

Prof. Saladini Raffaele-Curriculum Vitae

Nato a ROMA il 31-08-1964, nazionalità italiana.

POSIZIONE ATTUALE

Dal 2016 Full professor in Organic Chemistry SSD CHIM/O6, 03/C1-Chemical Sciences, University of Tuscia (Viterbo, Italy)

POSIZIONI PRECEDENTI

dal 2000 al 2016:

- Associate professor, SSD CHIM/O6,03/C1-Chemical Sciences, University of Tuscia (Viterbo, Italy).

INCARICHI ACCADEMICI PRINCIPALI

2000 Associate professor, SSD CHIM/O6, 03/C1-Chemical Sciences, University of Tuscia.
2001-2005 Association Agreement (class B1), Italian Institute for the Physics of Matter (INFN).
2001-2006 Vice-Director Agrobiology and Agro-chemistry Department, University of Tuscia.
2001-today Scientific Committee of the Italian Cultural Association for Lignin Chemistry (ITALIC).
2004-2013 Academic Board of the PhD-course in Plant Biotechnology.
2005-today Association Agreement, Italian Institute for Astrophysics (INAF).
2006-2019 Founder and Steering Committee of the Italian Society of Astrobiology (SIA).
2007-2012 Director of the Agrobiology and Agro-chemistry Department of the University of Tuscia.
2008-2013 Responsible for the European Course in Astrobiology (ABC-Network), European Space Agency.
2008-2018 Member Board of Italian Interuniversity Consortium of Chemistry for the Environment (INCA).
2013-today Advisory Committee for the Condensed Matter Physics at the Joint Institute of Nuclear Research, Dubna (Mosca).
2013-today Academic Board of the PhD-course in Ecology and sustainable management of environmental resources.
2014-2016 Panel of Experts of the European Scientific Foundation (ESF) Astro-Map, Prebiotic Chemistry.
2014-2019 President of the Quality Evaluation Nucleus (NdV), University of Tuscia.
2015-today Member Board of the Astrobiology Panel, Italian Space Agency (ASI).
2016-today Full professor in Organic Chemistry SSD CHIM/O6,03/C1-Chemical Sciences, University of Tuscia.
2017-today CEO, University of Tuscia (D.R. 282/17, 31.03.2017).
2018-today RUS team (Rete Universitaria per lo Sviluppo Sostenibile), University of Tuscia (Viterbo, Italy).
2018-today Invited Member of "National Academy of Olive Oil and Olive".
2018-2023 President of the Italian Society of Astrobiology (SIA).
2019-2023 President of the Italian Astrobiology Institute (IAI).

FORMAZIONE

1989 Graduation 110/110 cum laude in Industrial Chemistry, Sapienza (Rome, Italy).
1989 Ministerial authorization for the profession of Chemist.
1992 Qualification for teaching Chemistry in secondary schools.
1992 Assistant Professor in Organic Chemistry, University of Tuscia (Viterbo, Italy).
1993 PhD in Chemical Science
1994 Post-doctoral position, Department of Chemistry, University of Montréal (Quebec, Canada).
1995 Post-doctoral position, Department of Chemistry, University of Montréal (Quebec, Canada).

PRINCIPALI ESPERIENZE LAVORATIVE

2010 Expert Board, Italian Ministry of University Research (MIUR).
2012-today Expert Board, Health and Medical Research Fund (HMRF) of the Food and Health Bureau, Hong Kong SAR Government.

2014-today Expert Board, Montenegro Ministry of Science, Higher Education and research for innovation and competitiveness HERIC.

2014-today Expert Board, Leverhulme Trust Research Project Grants, London(England).

2014-today Expert Board, Royal Marsden NHS Foundation Trust, Brompton and Belmont, London (England).

2016-today Section Editor, Current Medicinal Chemistry, Bentham Science, Organic synthesis and Biological Chemistry.

2016 Award "Premio Galilei", From the Big Bang to the Mother Cell, 2016, Ed. Mulino (Bologna, Italy).

2017-today Editor, Advances in Pharmacology and Pharmaceutical Science, Hindawi.

