



Sara Bernardoni

Date of birth: 01/08/1996 | **Nationality:** Italian | **Email address:**

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EDUCATION AND TRAINING

30/09/2018 – 10/12/2020 Bologna , Italy

CHIMICA LM-54 -MASTER DEGREE IN CHEMICAL SCIENCES Alma Mater Studiorum - Università di Bologna Scuola di Scienze

Thesis: *Heck-Cassar-Sonogashira cross-coupling: a green perspective and potential application in the pharmaceutical segmen*

In this thesis project a mild and green-sustainable approach to the reactions of Heck-Cassar-Sonogashira is presented. Using 1-(2-hydroxyethyl)-2-pyrrolidone (HEP) as an alternative reaction solvent to the more common and toxic DMF and NMP, and exploiting its polarity and solubility characteristics, we have defined an effective catalyst recycling protocol. Furthermore, this mild and sustainable protocol, being particularly suitable for use on complex substrates, is also tested on substrates such as peptides for the development of peptidomimetics that represent one of the most explored pharmacological targets of the moment.

Paper Publication: *Palladium Catalyst Recycling for Heck-Cassar-Sonogashira Cross-Coupling Reactions in Green Solvent/Base Blend*

authors: Tommaso Fantoni, Sara Bernardoni, Alexia Mattellone, Giulia Martelli, Lucia Ferrazzano, Paolo Cantelmi, Dario Corbisiero, Alessandra Tolomelli, Walter Cabri, Federica Vacondio, Francesca Ferlenghi, Marco Mor, and Antonio Ricci in the scientific journal ChemSusChem on 24/01/2021

Final Degree: 110/110

Address Via Selmi 2, Bologna , Italy | **Website** <https://chimica.unibo.it/it>

20/09/2015 – 27/09/2018 Bologna , Italy

CHIMICA E CHIMICA DEI MATERIALI L-27 - BACHELOR DEGREE IN CHEMICAL SCIENCES AND TECHNOLOGIES Alma Mater Studiorum - Università di Bologna Scuola di Scienze

Thesis: *Solid phase synthesis (SPPS) of hexapeptides as binding motifs of EphB1 receptors*

This thesis project focuses on the synthesis optimization and on the search for the ideal amino acid sequence for the development of soluble peptides antagonists of ephrins B1, which can be used as next-generation analgesics for the treatment of neuropathic pain.

Final grade: 110/110 with honors

Address Via Selmi 2, Bologna , Italy | **Website** <https://corsi.unibo.it/laurea/chimica>

14/09/2010 – 25/06/2015 Casalecchio di Reno (BO) , Italy

SCIENTIFIC HIGH SCHOOL DIPLOMA Liceo Scientifico Leonardo Da Vinci

Final Degree: 94/100

Address Via Cavour 6, Casalecchio di Reno (BO) , Italy |

Website https://www.liceovinci.edu.it/pvw/app/BOLS0008/pvw_sito.php

● WORK EXPERIENCE

14/01/2021 – 30/10/2021

RESEARCH FELLOWSHIP AT INSTITUTE OF SCIENCE AND TECHNOLOGY FOR CERAMICS (ISTEC-CNR) - BIOCERAMICS AND BIOHYBRIDS RESEARCH GROUPS

Project in collaboration with the University of Bologna, Department of Chemistry Giacomo Ciamician, funded by the Dal Monte foundation for the development of antibiotic biomaterials as new devices for "rapid infection mapping" and treatment of chronic skin lesions.

31/10/2021 – CURRENT

PHD STUDENT AT THE UNIVERSITY OF PARMA, WITH THE RESEARCH ACTIVITY CARRIED OUT AT THE INSTITUTE OF SCIENCE AND TECHNOLOGY FOR CERAMICS (ISTE-CNR), BIOCERAMICS AND BIOHYBRIDS RESEARCH GROUP

Research activities focusing on the development of biomedical materials for innovative approaches in the treatment of skin lesions and dermatological diseases that are difficult to heal

● LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● DIGITAL SKILLS

Utilizzo del software Chemdraw | Microsoft Office, Microsoft Word, Microsoft Excel, Outlook, Facebook, Google | MestreNova

● ADDITIONAL INFORMATION

DRIVING LICENCE

Driving Licence: B

VOLUNTEERING

Volunteering I carried out summer volunteer experiences at the Casa Santa Chiara association, which takes care of people with cognitive disabilities, and at parish churches, participating in the summer activities of Estate Ragazzi first as an animator and then as a coordinator. These experiences have allowed me to acquire skills in organizing activities and managing the time available and the ability to collaborate and teamwork.