

## Europass Curriculum Vitae



### Personal information

**First name(s) / Surname(s)** **Carlotta Marianecci**  
**Address(es)** Department of Drug Chemistry and Technologies, "Sapienza" University of Rome, P.le Aldo Moro 5, 00185 Rome, Italy  
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**E-mail** [carlotta.marianecci@uniroma1.it](mailto:carlotta.marianecci@uniroma1.it)  
**Nationality** Italian  
**Date of birth** January 17, 1976  
**Gender** Female

### Occupational field

Pharmaceutical technology

### Work experience

**Dates** Add separate entries for each relevant post occupied, starting from the most recent.

<b>Occupation or position held</b>	<p><b>2006</b> Research grant in Pharmaceutical Technologies at the Department of Chemistry and Pharmaceutical Technologies at Faculty of Pharmacy ("Sapienza" University of Rome). Research title: "New vesicular systems in drug release".</p> <p><b>2005</b> Fellowship in Pharmaceutical Technologies at the Department of Chemistry and Pharmaceutical Technologies at Faculty of Pharmacy ("Sapienza" University of Rome).</p>
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### Main activities and responsibilities

<b>Name and address of employer</b>	University of Rome "La Sapienza", P.le Aldo Moro 5, 00185 Rome, Italy
<b>Sector</b>	

**Education and training**

**2004** PhD in “Pharmaceutical Sciences” at Department of Chemistry and Pharmaceutical Technologies of the Faculty of Pharmacy (“Sapienza”University of Rome). PhD thesis on: “pH-sensitive niosomes as FANS delivery systems in Alzheimer disease therapy: preliminary evaluation of their interactions with macrophagic cells”. (Supervisor: Prof. Eleonora Santucci).

**2001** License to practice the profession of pharmacist.

**2001** Degree in Chemistry and Pharmaceutical Technologies at the Faculty of Pharmacy, “Sapienza” University of Rome. Experimental thesis entitled “pH-sensitive vesicular systems: characterization and applications”. (Supervisor: Prof. Maria Carafa).

**1994-2001** Chemistry and Pharmaceutical Technologies studies at the University “La Sapienza”, Rome, Italy

**1994** Elementary and High school until 1994

**Dates** Add separate entries for each relevant course you have completed, starting from the most recent.

**Title of qualification awarded** **Since 2007** Assistant Professor at Faculty of Pharmacy (“ La Sapienza” University of Rome).  
**2004** PhD in “Pharmaceutical Sciences”.  
**2001** Degree in Chemistry and Pharmaceutical Technologies (108/110)

**Name and type of organisation providing education and training** University of Rome “La Sapienza”

**Personal skills and competences**

Expert in the study of phospholipid and non phospholipid vesicles as drug delivery systems. In particular involved in preparation and characterization of vesicles for cytoplasmic delivery of therapeutic agents (pH-sensitive niosomes) and for topic (various niosomal formulations), oral (coated liposomes), pulmonary (coated and uncoated niosomes) and brain (liposomes) delivery of drugs.

**Mother tongue(s)** **Specify mother tongue**  
**Italian**

**Other language(s)**

**Self-assessment**  
*European level (\*)*

**English**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
good	good	good	Good	good

(\*) [Common European Framework of Reference for Languages](#)

**Additional information**

The research programs are carried out in cooperation with:  
 Prof. Federico Bordi, Università “Sapienza” di Roma  
 Dott. Giulio Caracciolo, Università “Sapienza” di Roma  
 Dott.ssa Daniela Pozzi, Università “Sapienza” di Roma  
 Prof. Massimo Fresta, Università “Magna Graecia” di Catanzaro  
 Dott.ssa Donatella Paolino, Università “Magna Graecia” di Catanzaro  
 Dott.ssa Luisa Di Marzio, Università “G. D’Annunzio” di Chieti  
 Dott. Andrea Masotti, Ospedale Pediatrico “Bambino Gesù”, Roma  
 Dott. Federico Martini, I.N.M.I. “L. Spallanzani” I.R.C.C.S.  
 Dott.ssa Chiara Agrati, I.N.M.I. “L. Spallanzani” I.R.C.C.S.  
 Dott. Stefano Pieretti Istituto Superiore di Sanità, Roma  
 Dott. Francesco Pampaloni EMBL University of Heidelberg, Germany