2018-today Editor, Molecules (Basel) MPDI.

2020-today Expert Board, Paris Region Fellowship Programme, Marie Skłodowska Curie Action (MSCA), EUH2020.

2020-today Review Editor, Journal of Frontiers in Astronomy and Space Science.

2020 Special Issue Editor "From Molecules to Origin of Life: The Astrobiology Network" Molecules (ISSN 1420-3049).

2020-today Editorial Board Member, Bioorganic Chemistry (ISSN 1420-3049).

2020-today MUR ASN Panel, SSD CHIM/O6, Area 03/C1-Chemical Sciences.

2021-today Section Editor, Encyclopedia of Astrobiology, Springer-Verlag GmbH.

PROGETTI DI RICERCA

Responsabile e componente di numerosi progetti di ricerca, tra i quali si evidenziano di seguito:

2000. PI of the Research Unit for the Convention with the Company Recordati Pharmaceuticals SpA (Via M. Civitali 1, 20148 Milan, Italy), project entitled "Study on the synthesis of compounds with antiviral activity." Duration of the project: N. 12 months.

2002. Agreement with Recordati Pharmaceuticals SpA (Via M. Civitali 1, 20148 Milan), project entitled "Processes of original synthetic active pharmaceutical ingredients-famciclovir." Duration of the project: N. 12 months.

2002. Agreement with Recordati Pharmaceuticals spa (Via M. Civitali 1, 20148 Milan), project entitled "Processes of original synthetic active pharmaceutical ingredients". Duration of the project: No 12 months.

2002-2007. PI of the Research Unit of the European project EU-COST Action D27 titled "Prebiotic Chemistry and Early Evolution: Etiology, Replication, Activity and Persistence of RNA", adopted on 07.06.2001, start date 27/02/2002, termination date 26/02/2007. Action D27 Aimed at development of the chemistry connected with the origin of life and early evolution of life on Earth, with special emphasis on self-replicating systems, prebiotic synthesis of nucleic acids and polypeptides, as well as simple protocells as early models of biological cells. To accomplish this objective, D27 has coordinated the scientific activities of the very many European research laboratories working in the field of prebiotic chemistry and early evolution, has Contributed to focus These activities into a few important research directions for greater efficiency, and has itself established businesses as the first European research network on prebiotic chemistry, origin and early evolution of life capable of interacting at an international level and in a competitive way.

2002-2003. PI of the Research Unit of the project Italian Space Agency (ASI), Research Contract No. I/R/315/02 of 20/September/2002 entitled "Role of cosmic dust analogues as catalysts of the syntheses and degradations of biogenically relevant prebiotic molecules". Duration of the project: N. 12 months.

2003-2004. PI of the Research Unit of the project PRIN-COFIN entitled "Use of organometallic derivatives of rhenium for the synthesis of new biologically active derivatives 1'-homonucleosides"

2004-2007. PI of Research Unit of the European project EU-COST Action E41 entitled "Analytical tools with applications for wood and pulping chemistry", adopted on 04.12.2002, start date 07/06/2004, end date 06/06 / 2008. The main objective of the Action is to develop and evaluate analytical methods related to wood, pulping and bleaching chemistry. The Action will evaluate the potential and restrictions of the presently available chemical analytical methods for wood and pulp fiber and fiber components. Duration of the project: N. 36 months.

2004. Agreement with Biofer spa (Viale Vittorio Veneto 2-41100, Modena, Italy), project entitled "Design and development of new synthesis routes of Gabesato Mesylate and other biologically active substances." Subject: Total synthesis of biologically active substances. Duration of the project: N. 12 months.

2005. Agreement with Biofer spa (Viale Vittorio Veneto 2-41100, Modena), project entitled "Design and development of new synthesis routes of Anagrelide and other biologically active substances." Duration of the project: N. 12 months.

2005. Agreement with Biofer spa (Viale Vittorio Veneto 2-41100, Modena), project entitled "Design and development of new ways of synthesis of (-)-galantamine and other biologically active substances." Duration of the project: N. 12 months.

