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Decreto Rettore Università di Roma “La Sapienza” n 136/2020 del 15/01/2020

ANDREA CALCATERRA
Curriculum Vitae

Place Rome

Date 02/03/2020

Part I – General Information

Full Name	ANDREA CALCATERRA
E-mail	andrea.calcatterra@uniroma1.it
Spoken Languages	ITALIAN, ENGLISH

Part II – Education

IIA – Academic Education

Type	Year	Institution	Notes (Degree, Experience,...)
PhD	2013	Sapienza - University of Rome	Pharmaceutical Sciences
University graduation	2009	Sapienza - University of Rome	Master Degree in Chemistry cum laude
University graduation	2007	Sapienza - University of Rome	Bachelor Degree in Chemistry cum laude

IIB – Other training course

25-27/06/2019	European Network of Fourier-Transform Ion-Cyclotron-Resonance Mass Spectrometry Centers, Sapienza - University of Rome, Roma	EU-FT-ICR MS Short Course #3
09/01/2019	Sapienza - University of Rome, Roma	Radiation protection training course
21/06-23/10/2017	University of Rome “Tor Vergata”, Regione Lazio; Roma	Start Cup Lazio 2017
18-20/09/2017	COST, Universidade Lusófona de Humanidades e Tecnologias, Lisbon (Portugal)	Second Training School of COST ACTION CM1407, “Synthesis, evaluation and structural elucidation of bioactive compounds”
24-26/09/2016	COST, Institute for Biological Research “Siniša Stanković”, University of Belgrade, Belgrade (Serbia)	First Training School of COST ACTION CM1407, “ <i>In vitro</i> evaluation of compounds with anticancer potential”

18/04/2016-30/05/2016	World Intellectual Property Organization (WIPO)	General Course On Intellectual Property
29/06/2016	World Intellectual Property Organization (WIPO)	Course: Introduction To The Patent Cooperation Treaty
21-24/05/2013	Sapienza - University of Rome, Roma	Epigenetic Rome Training School
04/04/2013-13/06/2013	Sapienza - University of Rome, Roma	Course SSSAS - “Gestione, valorizzazione e trasferimento dei risultati della ricerca”, at “Scuola Superiore di Studi Avanzati”
4-17/07/2010	University of Crete, Heraklion, Greece	Summer school SYNAPS, Synthesis and retrosynthesis in the Chemistry of Natural Products
14-18/06/2010	SCI, University of Milan, Gargnano (Brescia)	XXXV Summer School “A. CORBELLA” of Organic Synthesis

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
2013	2014	Dipartimento di Chimica e Tecnologie del Farmaco, Facoltà di Farmacia e Medicina, Sapienza - University of Rome	Post-doc research assistant, “Sviluppo di metodologie sintetiche eco-compatibili per la produzione di intermedi farmaceutici”, SSD CHIM/06
2014	2015	Dipartimento di Scienze Biochimiche “A. Rossi Fanelli”, Facoltà di Farmacia e Medicina, Sapienza - University of Rome	Post-doc research assistant, “Nuovi bioconiugati proteina farmaco in nanomedicina”, SSD BIO/10
2017	2018	Dipartimento di Studi letterari, filosofici e di Storia dell’Arte, University of Rome “Tor Vergata”	Post-doc research assistant, “Smart - Campus Grafene funzionalizzato per il restauro e la conservazione dei Beni Archivistici e Librari”, SSD CHIM/01
2018	2019	Dipartimento di Chimica e Tecnologie del Farmaco, Facoltà di Farmacia e Medicina, Sapienza - University of Rome	Post-doc research assistant, “Studio multimetodologico di infiorescenze di canapa industriale”, SSD CHIM/10
2019	2020	Dipartimento di Chimica e Tecnologie del Farmaco, Facoltà di Farmacia e Medicina, Sapienza - University of Rome	Post-doc research assistant, “Studio multimetodologico di infiorescenze di canapa industriale”, SSD CHIM/10

IIIB – Other Appointments

Start	End	Institution	Position
2011	2011	University of Bielefeld	PhD visiting
2015	2017	Center for Life Nano Science@Sapienza, Istituto Italiano di Tecnologia / Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza - University of Rome	Appointment for a free of charge Research

