
Contents

Foreword	vii
Contributors	xi
Chapter 1 Delineation of the Conformational Thermostability of Hyperthermophilic Proteins Based on Structural and Biophysical Analyses	1
<i>Atsushi Mukaiyama and Kazufumi Takano</i>	
Chapter 2 Role of Packing, Hydration, and Fluctuations on Thermostability	21
<i>Fabio Sterpone and Simone Melchionna</i>	
Chapter 3 Analyzing Protein Rigidity for Understanding and Improving Thermal Adaptation	47
<i>Doris L. Klein, Sebastian Radestock, and Holger Gohlke</i>	
Chapter 4 Thermostable Subtilases (Subtilisin-Like Serine Proteinases)	67
<i>Magnús M. Kristjánsson</i>	
Chapter 5 Combined Computational and Experimental Approaches to Sequence-Based Design of Protein Thermal Stability	105
<i>Julie C. Mitchell, Thomas J. Rutkoski, Ryan M. Bannen, and George N. Phillips, Jr.</i>	
Chapter 6 Designing Thermophilic Proteins: A Structure-Based Computational Approach	117
<i>Sohini Basu and Srikanta Sen</i>	
Index	155