



Adriano Cimini

● ESPERIENZA LAVORATIVA

01/03/2021 – 29/02/2024 Roma, Italia
PH.D SAPIENZA UNIVERSITY

PhD (36° ciclo) between LABOR srl research industry and the Department of Basic and Applied Sciences for Engineering (SBAI), at the Sapienza University of Rome; in collaboration with the Nanotechnology and Nanoscience (SNN) laboratory of the Research Center for Nanotechnology for Engineering of Sapienza (CNIS) on the research topic: **“Membrane bioreactor based on functionalized electrospun nanofiber (EVERMASK)”**.

01/06/2019 – 30/05/2020 Roma, Italia

RESEARCH GRANT CONSIGLIO NAZIONALE DELLE RICERCHE - ISTITUTO DEI SISTEMI COMPLESSI (CNR-ISC)

Research Grant at the Consiglio Nazionale delle Ricerche - Istituto dei Sistemi Complessi (CNR-ISC) on the topic: Ionic liquids as electrolytes for Li-ion batteries studied by Infrared Spectroscopy and Thermal analysis within the project *Silicon Alloying for Energy Dense Batteries comprising Lithium Rich Cathodes and Ionic Liquid Electrolytes for Safe High Voltage Performance (Si-Drive)*.

Project Description: Driving electric vehicles to the future of battery technology. European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 814464.

04/01/2019 – 30/04/2019 PArigi, Francia

WORK EXPERIENCE IN COLLABORATION WITH “SOLEIL SYNCHROTRON” ON THE PROJECT ENTITLED: RICERCA E SVILUPPO SULLA FISICA DEI LIQUIDI PROTICI IONICI. SOLEIL SYNCHROTRON

Internship financed from European social funds in the framework of the programme of initiatives “Torno Subito 2018” allowed me to investigate a set of binary mixture of ionic liquids (ILs) based on ammonium cation and water at various water concentrations by means of Fourier transform-Infrared spectroscopy (FTIR).

● ISTRUZIONE E FORMAZIONE

Roma, Italia

27/11/2018 MASTER'S DEGREE IN PHYSICS. TITLE OF THESIS: MOLECULAR INTERACTIONS IN PROTIC IONIC LIQUIDS BY INFRARED SPECTROSCOPY. Sapienza University of Rome

Roma, Italia

20/10/2015 BACHELOR'S DEGREE IN PHYSICS. TITLE OF DISSERTATION: BIOLOGICAL EFFECTS OF HADRON THERAPY (EFFETTI BIOLOGICI DELL'ADROTERAPIA). Sapienza University of Rome

● COMPETENZE LINGUISTICHE

Lingua madre: **ITALIANO**

Altre lingue:

	COMPRESIONE		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

● PUBBLICAZIONI

2023

[Upscaling of Electrospinning Technology and the Application of Functionalized PVDF-HFP@TiO₂ Electrospun Nanofibers for the Rapid Photocatalytic Deactivation of Bacteria on Advanced Face Masks](#)

2023

[Electrospun nanofibers for medical face mask with protection capabilities against viruses: State of the art and perspective for industrial scale-up](#)

2022

[So similar yet so different: the case of the ionic liquids N-trimethyl-N\(2-methoxyethyl\)ammonium bis\(trifluoromethanesulfonyl\)imide and N,N-diethyl-N\(2-methoxyethyl\)ammoniumbis\(trifluoromethanesulfonyl\)imide and N,N-diethyl-N-methyl-N\(2-methoxyethyl\)ammoniumbis\(trifluoromethanesulfonyl\)imide](#)

2021

[Influence of the alkyl chain length on the low temperature phase transitions of imidazolium based ionic liquids](#)

2021

[Evidence of the CH...O hydrogen bonding in imidazolium based ionic liquids from far-infrared spectroscopy measurements and DFT calculations](#)

2021

[Inter- and Intramolecular Interactions in Ether-Functionalized Ionic Liquids](#)

2020

[The infrared spectra of protic ionic liquids: performances of different computational models to predict hydrogen bonds and conformer evolution](#)

2020

[Decomposition temperatures and vapour pressures of selected ionic liquids for electrochemical application](#)

2020

[Temperature and Pressure Dependence of the Infrared Spectrum of 1-Ethyl-3-Methylimidazolium Trifluoromethanesulfonate Ionic Liquid](#)

● CONFERENZE E SEMINARI

18/10/2023 – 20/10/2023 OREA COONGRESS Hotel Brno (CZECH Rep. EU)

NANOCON 2023 CONFERENCE (18-20 October 2023)

Oral Presentation with the title "Electrospinning technology to upscale the production of low-cost and high-filtering functionalized polymer-based nanofibers providing photocatalytic activity for bacterial inactivation in advanced face mask".

18/09/2023 – 22/09/2023 Sapienza University of Rome (Italy)

NANOINNOVATION 2023 CONFERENCE

Oral presentation with the title “Electrospinning technology for scalable manufacturing of polymer-based nanofibers filters with high-performance in submicron particle filtration and bactericidal activity in advanced face mask”.

27/08/2019 – 30/08/2019 Sapienza University of Rome (Italy)

CEEC-TAC5 & MEDICTA 2019 CONFERENCE

Presented scientific poster with the title “Decomposition temperatures and vapour pressures of ionic liquids for electrochemical applications”.

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell’art. 13 d. lgs. 30 giugno 2003 n. 196 - “Codice in materia di protezione dei dati personali” e dell’art. 13 GDPR 679/16 - “Regolamento europeo sulla protezione dei dati personali”.