

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Barbara Chiavarino**
Address(es) Dipartimento di Chimica e Tecnologie del Farmaco, Università di Roma "La Sapienza", P.le A. Moro 5, I-00185 Roma, Italy
Telephone(s) (+) 39 (0)6 49913634 **Mobile:**
Fax(es) (+) 39 (0)6 49913602
E-mail barbara.chiavarino@uniroma1.it
Nationality Italian
Date of birth 1967
Gender Female

Occupational field research associate in General and Inorganic Chemistry (03/B1)

Work experience

Dates 1998-
Occupation or position held research associate
Main activities and responsibilities Scientific research, teaching
Name and address of employer Università degli Studi di Roma "La Sapienza"
Sector Inorganic Chemistry
Dates 1996
Occupation or position held Grant in Chemistry Science of the Italian National Research Council
Main activities and responsibilities Scientific research
Name and address of employer Università degli Studi di Roma "La Sapienza" and the Italian National Research Council
Sector Inorganic Chemistry

Education and training

Dates 1992-1996

Title of qualification awarded	PhD in Pharmaceuticals Science at the University "La Sapienza" of Rome 1992 graduated in "Chimica e Tecnologia Farmaceutiche" at the University "La Sapienza" of Rome, with the result of 110/110, with an experimental thesis under the supervision of Professor Prof. Pierluigi Giacomello. 1986 Education Liceo Scientifico S. Cannizzaro in Rome.																							
Name and type of organisation providing education and training	the University "La Sapienza" of Rome																							
Dates	1986-1992																							
Title of qualification awarded	She graduated in "Chimica e Tecnologia Farmaceutiche" with the result of 110/110, with an experimental thesis under the supervision of Professor Prof. Pierluigi Giacomello.																							
Name and type of organisation providing education and training	the University "La Sapienza" of Rome																							
Dates	1981-1986																							
Title of qualification awarded	scientific high-school																							
Name and type of organisation providing education and training	Liceo Scientifico S. Cannizzaro in Rome.																							
Personal skills and competences	<ul style="list-style-type: none"> - Intermolecular interactions (ion-ligand interactions, hydrogen bonds, ion-pi interactions, molecular recognition of biological molecules) - Ionic complexes and ion-molecule reactions - Chemical reaction mechanisms (e.g., proton transfer, substitution reactions, catalytic processes) - Infrared spectroscopy of molecular ions - Mass spectrometry 																							
Mother tongue(s)	Italian																							
Other language(s)	French, English																							
Self-assessment	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Understanding</th> <th colspan="2" style="text-align: center;">Speaking</th> <th style="text-align: center;">Writing</th> </tr> <tr> <th style="text-align: center;">Listening</th> <th style="text-align: center;">Reading</th> <th style="text-align: center;">Spoken interaction</th> <th style="text-align: center;">Spoken production</th> <th></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">C2</td> <td style="text-align: center;">C2</td> <td style="text-align: center;">C2</td> <td style="text-align: center;">C2</td> <td style="text-align: center;">C1</td> </tr> <tr> <td style="text-align: center;">B1</td> <td style="text-align: center;">B2</td> <td style="text-align: center;">B1</td> <td style="text-align: center;">B2</td> <td style="text-align: center;">B2</td> </tr> </tbody> </table>				Understanding		Speaking		Writing	Listening	Reading	Spoken interaction	Spoken production		C2	C2	C2	C2	C1	B1	B2	B1	B2	B2
Understanding		Speaking		Writing																				
Listening	Reading	Spoken interaction	Spoken production																					
C2	C2	C2	C2	C1																				
B1	B2	B1	B2	B2																				
<i>European level (*)</i>																								
Franch																								
English																								
	(*) Common European Framework of Reference for Languages																							
Additional information	<ul style="list-style-type: none"> - She serves as reviewer for some scientific journals such as Journal of Physical Chemistry, Journal of Mass Spectrometry. 																							
Receiving	Wednesday from 10.30 a.m. to 12.30 a.m.																							
Annexes	List any items attached.																							