2005. Consulting for the European Science Foundation (ESF), preparation of the annual planning document "Scientific perspective for future European Space Agency program in life and physical sciences in space"

2006. Agreement with Biofer spa (Viale Vittorio Veneto 2-41100, Modena), project entitled "Design and development of new synthesis routes dell'Anagrelide, dell'Eplerenone and other biologically active substances." Duration of the project: N. 12 months.

2006. Agreement with Lachifarma Ltd. (SS 16, Industrial Area, Zollino 73010 Lecce, Italy) in the context of the Support Investment Industrial Research, Pre-Competitive Development and Technology Transfer" entitled "Characterization of

water process of pressing of the olives in order to identify useful compounds to chemical-pharmaceutical and agro-food (acronym CAPR.OL.). Topic: characterization of natural substances, catalytic and biocatalytic transformations and development of nutraceutical formulations. Duration of the project: N. 12 months.

2006-2008. PI of the Project PNR-FIRB "Identification, characterization and evaluation of innovative pharmaceutical strategies, based on the interference with cellular metabolic pathways. A study of their use for the treatment and prevention of diseases of viral etiology. "

2006-2009. Research Unit of the Italian Space Agency (ASI) project, Research Contract No. I/014/06/0 of 25/May/2006 entitled "Biotechnological Applications by Molecule Man." Topic: Total synthesis of the natural molecules from formamide. Duration of the project: N. 36 months.

2006. Advisory Agreement with Lachifarma Ltd. (SS 16, Industrial Area, Zollino 73010 Lecce) as part of the NRP (National Research Plan), Law 297/1999, Ministerial Decree 29006 of 03.10.2000, entitled "Identification, characterization and preliminary evaluation of the effectiveness of innovative pharmaceutical strategies based on interference with molecular pathways. Study of their use for the prevention and therapy of diseases of viral etiology". Topic: Total synthesis and semisynthesis of derivatives of hydroxytyrosol and artemisinin, with particular attention to the use of techniques of bio-catalysis. Duration of the project: N. 12 months.

2007. Agreement with the Solvay spa (Rue de Ransbeek, 310 B-1120 Bruxelles, Belgium), project entitled "Production of chemicals from cellulose wastes by activation of hydrogen peroxide with heterogeneous catalysts methylrhenium trioxide: production of maleic anhydride from low molecular weight cellulose derivatives, furfural and hydroxymethylfurfural". Topic: Production of high value-added products from cellulose. Duration of the project: N. 12 months.

2007-2009. Research Unit of the project Chemical Bonding Center, U.S.A. National Science Foundation (National Science Foundation), titled "The Origins and Early Metabolism Chemical Inventory Project".

2007-2010. Research Unit of the project of the Italian Space Agency (ASI)-INAF, Research Contract No. I/015/07/0 of 01/June/2007 entitled "Studies of solar system exploration." Topic: Identification of new ways of prebiotic synthesis models in terrestrial and space. Duration of the project: N. 36 months.

2008. Agreement with Reckitt Benckiser Corporate Services Limited RB (103-105 Bath Road, Slough, Berkshire, SL1 3UH), project entitled "Development of new solid metal oxidation catalysts for traditional bleach system based on hydrogen peroxide to be used in heterogeneous phase for application in detergency. " Subject: Design and preparation of organometallic catalysts for the activation of hydrogen peroxide in the context of detergency. Duration of the project: N. 9 months.

2008. Research Unit of the project ASI-FEBO (Facility for Exobiology and Chemistry Observations) to develop the International Space Station (ISS).

2008-2012. Research Unit and Member of the Management group of the European project EU-COST Action CM0703 entitled "Systems Chemistry", approved 16/11/2007, start date 03/04/2008, end date 02/04/2012 . The main objective of the Action is to investigate autocatalytic reaction systems Within supramolecular, prebiotic organic and other fields of chemistry and to develop methods for Their integration into dynamic supersystems. Duration of the project: N. 48 months.

