Contents

1.	The same and a second of the s				
	Ву	S.S. Zilîtinkevich	1		
	1.1	Vertical Structure and Energy Transfer			
		Under Neutral and Stable Conditions	3		
	1.2	The Entrainment Equation for Convection	20		
2.	Diurnal Cycle of the Atmospheric Planetary Boundary Layer				
	By S	S.S. Zilitinkevich, E.E. Fedorovich, M.V. Shabalova	30		
	2.1	Parameterization of Energy Transfer Processes	31		
	2.2	Calculation of Dynamic Parameters	41		
3.	Air-Water Interaction Parameters over Lakes				
	By D.V. Mironov				
	3.1	Similarity Theory for a Near-Surface Stratified Layer	51		
	3.2	Parameterization of Fine-Scale Air-Water Interaction	55		
	3.3	Special Cases	59		
4 .	Wind-Induced Drift of Surface Films				
	By S	S. Zilitinkevich, K.D. Kreiman	63		
	4.1	Main Parameters of the Drift Current	63		
	4.2	Measurements of Drift Roughness in the Laboratory	66		
	4.3	Drift Roughness from Measurements on Lakes	71		
5.	Seasonal Changes of Temperature and Mixing Conditions in a Lake				
	By D.V. Mironov, S.D. Golosov, S.S. Zilitinkevich, K.D. Kreiman,				
	-	Terzhevik	74		
	5.1	Parameterized TEMIX Model	74		
	5.2	Numerical Experiments and Comparison			
		with Field Measurements	84		

6.	Theoretical and Laboratory Investigation of the Thermal Bar					
	By S.S. Zilitinkevich, K.D. Kreiman, A.Yu. Terzhevik					
	6.1	Theoretical Model	91			
	6.2	Laminar Stage of the Development of the Thermal Bar				
		in Laboratory Experiments	99			
Future Work 1						
Table of Symbols						
References						
Su	bject	Index	123			