

Contents

1	Plasma Catalysis: Introduction and History	1
	J. Christopher Whitehead	
2	Plasma Catalysis Systems	21
	Akira Mizuno and Michael Craven	
3	Plasma-Catalyst Interactions	47
	Hyun-Ha Kim, Yoshiyuki Teramoto, and Atsushi Ogata	
4	Plasma Catalysis Modeling	69
	Annemie Bogaerts and Erik Neyts	
5	Plasma-Catalytic Removal of NO_x in Mobile and Stationary Sources	115
	Ahmed Khacef and Patrick Da Costa	
6	Plasma-Catalytic Removal of VOCs	145
	Pieter Cools, Nathalie De Geyter, and Rino Morent	
7	Plasma-Catalytic Decomposition of Ammonia for Hydrogen Energy	181
	Yanhui Yi, Li Wang, and Hongchen Guo	
8	Plasma-Catalytic Conversion of Methane	231
	Tomohiro Nozaki, Seigo Kameshima, Zunrong Sheng, Keishiro Tamura, and Takumi Yamazaki	
9	Plasma-Catalytic Conversion of Carbon Dioxide	271
	Bryony Ashford, Yaolin Wang, Li Wang, and Xin Tu	
10	Plasma-Catalytic Reforming of Alcohols	309
	Dae Hoon Lee	
11	Plasma Catalysis: Challenges and Future Perspectives	343
	J. Christopher Whitehead	