

CURRICULUM VITAE

Roccaldo Sardella obtained his Master's Degree (*Laurea*) in Chemistry in 2002 from the Faculty of Sciences at the University of Perugia. In 2007, at the Department of Pharmaceutical Sciences (*Dipartimento di Chimica e Tecnologia del Farmaco*) of the same University, he earned his Ph.D. in Pharmaceutical Sciences (International profile - XIX cycle; Curriculum: Pharmaceutical Analysis; Doctoral School Coordinator: Prof. Roberto Pellicciari; Research Supervisor: Prof. Benedetto Natalini; Thesis Title: *New Chiral Selectors in the Analytical and Preparative-Scale Separation of CNS Active Compounds*).

From 2007 to 2010, Roccaldo Sardella worked as a Postdoctoral Research Fellow (*Assegnista di Ricerca*) at the same Department, within the research group led by Prof. Benedetto Natalini. In 2006 and 2007, he spent two research periods at the Department of Analytical Chemistry and Food Chemistry of the University of Vienna, under the scientific supervision of Prof. Wolfgang Lindner.

From 2011 to 2017, Roccaldo Sardella served as an Assistant Professor (*Ricercatore Universitario*, tenured in 2014), initially at the Department of Pharmaceutical Sciences (*Chimica e Tecnologia del Farmaco*) and subsequently at the Department of Pharmaceutical Sciences (*Scienze Farmaceutiche*) of the University of Perugia. From December 2017 to March 2025, he held the position of Associate Professor of Medicinal Chemistry (focusing on Pharmaceutical Analysis) at the Department of Pharmaceutical Sciences of the University of Perugia, where, since March 2025, he has been serving as Associate Professor of Analytical Chemistry.

Author of over 150 publications (Scopus source) in international peer-reviewed journals and 7 book chapters, Prof. Sardella has also been a speaker at numerous national and international conferences, and regularly serves as a peer reviewer for several international scientific journals.

From 2017 to 2022, Prof. Roccaldo Sardella was a member of the Scientific Committee of the Summer School in Pharmaceutical Analysis (SSPA), organized by the Medicinal Chemistry Division of the Italian Chemical Society, and, since 2015, of the International Conference on Recent Developments in Pharmaceutical Analysis (RDPA).

Since 2017, Prof. Sardella has been a Member of the Doctoral Board (*Collegio dei Docenti*) for the Ph.D. program in "Pharmaceutical Sciences" at the Department of Pharmaceutical Sciences of the University of Perugia. Since 2019, he has also been a Member of the Board for

the 2nd Level Master's Degree in "Process Development for the Production of Active Pharmaceutical Ingredients (PRO-API)" at the same Department.

Since 2020, Prof. Sardella has been a Member of the Center for Perinatal and Reproductive Medicine at the University of Perugia, serving as the Head of the Chemical and Toxicological Analysis Unit.

Since December 2025, Prof. Roccaldò Sardella has been a Member (serving as SECRETARY) of the Executive Board of the Pharmaceutical Analysis Thematic Group of the Italian Chemical Society, and since March 2026, he has been a Member of the International Relations Committee of the same Society.

In 2020, Prof. Sardella received the National Scientific Qualification (*Abilitazione Scientifica Nazionale*) as a Full Professor (*Prima Fascia*) in Medicinal Chemistry, and in 2023, he received the National Scientific Qualification as a Full Professor (*Prima Fascia*) in Analytical Chemistry.

Main Research Interests

- Development of chromatographic methods for the chiral and achiral analysis and identification of compounds of pharmaceutical, nutraceutical, cosmetic, and diagnostic interest.
- Development of liquid chromatography strategies for determining the physicochemical properties of compounds of pharmaceutical and nutraceutical interest.
- Study of enantiorecognition mechanisms across various domains of chiral chromatography.
- Study of biological and food matrices for the identification of potential biomarkers of pathological states (in both humans and animals).

Most Significant Professional Experience

- HPLC and UHPLC analysis of compounds belonging to various chemical classes (specifically ionizable compounds) across all elution modes (NP, RP, NARP, PO/PI, HILIC, and IE) using the most common detection systems (DAD, UV-Vis, ELSD, FD, MS).
- Enantioselective HPLC analysis across various domains of chiral chromatography.
- 2D-HPLC analysis using the "heart-cut" approach.
- Validation of analytical and bioanalytical methods (both HPLC and GC) in accordance with ICH guidelines.

- Spectroscopic (emission and/or absorption methods), conductometric, and GC/MS analysis of compounds of pharmaceutical, pharmaco-toxicological, and nutraceutical relevance.
- Extraction of compounds of pharmaceutical, nutraceutical, and biochemical relevance from various matrices (pharmaceutical formulations, biological matrices, dietary supplements), and subsequent purification using SPE, ultrafiltration, and liquid-liquid extraction protocols.

