

Innovative sample preparation and handling strategies for automated and high-throughput metabolomics

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Dankwoord

Throughout this journey, I have encountered many people that inspired me, contributed to this thesis, or otherwise made it memorable. I would like to highlight the most prominent people here, starting with my promotor, Thomas. Your endless enthusiasm and ambitions to advance the field of metabolomics is fascinating and inspiring, and I am grateful to have experienced it up close. Your guidance to me, as only mechanical engineer in a group of analytical chemists, has shown me the meaning of multidisciplinary work. You also trusted me with many engineering challenges outside of this thesis. These were unique opportunities for me to put your vision into practice, and to shape and implement my own vision while doing so, for which I am grateful.

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Curriculum Vitae

Anthonius Lambertus Wilhelmus (Paul) Miggiels was born on March 20th, 1990 in Boxmeer (Noord-Brabant), The Netherlands. He obtained his pre-university education at Elzendaal College in Boxmeer with a focus on physics, chemistry and mathematics in 2008.

He then commenced a bachelor's degree in Mechanical Engineering at Eindhoven University of Technology, with a minor in Entrepreneurship for Sustainability. He continued studying at this institute and obtained his master's degree in Mechanical Engineering with honours in 2015, specializing in Microsystems with research on microfluidic systems for biological research in the group of Professor Jaap den Toonder. His masters dissertation was entitled "*Soft nanofibrous scaffolds for breast tumour models: fabrication and characterization.*" During his master's, he spent three months at the University of Toronto to research microfluidic applications of sperm motility for fertility treatments. Additionally, he expressed his broader academic interest and obtained two extracurricular certificates in Sustainable Entrepreneurship and Philosophy & Ethics.

Subsequently, he pursued his academic career with a PhD in the Analytical Biosciences and Metabolomics group led by Professor Thomas Hankemeier under the Leiden Academic Centre for Drug Research (LACDR), at Leiden University, Leiden, The Netherlands.

Paul is currently working as a Systems Engineer for medical systems, developing high-end medical devices and in-vitro diagnostics systems.

List of publications

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Patent

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