Ion induced radiation damage on the molecular level
Alvarado Chacon, Fresia

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2007

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):
Alvarado Chacon, F. (2007). Ion induced radiation damage on the molecular level s.n.

Copyright
Other than for strictly personal use, 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), unless the work is under an open content license (like Creative Commons).

Take-down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): http://www.rug.nl/research/portal. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.
It was more than six years ago when I left the warmth of my country in order to pursue a dream. Now that I am very close to achieve it, I can only say How time flies when one has fun!! I still remember the day when I boarded that plane on the way to Russia, afraid of the cold weather and the new language but extremely excited about how many new things I will learn. At that moment, I did not know that I will board many other planes and that my main objective will be finally accomplished here in Groningen. All this flying time which passed so fast would not have been the same without all the nice people who helped to make it fun! And as the story is long, the list of people who participated in the track of “making a dream come true” is also long and I do not want to skip anyone.

First of all, I want to thank my present supervisors: without them the experimental research carried out for this thesis would have been impossible. Thomas, thanks for believing in me since the beginning. Thanks for including me in all the bio-activities and giving me the opportunity of participating in so many conferences and collaborations. That was really great! Thanks also for helping me in the process of “making career”. Ronnie, thanks for trying to teach me atomic physics during four years and stand all my bad jokes! Thanks to both of you for reading my thesis again and again... and again and also for giving useful comments and suggestions. Thanks also for correcting my papers with so much patience. Thanks for all the nice conversations. Reinhard, thanks for all the comments and questions which made me understand the physics behind my experiment much better. Thanks for being there in spite that you were not my official supervisor. I want also to thank the three of you for encouraging within the Atomic Physics group (ATF), the social atmosphere it has.

I want to thank my reading committee (beoordelingscommissie): Bernd Huber, Ron Heeren and Leo Meerts for accepting the challenge of reading my thesis and approving it. I also want to thank Albert for working on my dutch summary and Ronnie and Steven for their useful comments. Thanks also to Carlos for reading my spanish summary.

I was very lucky that during my PhD time, my research topic was part of COST Action P9: RADAM. This European network started exactly the same year that my PhD contract began. All meetings and collaborations from this network and the recently started ITSLEIF were very valuable for my PhD research. Every conference, meeting or visit I encountered a lot of interesting scientists from different areas willing to interchange knowledge and ideas.

---

1Samuel Beckett (1906-1989), Irish dramatist, novelist.
Thanks to Nigel Mason, the chair of RADAM and to Bernd Huber, the chair of ITSLEIF for making these networks functional and fruitful. Thanks to all the people interested in my research, all the people with whom I shared ideas, dinners, talks, poster sessions and drinks. You have made these four years extraordinary.

During my PhD time I also had the opportunity to collaborate with different groups. In the first month after arriving to the Netherlands I was already sent to Amsterdam to do measurements in the group of Mark Vrakking. Thanks to Mark for hosting me and thanks to Franck Lepine for performing the experiments with me, although I had no experience and was even scared of the turbo pumps. Thanks also to Tania and Yongfeng for the company. But this was only the beginning. In this four years, I made several visits to Caen in France, for the experiments with clusters. Thanks to my collaborators there for making our beam times such a pleasant experience, actually the best were the night shifts, the fridge was always full!! Thanks to Bernd, Bruno, Jimmy, Virgil and all the co–workers from CIRIL/GANIL.

France is one of my favorite places for going to conferences and doing experiments, therefore I was not against doing some measurements in Lyon in the group of Serge Martin. Thanks to Li, Richard, LiBin, Jerome and Serge for letting me put some sugar in your setup. Travelling from Groningen to France was not enough. Later on, Austria became one of my favorite destinations. I was a few times visiting our friends in Innsbruck, in the group of Tilmann Märk. Special thanks to Paul Scheier for having the doors of his group’s lab open for me. Thanks also to Stefan, Fabio and the rest of the group for hosting me during my visits.

I have also a lot to thank to my ATF colleagues, I even missed you when I was abroad. Honestly, without you guys and girls, these years of thesis making would have been boring. Thanks to the present group: Sadia, Erwin, Hong, Gabriel, Albert, Jos, Przemek, Maarten and Dominik. And thanks to the former group members: Dennis, Mirko, Abel, Marjorie, Herwig, Steven K., Steven H., Zoltan and Danyal. The ATF experience will be hard to forget: coffee break, lunch time and our traditional winter and summer group dinners!