Part IV – Teaching experience

Year	Institution	Lecture/Course
2019-2020	Facoltà Dipartimentale di Medicina e Chirurgia, Università Campus Bio-Medico di Roma	<i>Chemistry and Introductory Biochemistry</i> (3 CFU) <i>within the course “Fundamentals of Basic Science 1”</i> , Degree course in “Medicine and Surgery”
2019-2020	Facoltà Dipartimentale di Medicina e Chirurgia, Università Campus Bio-Medico di Roma	<i>Chimica e Propedeutica Biochimica</i> (2 CFU), Degree course in “Medicina e Chirurgia”
2019-2020	Facoltà Dipartimentale di Scienze e Tecnologie per l’Uomo e l’Ambiente	<i>Chimica Organica</i> (6 CFU), Degree course in “Scienze dell’Alimentazione e della Nutrizione Umana”
2019/2020	Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza - University of Rome	<i>Chimica Organica e Chimica delle Sostanze Organiche Naturali</i> (3 CFU), Degree course in “Scienze Farmaceutiche Applicate”
2018-2019	Facoltà Dipartimentale di Medicina e Chirurgia, Università Campus Bio-Medico di Roma	<i>Chimica Organica</i> (6 CFU), Degree course in “Scienze dell’Alimentazione e della Nutrizione Umana”
2018/2019	Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza - University of Rome	<i>Chimica Organica e Chimica delle Sostanze Organiche Naturali</i> (4 CFU), Degree course in “Scienze Farmaceutiche Applicate”
2017-2018	Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza - University of Rome	<i>Chimica Organica e Chimica delle Sostanze Organiche Naturali</i> (4 CFU), Degree course in “Scienze Farmaceutiche Applicate”
2017-2018	Istituto Centrale per il Restauro e la Conservazione del Patrimonio Archivistico e Librario (ICRPCAL), Ministero per i Beni e le Attività Culturali e per il Turismo (MiBACT), Roma	Laboratory trainer of the course “Scienza e Tecnologia dei materiali: della carta, della pergamena, del legno, del cuoio, dei metalli dei tessuti”, advanced training course in “Restauro”,
2016-2017	Dipartimento di Chimica, Sapienza - University of Rome	Lecture intitled “ <i>Analoghi e derivati della ciclopamina</i> ” (2h), Master course in “Sostanze Organiche Naturali”
2015-2016	Dipartimento di Chimica, Sapienza - University of Rome	Lecture intitled “ <i>Analoghi e derivati della ciclopamina</i> ” (2h), Master course in “Sostanze Organiche Naturali”
2011-2012	Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza - University of Rome	Trainer of “ <i>Chimica Organica</i> ”, Degree course in “Farmacia”
2010-2011	Dipartimento di Chimica e Tecnologie del Farmaco, Sapienza - University of Rome	Trainer of “ <i>Chimica Organica</i> ”, Degree course in “Farmacia”

Part V - Society memberships, Awards and Honors

Year	Title
2019-2020	Member of Società Chimica Italiana (SCI), division of organic chemistry
10/16-2020	Member of the American Chemical Society, division of organic chemistry
25/07/2017	Award for the Best Social Project (Nanographarm), final event Start Cup Lazio 2017

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value

Part VII – Research Activities

Keywords	Brief Description
Natural products isolation	Isolation, purification and structural characterization of natural products by HPLC-UV, LC-MS, NMR.
Natural products and heterocycles synthesis	Total and semisynthesis, purification and structural characterization of natural products and pharmaceutically relevant heterocycles by HPLC-UV, LC-MS, NMR.
Macrocycles	Synthesis, purification and structural characterization of macrocyclic compounds by HPLC-UV, LC-MS, NMR, for different applications.
Biological applications	Study of the biological applications of isolated/synthesized compounds.

Part VIII – Participation to conferences, workshops and scientific meetings

Dates	Institution/place	Description
05/02/2020	Sapienza - University of Rome, Roma	Conference “Scienza e Fede”
11-14/06/2019	Sapienza - University of Rome, Roma	Conference & Exhibition “Nanoinnovaton 2019”
02-06/06/2019	Lecce	14th International Symposium on Macrocyclic and Supramolecular Chemistry (ISMCS2019)
18-19/02/2019	COST Office, Bruxelles (Belgium)	COST Action CM1407 “Meeting dedicated to Early Career Investigators”
24/10/2018	YOCOUCU - YOUTH in CONSERVATION OF CULTURAL HERITAGE International Organization, Museo Etrusco di Villa Giulia, Roma	Conference day “I Giovani e l’Innovazione. Giornata dedicata a 'Luciana Drago' e 'Maurizio Marabelli' ”
11-14/09/2018	Sapienza - University of Rome	Conference & Exhibition “Nanoinnovaton 2018”
24/05/2018	Università di Roma “Tor Vergata, Biblioteca statale del monumento nazionale di Grottaferrata, Grottaferrata (Roma)	Closing event “Smart Campus” project
20-24/05/2018	University of Siena, Certosa di Pontignano (Siena)	VII EWDSy “European Workshop in Drug Synthesis”
12/03/2018	Istituto Centrale per il Restauro e la Conservazione del Patrimonio Archivistico e Librario (ICRCPAL), Ministero per i Beni e le Attività Culturali e per il Turismo (MiBACT), Roma	Information day “Nanoparticelle libri e documenti”
30-31/01/2018	Istituto Centrale per il Restauro e la Conservazione del Patrimonio Archivistico e Librario (ICRCPAL), Ministero per i Beni e le Attività Culturali e per il	Conference days “Opere d’arte moderne e contemporanee su carta. Nuove frontiere per il restauro”

