Towards in-cell structural study of light-harvesting complexes : an investigation with MAS-NMR

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Curriculum vitae

I was born and grown up in the mountain city of Khorramabad in Iran where I completed schooling. After the high school period, I decided to pursue my university studies in the field of Physics. In 2011, I received my master degree in Solid State Physics from Iran University of Science and Technology (IUST) in Tehran. Following the completion of my master program, I taught a wide range of theoretical and practical bachelor courses as a guest lecturer at Azad University of Parand in Tehran province. In 2013, I moved to Germany to perform research on Raman microscopy and spectroscopy on nanosystems in the group of Prof. Peter Lemmens at the Technical University of Braunschweig. A year later, in 2014, I joined the Solid-State NMR group in the Leiden Institute of Chemistry to work on the doctoral project described in this thesis under supervision of Dr. Anjali Pandit and Prof. Huub de Groot.

During my PhD program, my research was selected for oral presentations at several scientific conferences including the Light-Harvesting satellite meeting of the 17th International Congress on Photosynthesis Research (Egmond aan Zee, 2016), CHAINS (Veldhoven, 2016), 52th NMR-DG meeting (Geleen, 2017) and round-table discussions at 10th Alpine conference on Solid-State NMR (France, 2017). During the Alpine conference, I had the opportunity to chair two round table discussions. My research has also been presented as posters at the Dutch Biophysics meetings (Veldhoven, 2014 and 2018), 5th EBSA Solid-State NMR school (Munich, 2014), CHAINS (Veldhoven, 2015), EUROMAR (Prague, 2015), International school of Pure and Applied Biophysics "Molecular and Biophysical Aspects of Photosynthesis" (Venice, 2016), 17th International Congress on Photosynthesis Research (Maastricht, 2016) and the 50th and 51th NMR-DG meetings (Utrecht, 2015 and Wageningen, 2016). In addition, in 2017, I was awarded an ISMAR student travel stipend to participate and present my research at the 20th ISMAR conference in Quebec, Canada.

Publications

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2) Azadi-Chegeni. F, Perin. G, Simionata. D, Morosinoto. T, Pandit. A, Protein and lipid dynamics in photosynthetic thylakoid membranes investigated by *in-situ* solid-state NMR, (BBA) Bioenergetics (2016), 1857 (12), 1849-1859.

3) Azadi-Chegeni. F, Schiphorst. C, Pandit. A, *In-vivo* NMR as a tool for probing molecular structure and dynamics in intact *Chlamydomonas reinhardtii* cells, Photosynthesis Research (2017), 135 (1-3), 227-237.

4) Azadi-Chegeni. F, Ward. E. M, Perin. G, Simionata. D, Morosinoto. T, **Baldus. M, Pandit. A**, Conformational dynamics of a light-harvesting complex in native thylakoid membranes. bioRxiv, 288860.

5) Azadi-Chegeni. F, Ward. E. M, Perin. G, Morosinoto. T, **Baldus. M, Pandit. A,** Effect of zeaxanthin on ligh-harvesting complex II in a lipid bilayer, In preparation.

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