

Contents

Chapter 1	General Properties of Flavins	1
	<i>Ana M. Edwards</i>	
Chapter 2	Photochemistry of Flavins in Aqueous and Organic Solvents	13
	<i>Iqbal Ahmad and Faiyaz H.M. Vaid</i>	
Chapter 3	Excited States Interaction of Flavins with Amines: Application to the Initiation of Vinyl Polymerization	41
	<i>María V. Encinas and Carlos M. Previtali</i>	
Chapter 4	Riboflavin as a Visible-Light-Sensitizer in the Aerobic Photodegradation of Ophthalmic and Sympathomimetic Drugs	61
	<i>Norman A. García, Susana N. Criado and Walter A. Massad</i>	
Chapter 5	The Antiviral and Antibacterial Properties of Riboflavin and Light: Applications To Blood Safety and Transfusion Medicine	83
	<i>Raymond P. Goodrich, Richard A. Edrich, Laura L. Goodrich, Cynthia A. Scott, Keith J. Manica, Dennis J. Hlavinka, Nick A. Hovenga, Eric T. Hansen, Deanna Gampp, Shawn D. Keil, Denise I. Gilmour, Junzhi Li, Christopher B. Martin and Matthew S. Platz</i>	
Chapter 6	Light-Induced Flavin Toxicity	115
	<i>Ana M. Edwards</i>	
Chapter 7	Photoinduced Processes in the Eye Lens: Do Flavins Really Play a Role?	131
	<i>Eduardo Silva and Frank H. Quina</i>	

Chapter 8	Blue Light-Initiated DNA Repair by Photolyase	151
	<i>Christopher W.M. Kay, Adelbert Bacher, Markus Fischer, Gerald Richter, Erik Schleicher and Stefan Weber</i>	
Chapter 9	Flavin-Based Photoreceptors in Plants	183
	<i>Winslow R. Briggs</i>	
Chapter 10	Flavin-Based Photoreceptors in Bacteria	217
	<i>Aba Losi</i>	
Chapter 11	Photoactivated adenylyl cyclase (PAC), the photoreceptor flavoprotein with intrinsic effector function mediating euglenoid photomovements	271
	<i>Mineo Iseki, Shigeru Matsunaga, Akio Murakami and Masakatsu Watanabe</i>	
Chapter 12	Mechanisms of Light Activation in Flavin-Binding Photoreceptors	287
	<i>John T.M. Kennis and Maxime T.A. Alexandre</i>	
	Subject Index	321