Physiological and genetic studies towards biofuel production in cyanobacteria

Schuurmans, R.M.

Creative Commons License (see https://creativecommons.org/use-remix/cc-licenses):
Other

Citation for published version (APA):

General rights
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (http://dare.uva.nl)
Acknowledgements
So, here it is, the actual end of the end. Although I always had faith that I would make it I am still surprised to find myself here on the last page of my own thesis. I have spent many happy, interesting and educational (both personal and professional) years on building this thesis. However, the time it took is not important right now, what is important is that I greatly enjoyed the work I was allowed to do and the company that I could keep at the UvA with the MMP and associated groups. For all this much thanks is due:

First, I would like to thank Prof. Dr. Klaas Hellingwerf, for putting his faith in me and his endless patience in guiding me to this point. Although we have had our rough patches I am very grateful for your support when I needed it and for sharing your knowledge and knowhow in our many discussions. Similar thanks go to my other promotor Prof. Dr. Lucas Stal, although your supervision of my project was less direct your patience and assistance in the writing of this thesis are greatly appreciated. I would also like to thank the members of the defense committee for taking the time to read my thesis and for being here on the day of my defense, and a special thanks to Prof. Dr. Matthias Rögner for coming here all the way from Germany.

A financial thanks to the BioSolar Cells program and the University of Amsterdam for keeping me fed and sheltered and giving me the opportunity to attend several very interesting conferences and summer schools both in The Netherlands and abroad.

Through the years many colleagues and ‘groups’ have come and gone and it will be impossible to thank all of you personally, also because I am not always good with names, just know that I enjoyed all of your company. First, I would like to give a special thanks to Martijn for his assistance in the early days, to Andreas for paving the way for the rest of us and for always being helpful, to Merijn, my dear brother, for helping me design and build functional set-ups and for being my vortex slave. To Wilmar for offering me precious Photanol space and not giving up on my slow and fickle little cyano. Thanks to Jacco Kromkamp for letting us use the MIMS in Yerseke and helping me with the data interpretation. Also, special thanks go to Richard, for our interesting and helpful conversations and off course for driving me home so many times. Thanks to Dennis and Jos for keeping the lab from self-destructing and to Anniek for taking the time to update and regulate a very busy lab. And thank you, Filipe, for lighting up our group with your insane enthusiasm and reminding me that I love science in a time when I felt I might forget.
Many cheerful thanks to all my lunch buddies, coffee friends and beer mates; Rosanne, Poonam, Angie, Richard, Reuben, Johan, Marian, Belinda, Gertien, Andreas, Orawan, Jeroen, Pascal, Philipp, Aleksandra, Soraya, Aniek, Wei, Que, Davide, Merijn, Michael, Andrew, Patrick etc. for all the fun discussions we have had on wildly varying levels of intelligence and sanity. Although I cannot remember all of them they will never be forgotten. Also, many thanks to the Photanol Student Labor Force for keeping the lab and the bar alive in quieter times; Ruth, Fede, Tania, Mara, Blai, Juliette, Elodie and probably many more. Every now and then an attempt is made for a movie night or some other social activity to keep the gang together, thank you for that, Pascal, and for including me on the invite list.

More thanks still to the AMB group, for putting up with my constant invasion of their workspace and the ‘borrowing’ of a wide variety of materials. Also, thank you Veerle for your friendship, especially in harder times.

Thanks to my parents and family for building me, supporting me and instilling their love of nature in me, making biology the inevitable choice, I have never regretted it. Thank you Matthijs, for always being there for me and for always keeping me happy with your unlimited love no matter what.

On these accounts, you generally thank your supervisors first and your family last but since this is a special occasion I would like to end on a bittersweet note: Thank you endlessly Hans, for putting me on this path and walking with me all the way to the end. Your love for this work was most infectious and inspiring and thanks to you, photosynthesis is the most beautiful and fascinating process that I know. I am a lucky woman for having been allowed to study it with you. You were my friend and my mentor and I will never forget you.

Love and best wishes to all of you,

Milou
List of Publications
Schuurmans RM, Matthijs HCP, Stal LJ, Hellingwerf KJ.
Cyanobacterial cellulose synthesis in the light of the photanol concept.

Schuurmans RM, Schuurmans JM, Bekker M, Kromkamp JC, Matthijs HCP, Hellingwerf KJ.
The Redox Potential of the Plastoquinone Pool of the Cyanobacterium *Synechocystis* Species Strain PCC 6803 Is under Strict Homeostatic Control.

Schuurmans RM, van Alphen P, Schuurmans JM, Matthijs HC, Hellingwerf KJ.
Comparison of the Photosynthetic Yield of Cyanobacteria and Green Algae: Different Methods Give Different Answers.

Schuurmans RM, Matthijs HCP, Hellingwerf KJ.
Transition from exponential to linear photoautotrophic growth changes the physiology of *Synechocystis* sp. PCC 6803.
Submitted to Photosynthesis Research. 2017