

Contents

Preface	xi
List of Contributors	xiii
Chapter 1 The Role and Nature of Environmental Testing Methods . <i>F. Korte, W. Klein, and P. Sheehan</i>	1
Chapter 2 Behaviour of Chemicals in the Atmosphere	13
2.1 Background for the examination of chemical processes in the atmosphere	15
<i>I. Barnes, F. Zabel, and D. Perner</i>	
2.2 Atmospheric chemistry	19
<i>D. Perner</i>	
2.3 Degradation in the gas phase	57
<i>I. Barnes and F. Zabel</i>	
2.4 Degradation in the liquid and adsorbed phase	81
<i>H. Parlar and D. Kotzias</i>	
2.5 Test methods for abiotic degradability	107
<i>D. Kotzias and H. Parlar</i>	
Chapter 3 Behaviour of Chemicals in Water, Sediments, and Soil ..	117
3.1 Abiotic chemical changes in water	119
<i>H. Hulpke and R. Wilmes</i>	
3.2 Sediments	137
<i>I. Scheunert</i>	

	3.3 Soil systems	169
	<i>F. P. W. Winteringham</i>	
Chapter 4	Prediction, Transformation, Degradation, and Accumulation of Chemicals in Biota	193
	4.1 Biotransformation processes	195
	<i>W. Klein and I. Scheunert</i>	
	4.2 Degradation by microorganisms in soil and water ...	213
	<i>R. Cabridenc</i>	
	4.3 Modelling of biotic uptake	233
	<i>J. R. Roberts and J. T. McGarrity</i>	
	4.4 Accumulation in aquatic organisms	243
	<i>W. Ernst</i>	
	4.5 Bioaccumulation in terrestrial food chains	257
	<i>F. Moriarty</i>	
Chapter 5	Predicting the Movement of Chemicals between Environmental Compartments (air-water-soil-biota)	285
	<i>I. Scheunert and W. Klein</i>	
Chapter 6	Regulatory Needs for Tests to Predict the Behaviour of Environmental Chemicals	333
	<i>F. Schmidt-Bleek</i>	
Chapter 7	Conclusions and Recommendations	351
	<i>F. Korte</i>	
Index	359