



Alberta Carella

Data di nascita: 01/08/1995 | **Nazionalità:** Italiana | **Sesso:** Femminile |

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● ESPERIENZA LAVORATIVA

01/2023 – ATTUALE Modena, Italia

DOTTORANDA DI RICERCA IN "PHYSICS AND NANOSCIENCES" UNIVERSITÀ DI MODENA E REGGIO EMILIA

Sustainable nanomaterials for battery and supercapacitor technology development

10/2022 – 12/2022 Florence, Italia

TIROCINIO EXTRA-CURRICULARE "ENGINEERING & TECHNOLOGY 2022" (FIGURA: R&D SCIENTIST) NUOVO PIGNONE (BAKER HUGHES)

Transizione Energetica ("Green Minds for Energy Transition" Team)

09/2021 – 09/2022 Pisa, Italia

MEMBRO DEL SETTORE "AERODINAMICA E MATERIALI COMPOSITI" E-TEAM SQUADRA CORSE - RACING TEAM OF UNIVERSITY OF PISA

Chemical sector management

● ISTRUZIONE E FORMAZIONE

09/2019 – 09/2022 Pisa, Italia

LAUREA MAGISTRALE IN CHIMICA Università di Pisa - Dipartimento di Chimica e Chimica industriale

Inorganic Chemistry
Industrial Chemistry
Green Chemistry

Indirizzo Via Giuseppe Moruzzi 13 , Pisa, Italia | **Sito Internet** <https://www.dcci.unipi.it/> | **Voto finale** 110/110 |

Tesi "Oxide nanoparticles for thermal management of solar radiation"

09/2021 – 07/2022 Pisa, Italia

TIROCINANTE IN LABORATORIO CHIMICO Università di Pisa - Dipartimento di Chimica e Chimica industriale

Internship work of Thesis (Master's degree in Chemistry): Synthesis and characterization of inorganic and/or nanostructured systems as innovative "green" solutions for many applications.

Indirizzo Via Giuseppe Moruzzi, 13, Pisa, Italia | **Sito Internet** <https://www.dcci.unipi.it/> |

Campo di studio Inorganic Chemistry , Industrial Chemistry

09/2014 – 07/2019 Pisa, Italia

LAUREA TRIENNALE IN CHIMICA Università di Pisa - Dipartimento di Chimica e Chimica industriale

Indirizzo Via Giuseppe Moruzzi 13 , Pisa, Italia | **Sito Internet** <https://www.dcci.unipi.it/>

03/2019 – 07/2019 Pisa, Italia

TIROCINANTE IN LABORATORIO CHIMICO Università di Pisa - Dipartimento di Chimica e Chimica industriale

Internship work of Thesis (Bachelor's degree in Chemistry): Synthesis of a bioactive Pt (II) complex and preliminary studies of loading on gold nanoparticles

Indirizzo Via Giuseppe Moruzzi, 13 , Pisa, Italia | **Sito Internet** <https://www.dcci.unipi.it/> |

Campo di studio Inorganic Chemistry

● **COMPETENZE LINGUISTICHE**

Lingua madre: **ITALIANO**

Altre lingue:

	COMPRENSIONE		ESPRESSIONE ORALE		SCRITTURA
	Ascolto	Lettura	Produzione orale	Interazione orale	
INGLESE	B2	B2	B2	B2	B2

Livelli: A1 e A2: Livello elementare B1 e B2: Livello intermedio C1 e C2: Livello avanzato

● **COMPETENZE DIGITALI**

Google Drive | Social Media

Microsoft Office

Microsoft Word | Microsoft Powerpoint | Microsoft Excel | Microsoft Teams

● **ULTERIORI INFORMAZIONI**

RETI E AFFILIAZIONI

07/03/2022 – 21/09/2022 Institution of Mechanical Engineers, One Birdcage Walk, London, SW1H 9JJ, United Kingdom
Student Affiliate Member of the Institution of Mechanical Engineers

Link <https://www.imeche.org/>

PATENTE DI GUIDA

Patente di guida: B

CONFERENZE E SEMINARI

13/02/2023 – 14/02/2023 – Università degli Studi di Trento - Dipartimento di Ingegneria Civile, Ambientale e Meccanica
Giornate sulla termoelettricità (GiTe 2023)

Link <https://gite.icmate.cnr.it/2023/>

24/10/2022 – 28/10/2022 – Brussels, Belgium

European Hydrogen Week - Third Edition The European Hydrogen Week is the biggest annual event dedicated to Hydrogen bringing together industry, policymakers, researchers and the public to shape the potential for clean hydrogen technologies and discuss latest developments.

I watched the 27 and 28 October 2022 events (EU Research Days) online, via live streaming platform.

Link https://www.clean-hydrogen.europa.eu/european-hydrogen-week-2022_en

American Chemical Society (ACS) : CAS SciFinder-n Multidisciplinary Training Online Sessions

Green Synthesis - Multidisciplinary Session (Webinar) Green Organic Synthetic Reactions: green solvent/catalyst/conditions

Green Chemistry – Related Concepts & Terms – CAS Lexicon

Bioinspired synthetic routes – Synthesis Reactions

Natural products total synthesis design: Atom Efficiency, click chem, Organocatalysis

Enzymatic structures and Catalysis – Biosequences & Reactions

Sustainable Polymer synthesis and life cycle assessment – Reactions & References

Markush structures reported for Green Chemistry

Substance patents visually displayed by chemical similarity – ChemScape

American Chemical Society (ACS) : CAS SciFinder-n Multidisciplinary Training Online Sessions

Energy Storage and Conductive materials - Multidisciplinary Session (Webinar) Anode / Cathode / Active Material / Electrolyte / Binder Reference Search.

