

Acknowledgements

The studies presented in this thesis were carried out at the Department of Prosthetic Dentistry and Oral Function, and Oral Research Laboratory, Dental Faculty, University of Oslo, Norway, during the period 1998 - 2002. The Dental Faculty generously provided me with a research fellowship, for which I am most grateful.

I would like first to express my great thanks to Professor Jan Eirik Ellingsen, who introduced me to the field of science. He has been an excellent supervisor and co-worker, guiding me by sharing his knowledge, not only along the road of research. He has been there from day one of my fellowship, always available. I am also grateful to Professor Ståle Petter Lyngstadaas, my assistant supervisor and co-worker. I am deeply in debt to these two people, without whose enthusiasm and expertise provided in busy daily schedules, this thesis would not have been possible. I also wish to express my gratitude to Emeritus Professor Gunnar Rølla for his contagious enthusiasm, constructive criticism, his willingness to get involved in my research and the enjoyable conversations about the science of sailing.

Special thanks go to Erik Kleven Scandinavian Institute of Dental Materials, Reidar Larsen, Knut Rekdal and Torgeir Kvernstuen Department Group of Basic Medical Sciences, University of Oslo, for their ideas in the field of mechanics and their great ability to carry them out.

Thanks go also to Emeritus Professor Ketil Videm and Przemyslaw T Zagierski for helpful advice with metallurgical preparations. Shabaz Yousefi and Soheila Beygi are acknowledged for their assistance with histological preparations and Steinar Stølen for his electron microscope expertise. A special thanks to Professor Adrian Smith and Patricia Engen at the Norwegian School of Veterinary Science, for their skilful contribution and kind assistance during the animal experiments.

I want to thank the staff, personnel and colleagues at the department of Prosthetic Dentistry and Oral Function, and at the Oral Research Laboratory, Dental Faculty of Oslo for their obligingness.

I am also grateful to my family and friends for their encouragement and for always being there whenever needed.

Last but not least, I want to express my gratitude to my love, Karin and our son, Ludvig Linus, for their ability to adjust themselves to my situation and for their unreserved support and endless patience.