptor o cond by 6/24	
by 5/10	3.4 Numerical methods clean up the figures that I 4	
3.5 Validation (convergence) 5/1	2 3.4.1 Background fluid density 4	
3.6 results (what are we runn	ing? patameters)city coffgretation	
shapes (with the same number o	of cubes)រដែលរាស្រីស្រីស្រី library	8
we need 100 cubes different sha	pes 3.4.4 Homogeneous velocity computation with FMM 5	0
3.7 Discussion (tie back to the m	3.4.5 Computation time results	7
-> by 5/19: with figures and disci	ussion Numerical simulation results	60
3	3.6 Discussions	60
edit these by 5/24		
Chapter 4	Continuum modeling of a complex fluid with a second-order rheology 6	
	4.1 Governing equations 6	
	4.1.1 Rheology	
4.1 - 4.2 : needs	4.1.2 Viscosity regularization 6	5
edit by 5/31	4.2 Numerical methods 6	5
	4.2.1 Computation of pressure-dependent apparent viscosity . $6$	6
	4.2.2 Second-order strain rate stress tensor 6	6
	4.2.3 Velocity computation 6	8
by 6/2 (add text)	4.3 Predictor-Corrector method 6	69
	4.4 Validation	0
	4.5 Example	0
	4.6 Discussion (conclusion)	
Chapter 5	Conclusion	'1
Bibliography		'1
Appendix A	Appendix for chap 2	6
	check the notations!	