


PERSONAL INFORMATION

Silvia Alessandrini



 7, Via A. Gaudenzi, 40127 Bologna (Italy)

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EDUCATION AND TRAINING

- 2017–Present

PhD Candidate in Methods and Models for Molecular Sciences EQF level 8

Scuola Normale Superiore, Pisa (Italy)

PhD Advisor: Vincenzo Barone

PhD Supervisor: Cristina Puzzarini
- 2015–2017

Master of Science in Chemistry EQF level 7

Alma Mater Studiorum - University of Bologna, Bologna (Italy)

Thesis: *Spectroscopic Characterization of New Sulfur-containing Molecules for Astrochemical Purposes.*

Supervisor: Cristina Puzzarini Co-Supervisors: Jürgen Gauss and Lorenzo Spada
- 2012–2015

Bachelor of Science in Chemistry EQF level 6

Alma Mater Studiorum - University of Bologna, Bologna (Italy)

Thesis: *Caratterizzazione strutturale ed energetica di una molecola prebiotica: la formammide e il suo dimero.*

Supervisor: Cristina Puzzarini
- 2007–2012

Secondary School Diploma in Chemistry EQF level 4

Technical Collage in Industrial Chemistry, Urbino (Italy)

PERSONAL SKILLS

Mother tongue(s) Italian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C1
IELTS score 8.0					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
 Common European Framework of Reference for Languages

Communication skills - Good communications skills both in italian and english.
 - Good teamwork skills

Digital skills

SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem-solving
Independent user	Proficient user	Proficient user	Independent user	Independent user

Digital skills - Self-assessment grid

- Good Command of Office Suite of Program
- Good User of Molden, Chimera, Gaussian Suite of Programs, CFour
- Basic knowledges of Fortran90 and Python
- Operating Systems: Unix and Windows

Driving licence B

ADDITIONAL INFORMATION

Honours and awards Best Poster Prize at the 2nd Italian Workshop on Astrochemistry, Follonica (GR) 13-16th June 2018

Publications 1) S. Alessandrini and C. Puzzarini. *Structural and Energetic Characterization of Prebiotic Molecules: The Case Study of Formamide and Its Dimer*. J. Phys. Chem. A, 120, 5257 (2016).

2) S. Alessandrini, J. Gauss and C. Puzzarini, *Accuracy of Rotational Parameters Predicted by High-Level Quantum-Chemical Calculations: Case Study of Sulfur-Containing Molecules of Astrochemical Interest*, J. Chem. Theory Comput., 14, 5360 (2018).

3) D. A. Obenchain, L. Spada, S. Alessandrini, et al. *Unveiling the Sulfur-Sulfur Bridge: Accurate Structural and Energetic Characterization of a Homochalcogen Intermolecular Bond*. Angew. Chem. Int. Ed., 57, 15822 (2018).

Conferences & Summer Schools

- Poster presentation at ERC AdG-Barone DREAMS: final meeting, Scuola Normale Superiore, Pisa, 29th November - 2nd December 2017.

- Partecipation to the ASTRO-Winter Modeling "Advances in computational and experimental modeling: Application to Astrochemistry", University of Bologna, Bologna, 15th-16th February 2018.

- Poster Presentation at the AstrochemII - 2nd Italian Workshop on Astrochemistry "Chemical Evolution in our Galaxy: Spectroscopy, Observations and Reactivity", Follonica, 13th-16th June 2018.

- Partecipation to the Lake Como School of Advanced Studies - Computational Spectroscopy: Bridging Theory and Experiment, Lake Como, 9th-14th September 2018.

- Partecipation and poster presentation at the Summer School "Modern Wavefunctions Methods in Electronic Structure Theory Summer School", Gelsenkirchen, 30th September - 5th October 2018.

-Oral contribution at the Winter Modeling 2019 - Special Edition on Valentine's Day, University of Naples Federico II, Naples, 14th February 2019.

- Oral contribution at the 4th COST- MOLIM General Meeting, University of Bologna, Bologna, 27th February - 1st March 2019