

# CAMILLA MONTESANO

## Curriculum Vitae

AI FINI DELLA PUBBLICAZIONE

### Part I – General Information

Full Name	Camilla Montesano
Spoken Languages	Italian, French, English, Spanish

### Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	2008	Sapienza University of Rome	Bachelor's degree in Chemistry 106/110
Post-graduate studies	2010	Sapienza University of Rome	Master's degree in Analytical Chemistry – 110/110
PhD	2013	Sapienza University of Rome	PhD in "Analytical Chemistry and real systems"

### Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
May 2022	May 2024	Department of Chemistry, Sapienza University of Rome	Fixed Term Assistant Professor (RtD-A) on the SSD CHIM/01
May 2019	May 2022	Department of Chemistry, Sapienza University of Rome	Fixed Term Assistant Professor (RtD-A) on the SSD CHIM/01
November 2016	January 2017	Department of Chemistry, University of Padua	Post-Doctoral Research fellow
May 2014	September 2016	Department of Chemistry, Sapienza University of Rome	Post-Doctoral Research fellow
May 2010	September 2010	National Research Council, Institute of nanostructured materials	Research Fellow

IIIB – Other Appointments

Start	End	Institution	Position
January 2016	January 2018	IRBM Science Park, Via Pontina Km 30,600 – 00400 Pomezia (RM)	Junior Researcher

### Part IV – Teaching experience

IVA – Frontal teaching

Year	Institution	Lecture/Course
2022/2023	Sapienza University of Rome	Chromatographic Techniques and Mass Spectrometry within the Master course “Scientific investigation techniques in the food sector”
2022/2023	Sapienza University of Rome	Analytical Chemistry within the Bachelor course in Agro-Industrial Biotechnology (6 ECTS)
2021/2022	Sapienza University of Rome	Analytical Chemistry within the Bachelor course in Agro-Industrial Biotechnology (9 ECTS)
2021/2022	Sapienza University of Rome	Instrumental Analytical Chemistry and laboratory within the master’s degree in Analytical Chemistry (1 ECTS)
2020/2021	Sapienza University of Rome	Analytical Chemistry within the Bachelor course in Agro-Industrial Biotechnology (9 ECTS)
2020/2021	Sapienza University of Rome	Instrumental Analytical Chemistry and laboratory within the master’s degree in Analytical Chemistry (1 ECTS)
2019/2020	Sapienza University of Rome	Analytical Chemistry within the Bachelor course in Agro-Industrial Biotechnology (9 ECTS)
2015	Scientific Police Service	Invited course addressed to the Scientific Police personnel “Potential of High resolution mass spectrometry for forensic investigations”

IVB – Thesis supervision

Year	Institution	Course ( <b>number of students</b> )
2022/2023	Avans University of Applied Science	Bachelor in Forensic Chemistry ( <b>1</b> within the Erasmus+ traineeship programme)
2021/2022	Sapienza University of Rome	Master’s degree in Analytical Chemistry ( <b>9</b> )
2021/2022	Sapienza University of Rome	Single cycle degree in Pharmaceutical Chemistry and Technology ( <b>1</b> )
2021/2022	Sapienza University of Rome	Bachelor’s degree in Agro-industrial Biotechnology ( <b>1</b> )
2021/2022	Sapienza University of Rome	Bachelor’s degree in Chemistry ( <b>2</b> )
2021/2022	University of Tor Vergata	Master’s degree in Chemistry ( <b>1</b> )
2021/2022	Avans University of Applied Science	Bachelor in Forensic Chemistry ( <b>1</b> within the Erasmus+ traineeship programme)
2020/2021	Sapienza University of Rome	Master’s degree in Analytical Chemistry ( <b>5</b> )
2020/2021	Sapienza University of Rome	Single cycle degree in Pharmaceutical Chemistry and Technology ( <b>1</b> )

2020/2021	Sapienza University of Rome	Master's degree in Pharmaceutical Biotechnology (1)
2020/2021	Sapienza University of Rome	Bachelor's degree in Chemistry (6)
2020/2021	University of Tor Vergata	Master's degree in Medical Biotechnology (1)
2019/2020	Sapienza University of Rome	Bachelor's degree in Chemistry (3)