**Receiving** Monday 10-11.30 a.m. and by preliminary appointment

**Annexes** | List any items attached.

- Scientific Publication
- 1 M. Carafa, C. Marianecci, G. Lucania, E. Marchei, E. Santucci  
 "New vesicular ampicillin – loaded delivery systems for topical application : characterization, in vitro permeation experiments and antimicrobial activity"  
*J. Contr. Rel.*, (2004), 95, 67-74 **IF 7.164**
  - 2 A. Di Stefano, M. Carafa, P. Sozio, F. Pinnen, D. Baghiroli, G. Orlando, G. Cannazza, M. Ricciutelli, C. Marianecci, E. Santucci  
 "Evaluation of rat striatal L-Dopa and DA concentration after intraperitoneal administration of L-Dopa prodrugs in liposomal formulation"  
*J. Control. Release*, (2004), 99, 293-300. **IF 7.164**
  - 3 C. Terzano, L. Allegra, F. Alhaique, C. Marianecci, M. Carafa  
 Non phospholipid vesicles for pulmonary glucocorticoid delivery"  
*Eur. J. Pharm. Biopharm.*, (2005), 59, 57-62 . **IF 4.304**
  - 4 M.G. Quaglia, F. Barbato, S. Fanali, E. Santucci, E. Donati, M. Carafa, C. Marianecci  
 "Direct determination by capillary electrophoresis of cardiovascular drugs, previously included in liposomes"  
*J. Pharm. Biomed. Anal.*, (2005), 37, 73-79. **IF 2.733**
  - 5 F. Bordi, C. Cametti, C. Marianecci, S. Sennato  
 "Equilibrium particle aggregates in attractive colloidal suspensions"  
*Journal of Physics: Condensed Matter* (2005), 17 (45), 1, **IF 1.886**
  - 6 F. Bordi, C. Cametti, S. Sennato, B. Paoli, C. Marianecci  
 "Charge Renormalization in Planar and Spherical Charged Lipidic Aqueous Interfaces"  
*Journal of Physical Chemistry B.*; (2006), 110 (10), 4808. **IF 3.603**
  - 7 M. Carafa, L. Di Marzio, C. Marianecci, B. Cinque, G. Lucania, K. Kajiwara, M.G. Cifone, E. Santucci  
 "Designing novel pH-sensitive non-phospholipid vesicle: characterization and cell interaction"  
*Eur. J. Pharm. Sci.* , (2006), 28 385-393. **IF 3.291**
  - 8 Carafa, M., Marianecci, C., Annibaldi, V., Di Stefano, A., Sozio, P., Santucci, E. "Novel O-palmitoylscleroglucan-coated liposomes as drug carriers: Development, characterization and interaction with leuprolide".  
*Int. J. Pharm.*, (2006), 325 155-162.. **IF 3.607**
  - 9 M.A. Casadei, F. Cerreto, S. Cesa, M. Giannuzzo, M. Feeney, C. Marianecci, P. Paolicelli  
 "Solid lipid nanoparticles incorporated in dextran hydrogels: a new drug delivery system for oral formulations"  
*International Journal of Pharmaceutics* (2006), 325 (1-2), 140. **IF 3.607**
  - 10 Di Stefano, A., Sozio, P., Iannitelli, A., Marianecci, C., Santucci, E., Carafa, M. "Maleic- and fumaric-diamides of (O,O-diacetyl)-L-dopa-methylester as anti-parkinson prodrugs in liposomal formulation".  
*Journal of Drug Targeting*, (2006), 14(9), 652-661. **IF 2.491**
  - 11 Masotti, A., Remollino, L., Carafa, M., Marianecci, C., Santucci, E., Ortaggi, G. "Synthesis of a novel lipophilic gadolinium complex as a potential MRI contrast agent".  
*Synlett*, (2006), 17, 2815-2817. **IF 2.447**
  - 12 A. Masotti, F. Moretti, F. Mancini, G. Russo, N. Di Lauro, P. Checchia, C. Marianecci, M. Carafa, E. Santucci, G. Ortaggi  
 "Physicochemical and biological study of selected hydrophobic polyethylenimine-based polycationic liposomes and their complexes with DNA".  
*Bioorganic & Medicinal Chemistry*, (2007), 15, 1504–1515. **IF 2.978**