	Turismo (MiBACT), Roma	
21-22/09/2017	COST, Universidade Lusófona de Humanidades e Tecnologias, Lisbon (Portugal)	COST Action CM1407 4 th meeting, “Challenging Organic Syntheses Inspired by Nature – from Natural Products Chemistry to Drug Discovery”
14/02/2017	BUCHI, Sapienza - University of Rome, Roma	Conference “Natural Products: Tecniche analitiche e nuove tendenze nel mondo dei prodotti naturali”
16/09/2016	Regione Lazio, Sapienza – Università di Roma, Università della Tuscia, associazione Canapa Live, Sala del Museo Civico il Convento della Sughera, Tolfa (Roma)	Conference “La Canapa Industriale: stato attuale e prospettive”
05-06/10/2015	COST, Sapienza – University of Rome, Roma	COST Action CM1407 1 st meeting, “Challenging Organic Syntheses Inspired by Nature – from Natural Products Chemistry to Drug Discovery”
08-10/09/2015	Società Chimica Italiana (SCI) Sapienza - University of Rome, Roma	Conference ChirItaly 2015
28/03/2015	Organized in the frame of the project “3069-GliTerIn”, Athens (Greece)	3069-GliTerIn Scientific Meeting, “Chemical Intervention in Hh/Gli and Related Developmental Signaling Pathways to Control Cancer Stem Cells”
26-27/03/2015	COST, Athens (Greece)	COST ACTION CM1106 3 rd working group meeting
19-20/06/2014	Gruppo Italiano Discussione Risonanze Magnetiche (GIDRM), Sapienza - University of Rome, Roma	IV Workshop “Applicazioni della Risonanza magnetica nella Scienza degli Alimenti”
18-23/05/2014	University of Siena, Certosa di Pontignano (Siena)	V EWDSy “European Workshop in Drug Synthesis”
19-20/05/2014	Sapienza - University of Rome, Roma	Conference “Quo Vadis Synthesis?”
10-13/09/2013	Sapienza - University of Rome, Roma	XXII National Meeting on Medicinal Chemistry
14-17/07/2013	Memorial University, St. John’s, Newfoundland and Labrador (Canada)	12th International Conference on Calixarenes (Calix 2013)
06-08/05/2011	COST, Dublin (Ireland)	COST Action CM08004 meeting
05-10/09/2010	ESF-COST, Acquafredda di Maratea, Maratea	ESF-COST High-Level Research Conference on Natural Products Chemistry, Biology and Medicine III
19/03/2010	University of Florence, Sesto Fiorentino, Firenze	Conference “La Spettrometria di Massa e leomiche”

Part IX – Oral communications

05/02/2020	Sapienza - University of Rome, Roma	A. Calcaterra. <i>Sintesi totale del kuwanol E</i> , invited speaker at the conference “Scienza e Fede”
18-19/02/2019	COST Office, Bruxelles (Belgium)	A. Calcaterra, V. Iovine, I. Benni, R. Sabia, I. D’Acquarica, G. Fabrizi, B. Botta. <i>Total synthesis of (±)-kuwanol E</i> , invited speaker at the conference COST Action CM1407 “Meeting dedicated to Early Career Investigators”

24/10/2018	Museo Etrusco di Villa Giulia, Roma	A. Calcaterra, F. Valentini. <i>Certificazione ed applicazione su campioni originali di nuovi nanomateriali per il restauro</i> , presented at the conference day “I Giovani e l’Innovazione. Giornata dedicata a 'Luciana Drago' e 'Maurizio Marabelli' ”
12/03/2018	Istituto Centrale per il Restauro e la Conservazione del Patrimonio Archivistico e Librario (ICRPCAL), Ministero per i Beni e le Attività Culturali e per il Turismo (MiBACT), Roma	A. Calcaterra, “ <i>Nanotecnologie per la sintesi dei nuovi nanomateriali</i> ”, invited speaker at Information day “Nanoparticelle libri e documenti”
14-17/07/2013	Memorial University, St. John’s, Newfoundland and Labrador (Canada)	A. Calcaterra, <i>Bis(diamido)-Bridged Basket Resorc[4]arenes as Enantioselective Receptor Towards Nucleosides</i> , short presentation at Calix 2013

Part X – Qualifying examination

Qualified as Senior Chemist by Italian “Ordine dei Chimici” in 2010.

