CONTENTS

		Page
1.	Filamentous Carbon Formation over Iron surfaces	1
2.	Inhibition of Coke Formation in Ethylene Steam Cracking	23
3.	Surface Effects on the Steam Cracking of Propane	45
4.	Oxidation of an Ethylene Steam Cracker Pyrolysis Tube Deposit in Water Vapor and its	
	Enhancement by Inorganic Catalysts	59
5. 6.	Effect of Hydrogen on the Iron-and Nickel-Catalyzed Formation of Carbon from Benzene Mechanism of Surface Carbon Formation during the Pyrolysis of Benzene in the Presence	89
0.	Of hydrogen	109
7.	Formation and Removal of Coke Deposited on Stainless Steel and Vycor Surfaces from Acetylene and Ethylene	123
8.	Surface Phenomena During Pyrolysis: The Effects of Treatments with Various Inorganic	123
0.	Gases	151
9.	Growth and Initiation Mechanism of Filamentous Coke	177
10.	The Characterization of Carbon Deposit Morphologies Using In Situ Scanning Electron	1,,
10.	Microscopy	193
11.	Inhibition by Sulfur Poisoning of the Heterogeneous Decomposition of Acetone	223
12.	Influence of Total Pressure and Hydrogen: Hydrocarbon Ratio on Coke Formation over	
	Naphtha-Reforming Catalyst	239
13.	Reactivity of Surface Carbon on Nickel Catalysts : Temperature-Programmed Surface	
	Reaction with Hydrogen and Water	253
14.	Reaction of Steam with coke on Solid Substrates	283
15.	Process of Coke Formation in Delayed Coking	293
Index		311