1. Lanucara, F.; Chiavarino, B.; Crestoni, M. E.; Scuderi, D.; Sinha, R. K.; Maitre, P.; Fornarini, S. "Naked Five-Coordinate FeII(NO) Porphyrin Complexes: Vibrational and Reactivity Features." *Inorg. Chem.* (2011), 50, 4445-4452.
2. Coletti, C.; Re, N.; Scuderi, D.; Maitre, P.; Chiavarino, B.; Fornarini, S.; Lanucara, F.; Sinha, R. K.; Crestoni, M. E. "IRMPD spectroscopy of gaseous protonated S-nitrosocaptopril, a biologically active, synthetic amino acid." *Physical Chemistry Chemical Physics*, (2010), 12, 13455-13467
3. Sinha, R. K.; Maitre, P.; Piccirillo, S.; Chiavarino, B.; Crestoni, M. E.; Fornarini, S. "Cysteine radical cation: a distonic structure probed by gas phase IR spectroscopy" *Physical Chemistry Chemical Physics*, (2010), 12, 9794 - 9800
4. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Lanucara, F.; Lemaire, J.; Maitre, P.; Scuderi, D. "Molecular complexes of simple anions with electron-deficient arenes: spectroscopic evidence for two types of structural motifs for bare anion-arene interactions" *Chemistry European Journal* (2009), 15, 8185-8195
5. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Lanucara, F.; Lemaire, J.; Maitre, P. "Structure and mid-IR Spectroscopy of Protonated Carbonic Acid in the Gas Phase" *ChemPhysChem* (2009), 10, 520-522
6. Chiavarino, B.; Crestoni, M. E.; Di Rienzo, B.; Fornarini, S.; Lanucara, F. "Site-selectivity of Protonation in Gaseous Toluene" *Physical Chemistry Chemical Physics* (2008), 10, 5507-5509
7. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Rovira, C. "Unravelling the Intrinsic Features of NO Binding to Iron(II)- and Iron(III)-hemes" *Inorganic Chemistry* (2008) 47 (17), 7792-7801
8. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Lanucara, F.; Lemaire, J.; Maitre, P.; Scuderi, D. "Direct Probe of NO Vibration in the Naked Ferric Heme Nitrosyl Complex" *ChemPhysChem* (2008) 9, 826-828
9. Chiavarino, B.; Cipollini, R.; Crestoni, M. E.; Fornarini, S.; Lanucara, F.; Lapi, A. "Probing the Compound I-like Reactivity of a Bare High-Valent Oxo Iron Porphyrin Complex: the Oxidation of Tertiary Amines" *Journal of the American Chemical Society* (2008) 130, 3208-321
10. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Lanucara, F.; Lemaire, J.; Maitre, P.; Scuderi, D. "Infrared Spectroscopy of Isolated Nucleotides. 1. The cyclic 3',5'-Adenosine Monophosphate Anion" *International Journal of Mass Spectrometry* (2008) 270, 111-117
11. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Lanucara, F.; Lemaire, J.; Maitre, P. "Meisenheimer Complexes Positively Characterized as Stable Intermediates in the Gas Phase" *Angewandte Chemie International Edition* (2007) 46, 1995-1998
12. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Rovira, C. "Protonated Heme" *Chemistry European Journal* (2007) 13, 776-785
13. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Lemaire, J.; Maitre, P.; Mac Aleese L. "π-Complex Structure of Gaseous Benzene-NO Cations Assayed by IR Multiple Photon Dissociation Spectroscopy" *Journal of the American Chemical Society* (2006) 128, 12553-12561
14. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Dopfer, O.; Lemaire, J.; Maitre, P. "IR Spectroscopic Features of Gaseous C₇H₇O⁺ Ions: Benzylium versus Tropylium Ion Structures." *Journal of Physical Chemistry A* (2006), 110, 9352-9360.

