

CONTENTS

	Page
Preface	v
Symbols	ix
1. Qualitative Description of Lubrication	2
2. Viscosity	16
3. Reynolds' Equation	48
4. The Energy and Navier-Stokes Equation and Inertia Correction	80
5. Tilting Thrust Bearings	100
6. Thrust Pads of Fixed Inclination	130
7. Rolling Contacts. Discs and Spheres	154
8. Elastohydrodynamic Lubrication	186
9. Friction and Heat Flow in Contacts	214
10. Experimental Methods and Scuffing in Elastohydrodynamic Lubrication	242
11. Journal Bearing History	262
12. Journal Bearings	276
13. Finite Journal Bearings. Computed Results	304
14. Oil Whirl in Journal Bearings	340
15. Journal Bearings with Alternating and Rotating Loads	382
16. Heat in Journal Bearings	397
17. Boundary Conditions	412
18. Computation of Reynolds' Equation	426
19. Turbulence I Lubrication	440
20. Boundary Lubrication	450
21. Solid Lubrication	468
22. Lubricating Oils	501
23. Greases	520
24. Porous Metal Bearings	542
25. Plain Bearings	561