Teaching Activities

- Since AY 2025/2026, Professor of “Analytical Chemistry”, Pharmacy.
- Since AY 2025/2026, Professor of “Analytical Chemistry”, Pharmaceutical Chemistry and Technology.
- AYs 2019/2020-2024/2025, Professor of “Analysis of Medicines I – Module II” (now “Analysis of Medicines and Health Products I – Module II”), Pharmacy.
- AYs 2015/2016-2018/2019, Professor of “Analysis of Medicines II”, Pharmacy.
- AYs 2011/2012-2014/2015, Professor of “Chemical-Pharmaceutical Analysis I”, Pharmaceutical Chemistry and Technology.
- In AY 2010/2011, Professor of “Chemical-Toxicological Analysis”, Herbal Techniques.
- In AY 2008/2009, Professor of “Analytical Methodologies and Clinical Diagnostics”, Specialization School in Hospital.

Editorial Activities

- Since 2015: Member of the editorial board of the international journal International Journal of Clinical Research & Trials (Graphy Publications).
- In 2015: “Guest Editor” for the international journal Current Medicinal Chemistry (Bentham Science Publishers) for the thematic issue entitled: “Chromatographic enantioseparations in pharmaceutical analysis: from the analytical- to the preparative-scale”; Code No.: BSP-CMC-2015-HT44.
- In 2017: “Guest Editor” for the international journal Journal of Separation Science (WILEY-VCH Verlag GmbH & Co. KGaA, Boschstraße 12, 69469 Weinheim, Germany) for the special issue entitled: “Chiral Separations”.

- Since 2018: Member of the “International Advisory Board” of the journal Separation Science Plus (WILEY-VCH). The journal is indexed in WOS.
- Since 2021: Review Editor (Pharmaceutical Analysis) for the journal Frontiers in Analytical Science (Frontiers Media SA). The journal is indexed in Google Scholar, CrossRef, CLOCKSS, and OpenAIRE.
- Since 2023: Review Editor (Forensic Chemistry) for the journal Frontiers in Analytical Science (Frontiers Media SA). The journal is indexed in Google Scholar, CrossRef, CLOCKSS, and OpenAIRE.
- Since 2023: “Academic Editor” for the journal Advances in Pharmacological and Pharmaceutical Sciences (WILEY-VCH). The journal is indexed in WOS.
- Since 2024: Member of the “International Editorial Board” of the journal Journal of Separation Science (WILEY-VCH). The journal is indexed in WOS.
- Since 2024: “Editorial Board Member” of the journal Journal of Pharmaceutical and Biomedical Analysis Open (Elsevier). The journal is indexed in WOS.
- Since 2025: “Advisory Board Member” of the journal European Journal of Life Sciences (published by Anadolu University Health Sciences Institute). The journal is indexed in Academic Resource Index, ICI World of Journals, CiteFactor, Eurasian Scientific Journal Index (ESJI), and Google Academic Database.

Administrative Role and Position Responsibility

- During the three-year period December 2019 – November 2022: Member of the “Coordination and Steering Committee for the activities of the Applied Research and Innovative Start-up Incubator of the University of Perugia”.
- Since October 2022: Member of the Scientific and Technical Committee of the multi-instrumental laboratory DELPHI STAR-Labs of the Department of Pharmaceutical Sciences, University of Perugia, serving as the person responsible for the High-Resolution Mass Spectrometry instrumentation.
- From November 2022 to November 2025: Quality Assurance Officer of the Department of Pharmaceutical Sciences of the University of Perugia.
- Since September 2023: Quality Manager of the Specialization School in Hospital Pharmacy (S.S.F.O.) of the aforementioned Department.

- Since 5 September 2025: Delegated by the Director of the Department of Pharmaceutical Sciences of the University of Perugia to coordinate the Bachelor's Degree Course in "Quality Control of Health Products" (Class L-29).
- Since December 2025: Member (serving as SECRETARY) of the Executive Board of the Pharmaceutical Analysis Thematic Group of the Italian Chemical Society.

Scientific Organisations/Coordination of Academic Activities

- Since September 2025: Delegated by the Director of the Department of Pharmaceutical Sciences of the University of Perugia to coordinate the Bachelor's Degree Course in "Quality Control of Health Products" (Class L-29).
- Since December 2025, Member of the Board of Directors of the Ge.Bi.Sa. Foundation, actively engaged in clinical, biomolecular, and epigenetic research.
- Since December 2025: Member (serving as SECRETARY) of the Executive Board of the Pharmaceutical Analysis Thematic Group of the Italian Chemical Society.
- Since July 2020, Coordinator of the "Chemical and Toxicological Analysis" Operational Unit of the Center for Perinatal and Reproductive Medicine, University of Perugia.
- Since 2015, Member of the Scientific Committee of the International Congress "Recent Developments in Pharmaceutical Analysis" Editions: Perugia, 28/06-1/7-2015; Rimini, 20-23 September 2017; Pescara, 8-11 September 2019; Modena, 6-8/9/2021; Novara, 3-6/9/2023; Pavia, 2-5/9/2025.
- Member of the Organizing Committee of the "XXIV National Meeting in Medicinal Chemistry – 10th Young Medicinal Chemists' Symposium (New Perspectives in Medicinal Chemistry, NPCF 10)," Perugia, 11-14/9/2016.
- During the three-year periods 2017-2019 and 2020-2022, Member of the Scientific Committee of the "Summer School in Pharmaceutical Analysis (SSPA)".