**ACKNOWLEDGEMENT**

This study was carried out at the Department of Biomedical Engineering, Near East University during the 2012-2013 academic year.

We express our warmest gratitude to our supervisor [Assist. Prof. Dr Terin ADALI](http://www.neu.edu.tr/en/node/1845) for introducing us to the interesting world of Silk Fibroin and Non- Trombogenic surface interaction, for guidance and endless optimism during the years.

## Our special thanks go to Prof. Dr. Nedime SERAKINCI, Assist. Prof. Dr. Mustafa Murat UNCU and Dr.Rasime KALAN for their valuable comments.

## We express my thanks to Dilek DUMAN in Biofarma Company and Miraç KURTOĞLU in Ali Raif Company for drug suppliments.

Many thanks to my parents, Halil and İnci ÜNALAN, and my sister Hilal, for their unfailing encouragement and loving support during my whole life.(İrem ÜNALAN)

Many thanks to my parents, Nevzat and Melek OKAY and my sister Azize, for their unfailing encouragement and loving support during my whole life (Metin OKAY)

Finally, thanks to all our friends and colleagues (Burcu KESKİN, Karina NURUMOVA, Derya ERDOĞAN, Melike ÜNAL, Ezel YILMAZ, Hazal BİLİCİ, Şerife KABA) for their friendship, support and for taking our mind out of the work from time to time.