2009-2013. Research Unit WP3 (http://web.abo.fi/fak/tkf/spk/costfp0901/wg2_participants.html), European project EU-COST Action FP0901 entitled "Analytical Techniques for Biorefineries", approved on 26 / 05/2009, start date 15/10/2009, end date 14/10/2013. Topic: Trees, annual and perennial plants, recycled fibers, and lignocellulosic side streams from forest and agroindustry are renewable resources for the development of natural materials, biochemicals, and bioenergy. The chemical complexity of plant materials, the feed material of Biorefineries, renders the analysis of the feed constituents, processes, and valorized products challenging. The main objective of the Action is to develop new and evaluate existing analytical methods related to forest-based and agro-industrial bio-refineries. Thus, the Action covers the analytical methods for the Biorefinery feed material and processed for biochemicals, Biomaterials, and process residues. Other areas will be emphasized development of analytical on-line applications, hyphenated techniques, and applying statistical multicomponent analyzes to sort out the relevant data from the main data stream. Duration of the project: N. 48 months.

2011. Agreement with Terme dei Papi Thermal spa (Bath Road 12, 01100 Viterbo), project entitled "Qualitative and quantitative analysis of the organic component of the sludge produced in the plant in Viterbo, including analysis of their charitable activities for ' body. " Topic: Characterization of natural substances and their transformation by catalytic and biocatalytic. Duration of the project: N. 12 months.

2012. Agreement with Terme dei Papi Thermal spa (Bath Road 12, 01100 Viterbo), project entitled "Structural characterization of the phospholipid component present in the sludge Bagnaccio (Viterbo) by applying techniques of nuclear magnetic resonance of phosphorus and evaluation of potential antioxidant effects mixtures of extracts ". Topic: Characterization of natural substances and their transformation by catalytic and biocatalytic. Duration of the project: N. 12 months.

2013-2017. Advisory Agreement with ABOCA spa (Arezzo, Italy) "analysis of vegetable extracts with biological activity".

2014. MC- member in the UE-COST Action TD 1308 entitled "Origins and evolution of life on Earth and in the Universe (ORIGINS)". Chair of the Action: Muriel GARGAUD (FR), Vice Chair of the Action: Prof Wolf GEPPERT (SE). This Action addresses three basic questions that fascinate and intrigue scientists, and the general public alike, questions that are pivotal to our understanding and appreciation of our place in the universe. Where, when and how did life emerge and

evolve on Earth? What are the conditions under which life can exist? Does life exist elsewhere in the Universe and, if it does, how can it be detected and identified?

2014-2017. Research Unit for the project ASI N. 2014-026-R.0-CUP F 92I14000030005 entitled "Exobiology and extreme environments: from prebiotic chemistry to extremophiles".

2016-2017. Agreement with IRBM-CNCCS spa (Pomezia, Roma), project entitled "Identification of bioactive agents from natural sources".

2016-2017. Agreement with Valmet spa (Calenzano, Firenze), project entitled "Plating: supramolecular chemistry for the stabilization of metal surfaces".

2016-2019. Research Unit for the project PRIN Bando 2015 Prot. 2015F59J3R- PART A. STARS in the CAOS (Simulation Tools for Astrochemical Reactivity and Spectroscopy in the Cyberinfrastructure for Astrochemical Organic Species).

2018-2023. PI of Research Unit for the project UNICO Life 2020 Regione Lazio, in collaboration with IDI Farmaceutici spa (Pomezia, Roma), entitled "Creation of a new cosmeceutical product for sun protection, based on the use of a UNIQUE antioxidant and eco-sustainable UVA/UVB filter".

2019-2022. Research Unit for the project EU EASME/EMFF/Blue Economy-2018/n.863697 entitled "FISH chitinolytic biowastes FOR FISH active and sustainable packaging material" (FISH4FISH) EUROPEAN COMMISSION Executive Agency for Small and Medium-sized Enterprises (EASME).

2019-2023. Italian Space Agency (ASI) BANDO ASI DC-VUM-2017-034 CONTRATTO DI FINANZIAMENTO ASI N. 2019-3-U.0, CUP F86C16000000006 -Vita nello spazio - Origine, presenza, persistenza della vita nello spazio, dalle molecole agli estremofili.