Battery and Conductive materials: Subtypes & Application – CAS Lexicon

Battery preparation and performance – Liquid and Solid Batteries Approaches

Synthesis of conductive (in)organic materials – Substance Draw & Search & Reactions

Characterization of conductive materials – Substance specific and broad approaches.

Eco-friendly, Biosourced, poly-ionic liquid based materials – Different Filters

Patented battery structures and applications (Patent Pak).

Patentable energy materials (still not reported) – Prior Art

American Chemical Society (ACS) : CAS SciFinder-n Multidisciplinary Training Online Sessions

Nanoparticles - Multidisciplinary Sessions (Webinar) Synthesis of nanoparticles – Substance and Reaction Search

Nanoparticles subclasses and Applications – CAS Lexicon

Nanoparticles as catalysts – Reactions and identification

Nanocarriers for Drug Delivery - Reference Searching

Bionanoparticles - Therapeutic Use

Carbon-based & Inorganic Nanoparticles - Properties & Characterization

Airborne and Waterborne Nanoparticles -Regulatory Information

Most relevant journal identification

Nanoparticles in Patents - PatentPak

American Chemical Society (ACS) : CAS SciFinder-n Multidisciplinary Training Online Sessions

Paints, Pigments and Coatings (Webinar) Paint, Pigments and Coatings subtypes and applications – CAS Lexicon

Materials adhesion, adsorption and absorption properties

Mapping Natural and Synthetic pigments in literature – Reference Search

Paints, primers, plasticizers, fillers, (polymeric) resins/materials – Synthesis Reaction

Emulsions, latexes, adhesives – Preparation and Applications

Different Coating processes, Film-formation, drying processes protocols

Anticorrosive coatings & paintings and corrosion inhibitors – State of the Art

Materials & Protocols patented in Automobile, textile, cosmetic or construction

29/06/2022 – 01/07/2022 – University of Pisa – Department of Chemistry and Industrial Chemistry

"Chemistry for the Future" International Conference Title of the poster presented during the CFF2022

Poster Session: "Study of the NIR reflective properties of micro and nano particles for the preparation of "cool" paints"

Link <https://cff.dcci.unipi.it/>

ONORIFICENZE E RICONOSCIMENTI

2014

Candidato al premio "Alfiere del Lavoro" – Federazione Nazionale dei Cavalieri del Lavoro

COMPETENZE COMUNICATIVE E INTERPERSONALI

Personal Skills and Competences Accepting feedback, Empathy, Teamwork,

Analytical and critical thinking, Willingness to learn, Business ethics,

Problem-solving, Conflict management, Time management, Stress management.

Technical Skills and Competences Lab Safety Skills,

Laboratory Skills: Synthesis, Schlenk line, UV/Vis/NIR spectrophotometry (including relative reflectance measurement using an integrating sphere and Total Solar Reflectance measurement), microscopy.

Social Skills and Competences Interpersonal skills, Flexibility, Spirit of cooperation, Resourcefulness, Self-confidence, Effective Communication.

VOLONTARIATO

Regione Puglia

Legambiente Italia - Campagna "Spiagge e Fondali Puliti"

Link <https://www.legambiente.it/campagna/spiagge-e-fondali-puliti/>

Regione Puglia

Fondo per l'Ambiente Italiano (FAI) - "Apprendisti Ciceroni : un'esperienza di cittadinanza attiva" Project

Link <https://fondoambiente.it/il-fai/scuola/progetti-fai-scuola/apprendisti-ciceroni/>

CERTIFICATIONS

11/2022 – ATTUALE

Esame di Stato (Chimico - Sezione A)

07/2020 – ATTUALE

Percorso Formativo PF24 - Abilitazione all'insegnamento

Discipline antro-psico-pedagogiche, metodologie e tecnologie didattiche

Link <https://www.unipi.it/index.php/offerta/itemlist/category/226-acquisizione-dei-24-cfu-in-ambito-antropo-psico-pedagogico-e-metodologie-e-tecnologie-didattiche-pf24>

10/2012 – ATTUALE

First Certificate in English (FCE)

06/2010

Preliminary English Test (PET)

COURSES

05/2022

"Certificazione e Controllo Qualità" Exam (Cod. 378ZW) - 3CFU (Final Grade: 30L/30)

"Nei contenuti il corso descrive il processo di normazione e gli organi competenti sia riguardo alle norme nazionali che a quelle europee e internazionali, con riferimento alle Direttive comunitarie. Nel dettaglio sono descritte le norme riferite alla Gestione del Sistema Qualità (famiglia **ISO 9000**), con indicazioni su ambiente sicurezza e salute per la Gestione del Sistema Ambientale (famiglia **ISO 14000**). Sono dati elementi per la conoscenza di rischio, pericolo, danno e prevenzione. Si fa riferimento al programma **Responsible Care e Reach**.

Il corso affronta anche tematiche relative alle definizioni di Rischio, Danno e Prevenzione in accordo al **Dlg. 81/08 TESTO UNICO SULLA SALUTE E SICUREZZA SUL LAVORO**.

Una lezione è dedicata alla **norma 13432** sulla compostabilità, con riferimento al confronto con i conetti di biodegradabilità."

(Information taken from: <https://esami.unipi.it>)

10/2021 – 12/2021

Language Training Program - Centro Linguistico Interdipartimentale (CLI) of University of Pisa

Level: B2

Hours: 20

Where: Pisa, Italy

Link <https://www.cli.unipi.it/>

03/09/2012 – 27/09/2012

Language Training Program: "Push your english forward" (FCE Preparation Course) - Bell London School

Level: B2

Hours: 80

Where: London, United Kingdom (Address: 1-2 Bear Gardens, London , United Kingdom)

Link <https://www.bellenglish.com/>

Language Training Program: "Progress" (PET Preparation Course)

Level: B1

Hours: 50