
Acknowledgements

I have had the privilege to work with great people.

First, I would like to thank Joost van der Mullen. Thank you for giving me the opportunity to work with you and for letting me profit from your insight, knowledge and experience. I have enjoyed our many discussions which have allowed me to greatly improve my work.

Winfred Stoffels, thanks for all your help and encouragement, for sharing with me your insight, and for showing me how to navigate in the field of science.

Marco Haverlag, thank you for sharing with me your vast knowledge of lamps and for infecting me with your enthusiasm for lamp physics.

Gerrit Kroesen, thank you for your help and for giving me the opportunity to participate in spectacular projects.

I would like to thank Dimitrios Karabourniotis, Antonio Gamero and Leo van IJzen-doorn for taking place in my committee.

I would like to thank John Curry, for introducing me to the fascinating world of x-ray induced fluorescence and giving me the opportunity to do measurements at the Advanced Photon Source of the Argonne National Laboratory. Also thanks to Craig Sansonetti for helping us.

All members of EPG while I was in the group, thanks for the *gezelligheid*, I have always enjoyed the good atmosphere that you guys created. I would especially like to thank the following members:

Xiaoyan Zhu (for the XRA project), Arjan Flikweert (for the centrifuge project), Wouter Brok (for all your help), Mark Beks (for our fruitful discussions), Bart Broks, Hjalmar Mulders (especially for anything related to cars that won't start), Ingrid Kieft, Sander Nijdam, Erik Wagenaars. I would like also like to thank the following people,

The following students for contributing to my work:

Antonio Jurado, Nicolas Papat, Gaelle Thubé, Rob Cornelis, Pedro Almeida (PhD Student), Peter Pasmans, Koen Kuiper.

The people who have taken such good care of my baby boy, de Knorretjes, Marylin, Truus and Marjolein.

Rina Boom, for all your help, I'll miss our talks.

Tanja Briels, for the good times, the moral support, and sharing the unique experience of being pregnant at the same time.

The following technicians, without whom these experiments in physics would not have been possible.

Loek Baede, Charlotte Groothuis, Huib Schouten, Rob de Kluijver and the rest of the GTD, and especially Evert Ridderhof, thank you for all your help and assistance, I can always count on you.

People who made lamps needed for all the experiments: J. Peeraer en J. Heuts (Philips Turnhout), en F. Vermeulen, F. Meeuwsen, W. Dekkers (Philips Lighting)

All my friends (you know who you are!). My family, both nearby and far away, especially my parents.

Finally, I would like to thank my caring husband Jorn Bakker, *mijn lieve held*, whose love and support has been of immeasurable value, and our beloved son, Roshan David Bakker, who makes the sun shine everyday.