#### Part V - Society memberships, Awards and Honors

Year	Title
2021	Achievement of the national Scientific Qualification for the role of Associate Professor for SC 03/A1 - Analytical Chemistry (Call 2018-2020); valid from 31/05/2021 to 31/05/2030.
2020	Recognition for the best oral communications presented at the International Conference "Massa VIP 2020"
2011 to date	Member of the Italian Chemical Society (SCI)

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

Year	Title	Program	Grant value
2022	Throw light on the emerging New Synthetic Opioids belonging to the nitazene class: advanced analytical techniques and data mining for studying their pharmacokinetic, metabolism and distribution (PI)	University funding for scientific research, Sapienza University of Rome	
2021	New tools for identifying New Psychoactive Substances and their biomarkers of assumption in biological matrices and seizures (I)	University funding for scientific research, Sapienza University of Rome	
2020	FingerSERSing. Fingerprint of a spot: Thin Layer Chromatography reaches out Raman Spectroscopy (I)	University funding for scientific research, Sapienza University of Rome	
2019	Innovative miniaturized approaches for urine sample preparation in workplace drug testing by LC-MS/MS (PI)	University funding for scientific research, Sapienza University of Rome	
2013	New challenges and tools in toxicological investigation of the cause of death related to new psychoactive illegal substances: focus on LC-MS/MS analysis of MDMA and cathinone related compounds (I)	University funding for scientific research, Sapienza University of Rome	
2012	Biomimetic receptors as SPE stationary phase for the determination of natural and	Sapienza Starting Grant	

synthetic cannabinoids in biological samples by LC-MS/MS (PI)
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## Part VII Organisation of Scientific Meetings

Year	Title
2022	Member of the organizing committee of the international First Symposium for Young Chemists: Innovation and Sustainability (SYNC 2022), Rome, June 20-23rd
2022	Member of the organizing and scientific committees of the international workshop “Le indagini forensic ed il contributo della spettrometria di massa”, Rome, March 25th
2021	Member of the organizing and scientific committees of the international workshop “Science and Sensitivity”, June 21st and 22nd 2021 hosted in online mode

## Part VIII – Research Activities

Keywords	Brief Description
Illicit drugs	<b>Forensic toxicology research</b> Development of (U)HPLC-MS/MS analytical methods for the determination of illicit drugs in biological matrices and seizures with special attention to green sample preparation techniques; development of new tools based on HRMS analysis for new psychoactive detection including untargeted metabolomics for identification of endogenous biomarkers related to drug consumption; development of biodegradable swabs for oral fluid collection.
Miniaturized extraction techniques	
New psychoactive Substances	
High Resolution Mass Spectrometry	
3D-printed swabs	

Keywords	Brief Description
Endocannabinoids	<b>Target and Untargeted Metabolomics</b> Development of sensitive (U)HPLC-MS/MS analytical methods for the target determination of endocannabinoids and markers of oxidative stress in conventional and non-conventional biological matrix; untargeted metabolomics applications in forensic toxicology; integration of NMR and HRMS datasets for untargeted metabolomics applications.
Isoprostanes	
New psychoactive Substances	
High Resolution Mass Spectrometry	
NMR	

Keywords	Brief Description
Nutraceuticals	<b>Pharmacokinetic analysis</b> Applications to new drugs and nutraceuticals, in collaboration with TIGEM (Telethon Foundation), University of Naples Federico II, Regina Elena National Cancer Institute
Small-molecule drugs	

## Part IX – Third Mission activities

Year	Brief Description
December 2022	Lecturer during the Christmas Seminar organized at the Chemistry Department to illustrate the implications of chemistry in everyday life

2019/2020	Chemistry tutor at the High School ITT Biagio Pascal within the Lab2Go project (PCTO)
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## Part X – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	54	Scopus	2010	2023
Oral presentations at national and international conferences	7	--	2012	2022

Total Impact factor	200.8
Total Citations	884
Average Citations per Product	16.4
Hirsch (H) index	20
Normalized H index	1.54

## Part X– Selected Publications

(\*corresponding author)

