Contents

Chapter 1	**General Properties of Flavins** *Ana M. Edwards*	**1**
Chapter 2	**Photochemistry of Flavins in Aqueous and Organic Solvents** *Iqbal Ahmad and Faiyaz H.M. Vaid*	**13**
Chapter 3	**Excited States Interaction of Flavins with Amines: Application to the Initiation of Vinyl Polymerization** *María V. Encinas and Carlos M. Previtali*	**41**
Chapter 4	**Riboflavin as a Visible-Light-Sensitiser in the Aerobic Photodegradation of Ophthalmic and Sympathomimetic Drugs** *Norman A. García, Susana N. Criado and Walter A. Massad*	**61**
Chapter 5	**The Antiviral and Antibacterial Properties of Riboflavin and Light: Applications To Blood Safety and Transfusion Medicine** *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*	**83**
Chapter 6	**Light-Induced Flavin Toxicity** *Ana M. Edwards*	**115**
Chapter 7	**Photoinduced Processes in the Eye Lens: Do Flavins Really Play a Role?** *Eduardo Silva and Frank H. Quina*	**131**

Chapter 8 **Blue Light-Initiated DNA Repair by Photolyase** **151**
Christopher W.M. Kay, Adelbert Bacher, Markus Fischer, Gerald Richter, Erik Schleicher and Stefan Weber

Chapter 9 **Flavin-Based Photoreceptors in Plants** **183**
Winslow R. Briggs

Chapter 10 **Flavin-Based Photoreceptors in Bacteria** **217**
Aba Losi

Chapter 11 **Photoactivated adenylyl cyclase (PAC), the photoreceptor flavoprotein with intrinsic effector function mediating euglenoid photomovements** **271**
Mineo Iseki, Shigeru Matsunaga, Akio Murakami and Masakatsu Watanabe

Chapter 12 **Mechanisms of Light Activation in Flavin-Binding Photoreceptors** **287**
John T.M. Kennis and Maxime T.A. Alexandre

Subject Index **321**