

Contents*

<i>Preface</i>	v
<i>List of Contributors</i>	xiii
Professor Bengt Rånby: Contributions to Science and Technology of Polymers	1
H. Mark	
Twenty Years of Polymer Photochemistry in the Department of Polymer Technology, The Royal Institute of Technology, Stockholm, Sweden	7
J. F. Rabek	
1. Intramolecular Energy Transfer in Polymers	19
S. E. WEBBER	
2. Studies of the Antenna Effect in Polymer Systems	43
J. E. GUILLET	
3. Fluorescence Studies of Equilibrium and Dynamic Properties of Polymeric Systems	61
H. MORAWETZ	
4. Initiation of Free Radical Polymerisation by Acylphosphine Oxides and Derivatives	69
W. SCHNABEL and T. Sumiyoshi	

* The names of invited speakers are printed in capitals. Only these speakers are included in the List of Contributors on pp. xiii–xv.

5. The Photochemical Behaviour of Some Monomers which Contain Electron Donor and Electron Acceptor Pairs	85
S.-K. WU and F. M. Li	
6. Photoinitiation of Radical, Cationic and Concurrent Radical-Cationic Polymerization	99
S. P. PAPPAS	
7. Photochemical Synthesis of Block Polymers	113
G. J. SMETS and T. Doi	
8. Applications of Transition Metal Derivatives in Free-radical Syntheses and Modification of Polymers by Photochemical Methods	129
C. H. BAMFORD	
9. New Aspects of the Photo-oxidation and Photostabilization of Polyolefins	147
D. M. WILES and D. J. Carlsson	
10. The Photochemistry of a Poly(ethylene-co-carbon monoxide)	159
R. Gooden, M. Y. Hellman, D. A. Simoff and F. H. WINSLOW	
11. Some Photo-reactions of Polystyrenes: Progress and Unsolved Problems	169
N. A. WEIR	
12. Unwanted Photochemical Reactions in Polymer Coatings	187
B. Lindberg and C. M. HANSEN	
13. Current Understanding of Photostabilising Mechanisms in Polyolefins	209
N. S. ALLEN	
14. Photo-antioxidants: A Review of Recent Developments	227
G. SCOTT	
15. New Polymerizable 2(2-Hydroxyphenyl)2H-Benzotriazole Ultraviolet Absorbers: 2[2,4-Dihydroxy-5-Vinyl(Isopropenyl)-Phenyl]1,3-2H-Dibenzotriazole	247
S. Fu, A. Gupta, A. C. Albertsson and O. VOGL	

16. Polymers in Solar Energy	265
J. F. RABEK	
17. Photocatalytic H ₂ Production from Aqueous Polymer Solution by a Suspension of TiO ₂ /Pt	289
S. Nishimoto, B. Ohtani and V. T. KAGIYA	
18. Photochemical Synthesis of New Biomedical Polymers	301
H. MIYAMA	
<i>Index</i>	315