Thanks also to the students who passed by the CHEOPS experiment when I was trying to learn how to do my experiments: Erwin, Sadia, Aurelie and Ruud. Thanks for your patience and for your contributions to the measurements. Thanks also for all what you let me learn about you and about myself by trying to teach you something, something that I was also learning. I would like also to mention here some other ATF related people, people whose company I enjoy/ed when they are/were around. Thanks to Umakhant, Wilbert, Duurt, Hans W., Hans B., Rob T., Gerco and all others with whom I had nice conversations. Special thanks also to the KVI PhD students which make life around the building nicer, thanks also to those of you with whom I shared my 4 FANTOM weeks.


Pero toda esta historia de hacer el doctorado en el exterior empezó gracias a don Luis Masperi, en paz descanse. Don Luis, como director del Centro Latinoamericano de Física
It was thanks to a Latin-american center that I ended up in Russia and from there jumped to Groningen. During my time in Dubna I learned a lot about life and for that I am really grateful. Thanks Anna for being always so helpful, even now that I am not there anymore. Ya hochu blagodarit moih eks-kolleg v Dubne: Nina Leonsivna, Tamara Aleksandrovna, Larisa, Olga, Polina i vse kto rabotal so mnoi. Vii mne nauchili kakie veshi yablyaiutcy vaizhnimi v zhizni. Spasibo Natasha potomu chto ti prepodavaly mne ruskii yazik. I want also to thank my friends in Dubna for encouraging me to go on and being my company in the lonely moments: Olga and Ilya, Jordanka and Nazko, Anahit and her lovely family, Radka, Anelia and Oleg, Buba and Kalin, Sevda and Emil, Eva, Spas, Stoyan, Pesho, Niki, Bogi, Ceco, Sonia. Special thanks to Mitko for keeping my interest in physics. Thanks to all of you for still maintaining our friendship. Gracias Osvaldo por ser mi amigo hispanohablante en Rusia, por escucharme cada vez que lo necesitaba.

Thanks to the people I have met in my time in Groningen, who helped me to have a life outside the lab. Thanks to my “Erasmus” friends which keep contact in spite of the distance: Anna, Evi, Gina, Elena, Andy, Han. You made my first months in Groningen a real experience. Thanks to my dutch classmates for the moments shared: Kristin, Umut, Eda, Kamila. Thanks to my tennis group and trainers for sharing my sport activities. Thanks to the HC-group Noord-Nederland, especially Esly, Ramesh, Gius, Jelly, Stefan for all the activities organized and reminding me that life is not only in the lab. Gracias a mis amigos hispanohablantes aquí en Groningen. Isabel, thanks for sharing with me the all the “ups and downs” of the PhD time and for accepting being my paranimf. Obrigado por ser uma amiga super especial. Gracias Carlos y Ximena por ser amigos incondicionales. Gracias a los amigos que han venido a visitarme y han logrado sobrevivir mi estres. Gracias Monica, Isabel C., Marce, Elian y Alicia. Significa mucho para mi que hayan estado por acá.

Gracias también a mis amigos en Costa Rica por no olvidarme, gracias a los que me han enviado de vez en cuando un correo o han chateado conmigo, gracias por su apoyo a la distancia. Gracias a la gente del barrio: Raul y Giorgia, Caro L., Caro B., Gloria, Vane, Mario, Irene y Armando, Monica, Manuel. Gracias a mis amigos ex-CCC. Gracias a mis ex-compañeros de carrera y a mis profesores de la U y del cientifico. Perdonen si he olvidado mencionar a alguien, creanme que no fue intencional.

Ik wil graag Steven, Lammert, Lineke, Jesper, Laurens, Opa en Oma Oldenhuis bedanken omdat jullie mijn Nederlandse familie zijn.

Gracias a mi familia: papi, mami, Igna y Vane. Gracias porque siempre me han apoyado en todas las decisiones que he tomado incluso si creían que no eran las correctas. Gracias por darme la libertad de escoger y mantenerse a mi lado. Gracias Vane y Mario por traer al mundo a Guit Yi y a Kin Wah: las luces de mis ojos. Gracias a todos mis tíos y primos por el apoyo que siempre me han brindado.

Steven, thanks for being my equilibrium point.

Thanks for being my inspiration and my support.

Muchas gracias a todos

Groningen, October 2007.