

## Internship Available (Radboud University)

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One Master Thesis at Biomed Elements B.V.

## **Biomed Elements**

BioMed Elements (located in Nijmegen and the US) strives to develop biomaterials that will enhance lives. We focus on biomaterials based on biocompatible and degradable biopolymers. BioMed Elements develops, manufactures and supplies biomaterials for application areas such as wound management, medical aesthetics, orthopedics, tissue-engineering and cosmetics.

Currently, BioMed Elements is offering an internship in the following project:

## Optimization and Upscaling process for a Microparticle-based hydrogel.

BioMed Elements has recently developed a microparticle-based hydrogel capable of stimulating collagen formation. This gel is based on a biopolymer, which is naturally produced by the human body and plays a crucial role in the wound healing process.

Its versatility renders this hydrogel applicable for both, physiological and (certain) pathological applications. As every application represents a different challenge, the gel although made of the same components, will require a tailored-made formulation that can handle the challenge in question. In this project, different optimizations will be required in order to fulfill those applications. If the R&D optimizations are found to be successful, the project will further continue towards upscaling of the process.

The goal of the internship is to provide technical input for the development project. Activities include, but are not limited to: do a literature review on microparticle based systems, research on technical challenges of the hydrogel and state-of-the-art technology that can be translated to its technical requirements.

This project is highly confidential and we will not be able to disclose more details on the process.

## Hydrogel stimulator for collagen production.

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