Acknowledgements

At this point I would like to thank Prof. Dr. Schreiber for giving me the opportunity to teach at Chemnitz and to integrate my work in a university chair's. I am also thankful for his detailed comments on the manuscript helping me to improve its readability in several points.

Moreover I would like to thank Prof. Dr. Kassner for introducing me to the field of simulating growth phenomena in materials science. Prof. Dr. Müller-Krumbhaar, Dr. Brener, Dr. Misbah and Dr. Ihle gave valuable guidance, which I am thankful for.

I am also grateful to Prof. Dr. Fulde and Prof. Dr. Rost for the stimulation and the opportunities which arose from being a Distinguished Postdoctoral Fellow at the Max Planck Institute for the Physics of Complex Phenomena at Dresden.

Finally I would like to thank Prof. Dr. Sadowski for offering the quite challenging new task to continue in the field of materials science by bridging the gap from the mesoscale to the atomar scale rising a respective simulation group at Dortmund university.

Dortmund, November 2002

Heike Emmerich