Part XI – Patents

Issue Date	Description
03/10/2016	Italian patent n° 0001424713, inventors: C. De Angelis, D. Biagioni, L. Scappaticci, A. Calcaterra. Assignee: C. De Angelis, D. Biagioni, L. Scappaticci. <i>Composizioni farmaceutiche per il trattamento della psoriasi.</i>
02/10/2019	European patent n° EP3164110B1, inventors: L. Scappaticci, A. Calcaterra, D. Biagioni, C. De Angelis. Assignee: Special Product’s Line S.p.A. <i>Pharmaceutical compositions for the treatment of psoriasis.</i>
19/04/2017	Chinese patent n° CN106572969A, inventors: D. Biagioni, A. Calcaterra, C. De Angelis, L. Scappaticci. Assignee: Special Product’s Line S.p.A. <i>Pharmaceutical compositions for the treatment of psoriasis.</i>
13/02/2018	United States patent n° US9889132B2, inventors: D. Biagioni, C. De Angelis, L. Scappaticci, A. Calcaterra. Assignee: Special Product’s Line S.p.A. <i>Pharmaceutical compositions for the treatment of psoriasis.</i>

Part XII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	26	SCOPUS	2008	2020
Papers [national]				
Books [scientific]	1	SCOPUS	2012	2012
Books [teaching]				
Posters	21		2010	2020
Conference oral communications	5		2013	2020

Total Impact factor	74.375
Total Citations	257
Average Citations per Product	9.5
Hirsch (H) index	8
Normalized H index*	0.667

*H index divided by the academic seniority.

Part XIII– Selected Publications

List of the 15 publications selected for the evaluation (2012-2020).

For each publication, authors, title, reference data, journal IF (InCites JCR) and number of citations (Scopus) are reported. IF is relative to the year of publication or, if not available, to the year closest to the year of publication. The role of the candidate as corresponding author is highlighted by reporting the symbol * after the name.

First name: n. 3 papers

(*) Corresponding author: n. 1 paper

Last name: 1 paper

- 1) A. Calcaterra*, L. Mangiardi, G. Delle Monache, D. Quaglio, S. Balducci, S. Berardozzi, A. Iazzetti, R. Franzini, B. Botta, F. Ghirga. *The pictet-spengler reaction updates its habits*, MOLECULES (2020); vol. 25(2): 414, <https://doi.org/10.3390/molecules25020414>; IF. 3.060, Cit. 0
- 2) A. Serafino, G. Nicotera, F. Andreola, D. Giovannini, M. Zonfrillo, G. Sferrazza, A. Calcaterra, C. De Angelis, C. Camponeschi, P. Pierimarchi. *Synergistic antiproliferative and differentiating effect of 2,4-monofurfurylidene-tetra-O-methylsorbitol and 4,6-dimethyl-2-(3,4,5-trimethoxyphenylamino)pyrimidine on primary and immortalized keratinocytes*, BIOMEDICINE AND PHARMACOTHERAPY (2018); vol. 107: 155-167; IF. 3.743, Cit. 0
- 3) A. Mascarello, A. C. Orbem Menegatti, A. Calcaterra, P.G.A. Martins, L. D. Chiaradia-Delatorre, I. D'Acquarica, F. Ferrari, V. Pau, A. Sanna, A. De Logu, M. Botta, B. Botta, H. Terenzi, M. Mori. *Naturally occurring Diels-Alder-type adducts from Morus nigra as potent inhibitors of Mycobacterium tuberculosis protein tyrosine phosphatase B*, EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY (2018), vol. 144: 277-288; IF. 4.833, Cit. 7
- 4) A. Calcaterra, I. D'acquarica. *The market of chiral drugs: chiral switches versus de novo enantiomerically pure compounds*. JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS (2018), vol. 147: 323-340; IF. 2.983, Cit. 59
- 5) A. Calcaterra, V. Iovine, B. Botta, D. Quaglio, I. D'Acquarica, A. Ciogli, A. Iazzetti, R. Alfonsi, L. Lospinoso Severini, P. Infante, L. Di Marcotullio, M. Mori, F. Ghirga. *Chemical, computational and functional insights into the chemical stability of the Hedgehog pathway inhibitor GANT61*, JOURNAL OF ENZYME INHIBITION AND MEDICINAL CHEMISTRY (2018), vol. 33(1): 349-358; IF. 4.027, Cit. 11
- 6) R. Martini, F. Esposito, A. Corona, R. Ferrarese, E. R. Ceresola, L. Visconti, C. Tintori, A. Barbieri, A. Calcaterra, V. Iovine, F. Canducci, E. Tramontano, M. Botta. *Natural Product Kuwanon-L Inhibits HIV-1 Replication through Multiple Target Binding*, CHEMBIOCHEM (2017), vol. 18(4): 374-377; IF. 2.774, Cit. 9