1. F. Fanti, F. Vincenti, G. Imparato, **C. Montesano\***, L. Scipioni, F. Ciaramellano, D. Tortolani, S. Oddi, M. Maccarrone, D. Compagnone, M. Sergi, *Determination of endocannabinoids and their conjugated congeners in the brain by means of  $\mu$ SPE combined with UHPLC-MS/MS*, *Talanta* (2023) 257,124392 - *IF(2022) 6.556; citations:1*
2. F. Pagano, F. Vincenti, **C. Montesano\***, F. Fanti, A. Gregori, R. Curini, M. Sergi, *Oral fluid as a new investigative matrix for the determination of organic gunshot residue exposure*, *J. Chromatography, B* (2022) 1210, 123477- *IF(2022) 3.318; citations:0*
3. **C. Montesano\***, F. Vincenti, F. Fanti, M. Marti, S. Bilel, A.R. Togna, A. Gregori, F. Di Rosa, M. Sergi, *Untargeted metabolic profiling of 4-fluoro-furanylfentanyl and isobutyrylfentanyl in mouse hepatocytes and urine by means of LC-HRMS* (2021) *Metabolites* 11(2), 1-21- *IF(2021) 5.581; citations:5*
4. F. Vincenti, **C. Montesano\***, F. Di Ottavio, D. Compagnone, M. Sergi, P.C. Dorrestein, *Molecular networking: a useful tool for new psychoactive substances identification in seizures by LC-HRMS* *Frontiers in Chemistry* (2020) 8, 572952- *IF(2020) 5.221; citations:22*
5. F. Vincenti, **C. Montesano\***, L. Cellucci, A. Gregori, F. Fanti, D. Compagnone, R. Curini, M. Sergi, *Combination of pressurized liquid extraction with dispersive liquid liquid micro extraction for the determination of sixty drugs of abuse in hair* *Journal of Chromatography A* (2019) 1605: 360348- *IF(2019) 4.049; citations:33*
6. R. Rocchi, M.C. Simeoni, **C. Montesano\***, G. Vannutelli, R. Curini, M. Sergi\*, D. Compagnone, *Analysis of new psychoactive substances in oral fluids by means of microextraction by packed sorbent followed by ultra-high-performance liquid chromatography–tandem mass spectrometry* *Drug testing and analysis* (2018) *IF(2018) 2.799; citations:41*
7. **C. Montesano**, G. Vannutelli, V. Piccirilli, M. Sergi, D. Compagnone, R. Curini, *Application of a rapid  $\mu$ -SPE clean-up for multiclass quantitative analysis of sixteen new*

- psychoactive substances in whole blood by LC–MS/MS* Talanta (2017) 167:260-267- **IF(2017) 4.244; citations:31**
8. **C. Montesano**, G. Vannutelli, M. Massa, M.C. Simeoni, A. Gregori, L. Ripani, D. Compagnone, R. Curini, M. Sergi, *Multi-class analysis of new psychoactive substances and metabolites in hair by pressurized liquid extraction coupled to HPLC-HRMS*, Drug Testing and Analysis (2016) 9:798-807- **IF 3.469; citations:34**
  9. **C. Montesano**, G. Vannutelli, A. Gregori, L. Ripani, D. Compagnone, R. Curini, M. Sergi, *Broad screening and identification of novel psychoactive substances in plasma by high performance liquid chromatography-high resolution mass spectrometry and post-run library matching*, J Anal Toxicology (2016) 40:519-528 **IF 2.409; citations:23**
  10. **C. Montesano**, M.C. Simeoni, G. Vannutelli, A. Gregori, L. Ripani, M. Sergi, D. Compagnone, R. Curini, *Pressurized liquid extraction for the determination of cannabinoids and metabolites in hair: Detection of cut-off values by high performance liquid chromatography-high resolution tandem mass spectrometry*, J. Chromatography, A (2015) 1406: 192-200- **IF 3.926; citations:33**
  11. **C. Montesano**, M.C. Simeoni, R. Curini, M. Sergi, C. Lo Sterzo, D. Compagnone, *Determination of illicit drugs and metabolites in oral fluid by microextraction on packed sorbent coupled with LC-MS/MS*, Analytical and Bioanalytical Chemistry (2015) 407: 3647-3658- **IF 3.125; citations:57**
  12. **C. Montesano\***, S.S. Johansen, M.K.K. Nielsen, *Validation of a method for the targeted analysis of 96 drugs in hair by UPLC–MS/MS*, Journal of Pharmaceutical and biomedical analysis (2014) 88: 295-306- **IF 2.979; citations:70**

**Rome, 12 June 2023**