15. Dopfer, O.; Lemaire, J.; Maitre, P.; Chiavarino, B.; Crestoni, M. E.; Fornarini, S.
"IR spectroscopy of protonated toluene: Probing ring hydrogen shifts in gaseous arenium ions."
International Journal of Mass Spectrometry (2006), 249/250 149-154.
16. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Lemaire, J.; MacAleese, L.; Maitre, P.
"Infrared spectroscopy of protonated phenylsilane in the gas phase."
ChemPhysChem (2005), 6, 437-440
17. Angelelli, F.; Chiavarino, B.; Crestoni, M. E.; Fornarini, S.
"Binding of Gaseous Fe(III)-Heme Cation to Model Biological Molecules: Direct Association and Ligand Transfer Reactions."
Journal of the American Society for Mass Spectrometry (2005), 16, 589-598
18. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Lemaire, J.; Maitre, P.; Mac Aleese L.
"Infrared Absorption Features of Gaseous Isopropyl Carbocations."
ChemPhysChem (2004) 5, 1679-1685
19. Jones, W.; Boissel, P.; Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Lemaire, J.; Maitre, P.
"Infrared fingerprint of protonated benzene."
Angewandte Chemie International Edition (2003), 42, 2057-2059
Angewandte Chemie (2003) 115, 2103-2105
20. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.; Kuck, D.
"Cation- π Interactions in the Gas Phase Methylation of α , ω -Diphenylalkanes."
Journal of Physical Chemistry A (2003), 107, 4619-4624.
21. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.
"The Trimethylsilylation of Acetylene"
Chemical Communications (2002) 1418-1419
22. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.
"Gas Phase Dioxygen Activation by Binuclear Manganese Clusters"
Chemistry European Journal (2002) 8, 2740-2746
23. Baiocchi, E.; Bietti, M.; Chiavarino, B.; Crestoni, M. E.; Fornarini, S.
"The Deprotonation of Benzyl Alcohol Radical Cations: a Mechanistic Dichotomy in the Gas Phase as in Solution."
Chemistry European Journal (2002) 8, 532
24. Chiavarino, B.; Crestoni, M. E.; Andrey A. F.; Fornarini, S.
"The Protonation of Gaseous Cyclopropane"
Chemistry European Journal (2001) 7, 2916-2921
25. Cacace, F.; Chiavarino, B.; Crestoni, M. E.
"Fast interconversion of $C_4H_7^+$ cations in the gas phase and in a gaseous microsolvated environment."
Chemistry--A European Journal (2000), 6, 2024-2031.
26. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.
"A Gas Phase Study of the Ionic Alkylation of Benzocycloalkenes"
Journal of the American Chemical Society (2000) 122, 5397
27. Chiavarino, B.; Crestoni, M. E.; Di Marzio, A.; Fornarini, S.; Rosi, M.
"Gas Phase Ion Chemistry of Borazine, an Inorganic Analogue of Benzene"
Journal of the American Chemical Society (1999) 121, 11204
28. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.
"Electrophilic Substitution of Gaseous Borazine"
Journal of the American Chemical Society (1999) 121, 2619
29. Chiavarino, B.; Crestoni, M. E.; Di Rienzo, B.; Fornarini, S.
"Gas Phase H/D Exchange between Arenium Ions and Selected Bases. The Site of Protonation of Si Aromatics"
Journal of the American Chemical Society (1998) 120, 10856-10862

30. Chiavarino, B.; Crestoni, M. E.; Fornarini, S.
"Radiolytic Silylation of Alkenes and Alkynes by Gaseous R_3Si^+ Ions. Stereochemical Evidence for the β -Silyl Effect."
Journal of the American Chemical Society (1998), 120, 1523-1527.

Works

Textbooks (Chapters, etc.)