- 13 T. Coviello, P. Matricardi, C. Marianecchi, F. Alhaique  
 "Polysaccharide hydrogel for modified release formulations"  
*Journal of Controlled Release* (2007), 119 (1), 5. **IF 7.164**
- 14 S. Sennato, F. Bordi, C. Cametti, C. Marianecchi, M. Carafa, M. Cametti, Hybrid "Niosome Complexation in the Presence of Oppositely Charged Polyions"  
*Journal of Physical Chemistry B*, (2008), 112(12) 3720-3727. **IF 3.603**
- 15 G. Caracciolo, D. Pozzi, R. Caminiti, C. Marianecchi, S. Moglioni, M. Carafa, H. Amenitsch,  
 "Effect of hydration on the structure of solid-supported niosomal membranes investigated by in situ Energy Dispersive X-ray Diffraction".  
*Chemical Physics Letters*, (2008), 462, 307-312. **IF 2.280**
- 16 Di Marzio L, Marianecchi C, Cinque B, Nazzari M, Cimini AM, Cristiano L, Cifone MG, Alhaique F, Carafa M.  
 "pH-sensitive non-phospholipid vesicle and macrophage-like cells: Binding, uptake and endocytotic pathway".  
*Biochimica Biophysica Acta-Biomembranes.*, (2008), vol. 1778, pp. 2749-2756. **IF 4.647**
- 17 Patrizia Paolicelli, Felice Cerreto, Stefania Cesa, Michelle Feeney, Federica Corrente, Carlotta Marianecchi & Maria Antonietta Casadei  
 "Influence of the formulation components on the properties of the system SLN-dextran hydrogel for the modified release of drugs"  
*Journal of Microencapsulation*, (2009), 26 (4), 355-364. **IF 1.515**
- 18 Cristina Marchini, Maura Montani, Augusto Amici, Heinz Amenitsch, Carlotta Marianecchi, Daniela Pozzi, and Giulio Caracciolo  
 "Structural Stability and Increase in Size rationalize the efficiency of lipoplexes in serum"  
*Langmuir*, (2009), 25 (5), 3013-3021. **IF 4.268**
- 19 M. Carafa, C. Marianecchi, F. Rinaldi, E. Santucci, S. Tampucci, D. Monti  
 "Span® and Tween® neutral and pH-sensitive vesicles: characterization and *in vitro* skin permeation"  
*Journal of Liposome Research*, (2009), 19, pp 332-340. **IF 1.823**
- 20 D. Pozzi, R. Caminiti, C. Marianecchi, M. Carafa, E. Santucci, S. Candeloro De Sanctis, G. Caracciolo  
 "Effect of Cholesterol on the Formation and Hydration Behaviour of Solid-Supported Niosomal Membranes"  
*Langmuir*, (2010), 26, pp 2268-2273. **IF 4.268**
- 21 Andrea Masotti; Paola Vicennati; Anna Alisi; Carlotta Marianecchi; Federica Rinaldi; Maria Carafa; Giancarlo Ortaggi  
 "Novel Tween®20 derivatives enable the formation of efficient pH-sensitive drug delivery vehicles for human hepatoblastoma"  
*Bioorganic & Medicinal Chemistry Letters*, (2010), 20, 3021-3025. **IF 2.661**
- 22 M. Carafa, C. Marianecchi, L. Di Marzio, V. De Caro, G. Giandalia, L. I. Giannola, E. Cantucci  
 "Potential dopamine prodrug-loaded liposomes: preparation, characterization, and *in vitro* stability studies"  
*Journal of Liposome Research*, (2010), 20, 250–257 **IF 1.823**

23 Daniela Pozzi, Carlotta Marianecchi, Maria Carafa, Cristina Marchini, Maura Montani, Augusto Amici, Giulio Caracciolo  
"Programmed Packaging of Multicomponent Envelope-type Nanoparticle System for Gene Delivery"  
*Applied Physics Letters*, (2010), 96, 183702-1 -183702-3. **IF 3.820**

