Acknowledgements

When I was in Amsterdam for four months, I felt that it would have been as long as four years. However, when a four-year period of time has really passed, I did not recognize, and then it would likely have been only four months. I do not know what and how to say to express my thankfulness to all of you, who stand by me, give me power to finish my PhD research and to make this thesis to become reality.

First of all, I would like to express my gratitude to my promoter Prof. Fred Brouwer and my daily supervisor Dr. René Williams. Dear Prof. Brouwer, thank you very much for giving me a chance to work in the group as well as your fruitful and sharp comments for my reports and the thesis manuscript. Dear René, I must say that without your constant support, encouragement and patience, particularly, in writing stage, I hardly reached to this point. I will always remember the quote “When the tree falls, any child can climb it” you wrote on a book to teach me how to overcome difficult issues. Therefore, I do understand that my tasks are to find a way to “cut down the tree!” Also, many thanks to you, Lissette and Tibbe for the family warm hospitality.

Officially, I would like to give my thanks to: Prof. Piétrick Hudhomme for very nice compounds, C$_{60}$ – PDI. They were my first topic with awesome properties, realizing a beautiful article; Prof. Frank Würthner for the Py-c-PDI compound, an interesting compound but challenging for data interpretation; Dr. Ivo H. van Stokkum for his support in Global and Target analysis in Py-c-PDI. Dear Ivo. When you said it was such a horrible system, I understood that it was really challenging and interesting, and then we got such nice results; Prof. Ari Aviram for the hemiquinone compound and continuous assistance while we were working with it.

My deep thanks go to all members of the Molecular Photonics group for supporting me and creating such a nice atmosphere to work. Time runs so fast. I know that I will miss Amsterdam very much when I am at home. I will also miss nice moments I spent with the group (ex-) members in the lab, in the group meetings, and in social events, many borrels and group dinners. All made the atmosphere friendly and we had more chance to exchange not only scientific issues but also cultural and personal opinions.
I would like to express my gratitude to John van Ramesdonk for his lessons during his technical guidance. Dear John, I learnt a lot from you not only scientific issues but also lessons about the love of life. I always consider you as my spirit father. Please send my thanks to your wife Thea for her kind hospitality. I am also grateful to Michiel Groeneveld for his help in femtosecond transient setup and his patience while we were working together.

Very special thanks are sent to my dear friend, Marcel. Hey Marcel, we were working in the same office, room D1.22, in Roetersstraat for 2 years and 1 year in Science Park. You helped me a lot during that time, particularly things related to Dutch language. (Is your “office” still open?) Thanks a lot for listening to me and encouraging me when I felt so weak. I also would like to thank Pablo as well as Tanzeela for their warm welcomingness during my first months in Amsterdam. You both are experts in cooking. And Joanna, thank you very much for your friendship and great hugs which encouraged me a lot when I was homesick. I am thankful to other members of the group Prof. Wybren Jan Buma (my voice will be louder), Dr. Hong Zhang (thanks for such a nice interview in Vietnam and your useful advices in Amsterdam), Dr. Sander Woutersen (I will try LaTex), Michiel Hilbers, Paul, Bert, Dick, Steven, Emile, Alessandro, Arnaud (Amelie and Luis), Tanzeela, Joanna, Pablo, Chantal (her motorbike is really cool), Danny, Eric, Matthijs, Adriana, Sérgeo, Tiber, Tatu, Heleen, Feng Cao, Franziska, the Chinese “mafia”: Qin Wenwu, Wang Yu, and Liu Kai, … It will be good memory forever.

I also would like to express my thanks to Peter, Arend and Niels for their support and encouragements. Whenever a Vietnamese defended his/her thesis, they always told us that they were very proud of that candidate. We highly appreciate their support and emotions to Vietnam and Vietnamese people.

It will cost pages to express all of my gratefulness to the Vietnamese friends in Amsterdam, especially, the “xóm Molukkenstraat and Amstel station”. You are my “brothers” and “sisters” who gave me great “energy” to overcome the difficulties during the last four years in Amsterdam. I am specifically grateful to the family "anh Thăng & chị Dương" for your kindness and friendship as well as the cooking lessons I learnt from chị Dương. Many thanks to the family anh Đức & Thanh for their warm friendship during the time we spent together. Thanks Hà for his kindness. Dear Hà, you usually give me a good impression about an enthusiastic and nice person. I deeply
express my thanks to cô Trúc (Ngô) for her kind support in the formalities, to anh Chinh (ca ca) for his IT assistance and guiding me a tour in Delft; to Triệt for great helps and advice in financial issues, his considerateness and friendship; to Dũng and Tú (I must say that you are an excellent cook, but the most important thing I learnt from you is your positive attitude about life.); to anh Công (Delft) for his help and encouragements; to Bách for his book recommendations and endless chit chat we had while you were in Amsterdam; to Tuấn for his patience in fixing my laptop; and to Cạnh for lending me his laptop which was very important for writing stage and strengthened my spirit in that hard time. I found it is not easy to enclose my thankfulness in few words to my friends Mai, Hoan, Lan Phi, Vinh (BK37), Huy (how many coffee left?), Trung, Hồng, Kiên, Nga, anh Thiệu, anh Thịnh, Chi, Đức (Phám), Ngọc A, Văn (Vũ), Bây, Thành, Dung (Ngô), Mai Thảo, Thùy, Hiếu (Cao), chị Thanh (Sorbon) for her kindness and welcoming me at her home.

Besides I thank my flatmates Wang Qian, Jadin, Yuki, Xavi, Raul George and Maria for creating pleasant atmosphere at home after hard working days. I will never forget the time I shared a house with Wang Qian who became one of my close friends. Thank you very much Wang for understanding my situation and for aiding me when I was sick.

I would like to thank my Vietnamese colleagues in Physical Department for their enormous assistance and other friends in Vietnam also. Thanks anh Chiến and Huy (HPT) for helping me to design this thesis cover.

From the bottom of my heart, I would like to send my special gratefulness to my parents and my parents-in-law for their unconditional love and great assistances in taking care of our daughters during the time I have been far away from home.

The last paragraph is to express my deepest emotion to my dear husband Cao Hồng Hà, and my two little “princesses” Cao Hải Anh and Cao Phương Linh for their love, encouragements and understanding during our hard four years. We all have known that the most difficult part of our lives is going away.

Amsterdam July 31st, 2011