

ARENBERG DOCTORAL SCHOOL Faculty of Engineering Science

Mathematical and Computational Modeling of Biodegradation Behavior of Personalized Printed Implants

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Supervisor: Prof. dr. ir. L. Geris Dissertation presented in partial fulfillment of the requirements for the degree of Doctor of Engineering Science (PhD): Mechanical Engineering

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Dissertation presented in partial fulfillment of the requirements for the degree of Doctor of Engineering Science (PhD): Mechanical Engineering

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Preface

Here we will have acknowledgment, in which I talk about people supported me during my PhD.

سلام این یک تست است و من آن را برای شما نوشته ام. امیدوارم این نوشته ازاردهنده نباشد. این متن برای قدردانیست و ممکن است کمی طولانی شود.

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i

Abstract

. . .

Beknopte samenvatting

...

List of Abbreviations

MD molecular dynamics. 3

List of Symbols

 Θ A nice symbol

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Introduction

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And yet another citation [1].

Introducing some symbol: Θ .

Introducing an acronym: MD.

2 ______INTRODUCTION

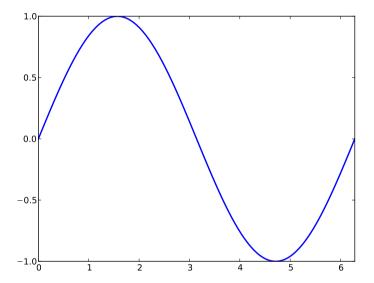


Figure 1.1: Illustration of how to include a figure (long text, should not go to Table of Figures).

Aim and objective

Chemistry of biodegradation of magnesium

Core model development

Fluid flow and convection

Advanced model with kinetics

Tissue growth

Model parallelization

BioDeg software

Bayesian parameter estimation

Applications: Mandible plate

Applications: Acetabular cup

Applications: Mechanical integrity of infilled structures

Conclusion

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List of publications

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