

Table of Contents

Table of Contents	iv
Preface	vi
Acknowledgements	ix
1 Preliminaries	1
1.1 Introduction	1
1.2 Tools from Functional Analysis	2
1.3 Variational Inequalities	7
1.4 Variational-like Inequalities	8
1.5 Variational Inclusions and Quasi-variational Inclusions	12
1.6 Complementarity Problems	13
2 Completely Generalized Nonlinear Variational-like Inclusions	16
2.1 Introduction and Formulations	16
2.2 Existence Theory in Topological Vector Spaces	18
2.3 Iterative Algorithms and Convergence Results	21
2.4 Iterative Algorithms and Convergence Results for Random Completely Generalized Nonlinear Variational-like Inclusions	28
3 Generalized Nonlinear Quasi-variational Inclusions	39
3.1 Introduction	39
3.2 Iterative Algorithms and Convergence Results	41
3.3 An Ishikawa Type Perturbed Iterative Algorithm and a Convergence Result	47
4 Co-quasi-variational Inequalities	55
4.1 Introduction	55

4.2	Generalized Multivalued Mixed Co-quasi- variational Inequalities . . .	56
4.3	Completely Generalized Multivalued Co-quasi-variational Inequalities	62
4.4	Generalized Multivalued Co-quasi-variational Inequalities with Fuzzy Mappings	69
5	Generalized Nonlinear Variational Inclusions in Banach Spaces	74
5.1	Introduction and Formulations	74
5.2	Existence and Convergence Theory	76
5.3	Fuzzy Extension	81
6	Generalized Quasi-complementarity Problems with Fuzzy Multival- ued Maps	86
6.1	Introduction and Formulations	86
6.2	Existence and Convergence Theory	88
	Bibliography	94