

# CONTENTS

Preface	ix
1. The Preparation of Uniformly Labeled $^{14}\text{C}$ -2,7-Dichlorodibenzo- <i>p</i> -dioxin and $^{14}\text{C}$ -2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin . . . . .	1
Wesley W. Muelder and Lewis A. Shadoff	
2. Preparation of Tritium-Labeled Dibenzo- <i>p</i> -dioxin and 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin . . . . .	
J. Howard Vinopal, Izuru Yamamoto, and John E. Casida	
3. X-ray Diffraction Studies of Chlorinated Dibenzo- <i>p</i> -dioxins . . . . .	14
F. P. Boer, M. A. Neuman, F. P. Van Remoortere, P. P. North, and H. W. Rinn	
4. Thermal Chemistry of Chlorinated Phenols . . . . .	26
H. G. Langer, T. P. Brady, L. A. Dalton, T. W. Shannon, and P. R. Briggs	
5. Cation Radicals of Chlorinated Dibenzo- <i>p</i> -dioxins . . . . .	33
G. C. Yang and A. E. Pohland	
6. Photochemistry of Dibenzo- <i>p</i> -dioxins . . . . .	44
Jack R. Plimmer, Ute I. Klingebiel, Donald G. Crosby, and Anthony S. Wong	
7. Toxicology of Chlorinated Dibenzo- <i>p</i> -dioxins . . . . .	55
B. A. Schwetz, J. M. Norris, G. L. Sparschu, V. K. Rowe, P. J. Gehring, J. L. Emerson, and C. G. Gerbig	
8. Polychlorodibenzo- <i>p</i> -dioxins: Perinatal Effects and the Dominant Lethal Test in Wistar Rats . . . . .	70
K. S. Khera and J. A. Ruddick	
9. Excretion and Tissue Distribution of 2,3,7,8-Tetrachlorodibenzo- <i>p</i> -dioxin in the Rat . . . . .	85
Walter N. Piper, James Q. Rose, and P. J. Gehring	
10. An Improved Analysis for Tetrachlorodibenzo- <i>p</i> -dioxins . . . . .	92
Robert Baughman and Matthew Meselson	
11. Environmental Significance of Chlorodioxins . . . . .	105
Philip C. Kearney, Allan R. Isensee, Charles S. Helling, Edwin A. Woolson, and Jack R. Plimmer	

12.	<b>Dioxin Residues in Lakeland Sand and Bald Eagle Samples . . . . .</b>	112
	Edwin A. Woolson, Peter D. J. Ensor, William L. Reichel, and Alvin L. Young	
13.	<b>The Stability of Pentachlorophenol and Chlorinated Dioxins to Sunlight, Heat, and Combustion . . . . .</b>	
	R. H. Stehl, R. R. Papenfuss, R. A. Bredeweg, and R. W. Roberts	
14.	<b>Preparation of Chlorodibenzo-<i>p</i>-dioxins for Toxicological Evaluation Orn Aniline</b>	

**Index**

**137**