



Universiteit  
Leiden  
The Netherlands

## **Understanding protein complex formation: the role of charge distribution in the encounter complex**

Di Savino, A.

### **Citation**

Di Savino, A. (2021, June 15). *Understanding protein complex formation: the role of charge distribution in the encounter complex*. Retrieved from <https://hdl.handle.net/1887/3185507>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3185507>

**Note:** To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/3185507> holds various files of this Leiden University dissertation.

**Author:** Di Savino, A.

**Title:** Understanding protein complex formation: the role of charge distribution in the encounter complex

**Issue date:** 2021-06-15

## Curriculum Vitae

Antonella Di Savino was born on May 27<sup>th</sup> 1986 in Turin, Italy. After studying engineering at the Polytechnic of Turin for two years, she decided to follow her interest for the biological sciences. She achieved a bachelor degree in Biology followed by a master degree in Cellular and Molecular Biology at the University of Turin. During her internship in the group of Prof. Gianfranco Gilardi, supervised by Dr. Francesca Valetti and Dr. Simone Morra, she developed an interest for biochemistry, particularly for the study of proteins. She moved to the Netherlands to join the research group of Prof. Marcellus Ubbink at Leiden Institute of Chemistry in 2016 to work on protein-protein interactions. Her research project was aimed at understanding the importance of charge distributions on the protein surface for the encounter complex and for protein complex formation.

## List of publications

Ubbink, M., and Di Savino, A. (2018) Chapter 5: Protein-protein interactions, in *New Developments in NMR - Paramagnetism in Experimental Biomolecular NMR* (Luchinat, C., Parigi, G., and Ravera, E., Eds.), pp 134–162. The Royal Society of Chemistry, Cambridge, UK. ISBN: 9781788014960

Di Savino, A., Foerster, J., La Haye, T., Blok, A., Timmer, M., Ullmann, M., and Ubbink, M. (2020) Efficient encounter complex formation and electron transfer to cytochrome *c* peroxidase with an additional, distant electrostatic binding site. *Angew. Chemie Int. Ed.* 132, 23239–23243.

van Son, M., Schilder, J. T., Di Savino, A., Blok, A., Ubbink, M., and Huber, M. (2020) The transient complex of cytochrome *c* and cytochrome *c* peroxidase: Insights into the encounter complex from multifrequency EPR and NMR spectroscopy. *ChemPhysChem* 21, 1060–1069.

Di Savino, A., Foerster, J. M., Ullmann, M., and Ubbink, M. Charge distribution on a protein surface determines whether productive or futile encounter complexes are formed. *Biochemistry*, 60(10), 747–755.

Di Savino, A. and Ubbink, M. Enhancing the population of encounter complex affects protein complex formation efficiency, *Under revision*