- 7) C. Frascchetti, M. Montagna, M. E. Crestoni, A. Calcaterra, F. Aiello, L. Santi, A. Filippi. *Kinetic enantioselectivity of a protonated bis(diamido)-bridged basket resorcin[4]arene towards alanine peptides*. ORGANIC & BIOMOLECULAR CHEMISTRY (2017), vol. 15: 1183-1189; IF. 3.423, Cit. 1
- 8) V. Iovine; I. Benni; R. Sabia; I. D'Acquarica; G. Fabrizi; B. Botta. A. Calcaterra. *Total Synthesis of (±)-Kuwanol E*, JOURNAL OF NATURAL PRODUCTS (2016), vol. 79(10): 2495-2503; IF. 3.281, Cit. 7
- 9) V. Iovine, M. Mori, A. Calcaterra, S. Berardozi, B. Botta. *One hundred faces of cycloamine*, CURRENT PHARMACEUTICAL DESIGN (2016), vol. 22(12), 1658-1681; IF. 2.611, Cit. 15
- 10) A. Bonamore, L. Calisti, A. Calcaterra, O. H. Ismail, M. Gargano, I. D'Acquarica, B. Botta, A. Boffi, A. Macone. *A Novel Enzymatic Strategy for the Synthesis of Substituted Tetrahydroisoquinolines*, CHEMISTRYSELECT (2016), vol. 1(8), 1525-1528; IF. (year 2017) 1.520, Cit. 10
- 11) F. Esposito, C. Tintori, R. Martini, F. Christ, Z. Debyser, R. Ferrarese, G. Cabiddu, A. Corona, E. R. Ceresola, A. Calcaterra, V. Iovine, B. Botta, M. Clementi, F. Canducci, M. Botta, E. Tramontano, *Kuwanon-L as a New Allosteric HIV-1 Integrase Inhibitor: Molecular Modeling and Biological Evaluation*, CHEMBIOCHEM (2015), vol. 16(17): 2507-2512; IF. 2.850, Cit. 18
- 12) G. Uccello-Barretta, F. Balzano, F. Aiello, L. Vanni, M. Mori, S. Menta, A. Calcaterra, B. Botta. *Hydrolytic inhibition of α -chymotrypsin by 2,8,14,20-tetrakis(D-leucyl-D-valinamido)resorc[4]arene-carboxylic acid: a spectroscopic NMR and computational combined approach*, ORGANIC & BIOMOLECULAR CHEMISTRY (2015), vol. 13(3): 916-924; IF. 3.559, Cit. 1
- 13) I. D'Acquarica, A. Calcaterra, F. Sacco, F. Balzano, F. Aiello, A. Tafi, N. Pesci, G. Uccello-Barretta, B. Botta, *Stereochemical Preference of 2'-Deoxycytidine for Chiral Bis(diamido)-bridged Basket Resorcin[4]arenes*, CHIRALITY (2013), vol. 25(12), 840-851; IF. 1.724, Cit. 7
- 14) F. Rondino, A. Ciavardini, M. Satta, A. Paladini, C. Frascchetti, A. Filippi, B. Botta, A. Calcaterra, M. Speranza, A. Giardini, S. Piccirillo. *Ultraviolet and infrared spectroscopy of neutral and ionic non-covalent diastereomeric complexes in the gas phase*, RENDICONTI LINCEI. SCIENZE FISICHE E NATURALI (2013), vol. 24(3), 259-267; IF. 0.757, Cit. 4
- 15) A. Filippi, C. Frascchetti, S. Piccirillo, F. Rondino, B. Botta, I. D'Acquarica, A. Calcaterra, M. Speranza, *Chirality effects on the IRMPD spectra of basket resorcinarene/nucleoside complexes*, CHEMISTRY-A EUROPEAN JOURNAL (2012), vol. 18(27), 8320-8328; IF. 6.075, Cit. 22

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