# Contents

Dutch Preface (Voorwoord) 13

1 General Introduction 17

2 Mechanical power output in rowing should not be determined from oar forces and oar motion alone 31

3 An accurate estimation of the horizontal acceleration of a rower’s centre of mass using inertial sensors: a validation 49

4 Improved determination of mechanical power output in rowing: Experimental results 63

5 Real-Time Feedback on Mechanical Power Output: Facilitating Crew Rowers’ Compliance With Prescribed Training Intensity 85

6 The effect of real-time feedback on power losses due to velocity fluctuations in steady-state rowing 107

7 Towards determination of power loss at a rowing blade: validation of a new method to estimate blade force characteristics 123

8 Epilogue 145

A The development of an innovative tool for real-time feedback in rowing 161

Summary 171

Dutch Summary (Samenvatting) 175

Bibliography 179

Acknowledgement (Dankwoord) 187

List of publications 192