24 Carlotta Marianecchi; Donatella Paolino; Christian Celia ; Massimo Fresta; Maria Carafa; Franco Alhaique  
"Non-ionic surfactant Vesicles in Pulmonary Glucocorticoid Delivery: Characterization and Interaction with Human Lung Fibroblasts"  
*J. Control. Release*, (2010), 147 pp.127-135. **IF 7.164**

25 Daniela Pozzi, Carlotta Marianecchi, Maria Carafa, Cristina Marchini, Maura Montani, Augusto Amici, Giulio Caracciolo  
"Programmed packaging of multicomponent envelope-type nanoparticle system (MENS)".  
*J. Control. Release*, (2010), 148, pp e87-e89. **IF 7.164**

26 Luisa Di Marzio, Carlotta Marianecchi, Mariadea Petrone, Federica Rinaldi, Maria Carafa  
"Novel pH-sensitive non-ionic surfactant vesicles: comparison between Tween 21 and Tween 20"  
*Colloids and Surface B: Biointerfaces*, (2011), 82 18–24. **IF 2.780**

27 Amenitsch, H. , Caracciolo, G., Foglia, P. , Fuscoletti, V. , Giansanti, P. , Marianecchi C., Pozzi, D. , Laganà, A.  
"Existence of hybrid structures in cationic liposome/DNA complexes revealed by their interaction with plasma proteins"  
*Colloids and Surface B: Biointerfaces* (2011) Volume 82, issue 1, 141-146 **IF 2.780**

28 Agrati, C. , Marianecchi, C. , Sennato, S. , Carafa M., Bordoni, V. , Cimini, E. , Tempestilli, M. , Pucillo, L.P. , Turchi, F. , Martini, F. , Borioni, G. , Bordi, F.  
"Multicompartment vectors as novel drug delivery systems: Selective activation of T $\gamma$  lymphocytes after zoledronic acid delivery"  
*Nanomedicine: Nanotechnology, Biology, and Medicine*, (2011), 7 153-161. **IF 4.882**

29 Giulio Caracciolo, Daniela Pozzi, Anna Laura Capriotti, Carlotta Marianecchi, Maria Carafa, Cristina Marchini, Maura Montani, Augusto Amici, Heinz Amenitsch, Michelle A. Digman, Enrico Gratton, Susana S. Sanchez, and Aldo Laganà  
"Factors Determining the Superior Performance of Lipid/DNA/Protamine Nanoparticles over Lipoplexes"  
*J Med Chem*, (2011), 54 (12) 4160–4171. **IF 5.207**

30 Carlotta Marianecchi, Maria Carafa, Luisa Di Marzio, Federica Rinaldi, Chiara Di Meo, Franco Alhaique, Pietro Matricardi, Tommasina Coviello  
"A New Vesicle-loaded Hydrogel System Suitable for Topical Applications: Preparation and Characterization"  
*J Pharm Pharmaceut Sci* ([www.cspCanada.org](http://www.cspCanada.org)) 14(3) 336 - 346, 2011. **IF: 1.914**

Patents Maria Carafa, Franco Alhaique, Carlotta Marianecchi, Donatella Paolino, Massimo Fresta:  
"Niosomi, polvere liofilizzata di essi e loro uso in terapia"  
RM/2010/A000002 (7 gennaio 2010)

Maria Carafa, Franco Alhaique, Carlotta Marianecchi, Donatella Paolino, Massimo Fresta:  
"Niosomes, lyophilized powder thereof and their uses in therapy"  
PCT/IB2011/050041 (5 gennaio 2011)  
WO 2011/083428 A1 (14 luglio 2011)

Textbooks (Chapters, etc.)

F. Alhaique, C. Marianecchi, E. Santucci, S. Petralito, A. Memoli, L. Di Marzio, M. Carafa  
"Veicoli cosmetici" Manuale di Scienze e Tecnologie Cosmetologiche  
Maurizio Giuliani e Ferdinando Di Iorio ARACNE Editrice S.r.l. Roma pp. 345-384 (2005)

Maria Carafa, Carlotta Marianecchi, Paolino Donatella, Luisa Di Marzio, Christian Celia, Massimo Fresta, Franco Alhaique  
"Novel concept in pulmonary delivery"  
"Chronic Obstructive Pulmonary Disease", ISBN 979-953-307-038-3  
InTech - Open Access Publisher in press (2011)