2017-2023. PI of the PRIN project "ORIGINALE CHEMIAE in Antiviral Strategy - Origin and Modernization of Multi-Component Chemistry as a Source of Innovative Broad Spectrum Antiviral Strategy", cod. 2017BMK8JR_002.

2023-2024. Research Unit for the project 2020 BIOPLAST PSR Lazio 2014-2020 entitled "Biodegradable plastics for packaging fresh fruit and vegetables.

2023-2025. Research Unit for the project ASI-INAF N.2023-3-HH.0 CUP F83C23000030005, project entitled "Scientific activity for the Mars exploration". Topic: Synthesis of prebiotic molecules. Chemistry and mineral's effect.

2023-2025. Research Unit for the project ASI DC-DSR-UVS-2022-231 "Activities related to support for the development of scientific projects/experiments in the field of Astrobiology", project entitled-Modeling Chemical Complexity: At the origin of this and other lives for an updated view of space missions.

2023-2025. Research Unit for the project MUR ARS01_00869 PERCIVAL- Extraction processes of bio-products from agro-industrial waste and cascade valorization. ATTIVITÀ DIDATTICA

ATTIVITÀ DI RICERCA (SPINOFF)

RAFFAELE SALADINO IS A FOUNDING PARTNER AND CEO OF THE SPIN-OFF GENTOXCHEM (GENETIC TOXICOLOGY AND MEDICINAL CHEMISTRY SERVICES, S.R.L.; WWW.GENTOXCHEM.COM), VIA MONTE BIANCO 63 (VITERBO, ITALY). THE FOUNDATION OF GENTOXCHEM WAS APPROVED IN THE FIRST INSTANCE BY THE DEPARTMENT OF AGROBIOLOGY AND AGROCHEMISTRY ABAC (PROPONENT PROF. RAFFAELE SALADINO; MINUTES NO. 1 DATED 28.01.2011) AND BY THE DEPARTMENT OF ECONOMICS AND BUSINESS DEIM (PROPONENT DR. STEFANO POPONI; MINUTES NO. 2 DATED 21.01.2011). THIS IS FOLLOWED BY THE APPROVAL RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE UNIVERSITY OF TUSCIA DATED 22.02.2011 N.01/2011 AND 13.06.2012 N. 04/2012 AND OF THE ACADEMIC SENATE DATED 12.06.2012 N. 6/12, WITH REPERTOIRE CONSTITUTIVE ACT N.10492 COLLECTION N. 7258 DATED 20 SEPTEMBER 2012. THE UNIVERSITY SPIN-OFF GENTOXCHEM WAS REGISTERED IN THE VITERBO COMPANY ON 09.26.2012.

RELATORE IN NUMEROSE CONFERENZE E CONVEGNI

PUBBLICAZIONI SCIENTIFICHE

1. Dimethyl-6-oxiranylpyrimidin-2,4-dione with anti-ASFV activity" *Tetrahedron Asymmetry*, (1990)441-444.

2. M. Botta,* R. Saladino, A. Gambacorta, R. Nicoletti* "An unusual condensation of pyrimidinones: synthesis of bipyrimidinones and bipyrimidinylmethane" *Heterocycles*, (1991)32, 1537-1545.

3. M. Botta,* R. Saladino, V. Summa, R. Nicoletti* "A useful methodology for the regioselective deprotection of 1,3-dibenzyluracils" *Synthetic Communications*, (1991)21, 2181-2187.

4. M. Botta,* G. Fabrizi, D. Lamba, R. Saladino "Structure of (+)-(S)-1,3-dimethyl-6-oxiranylpyrimidin-2,4-dione showing anti-ASFV activity" *Acta Cryst.* (1992)C48, 81-83.

5. M. Botta,* C. Crucianelli, R. Saladino, R. Nicoletti* "Studies on the synthesis of C-2 substituted cephalosporin sulfones: the unexpected reactivity of the C-2 carbon" *Heterocycles*, (1992)34, 1375-1384.

6. M. Botta,* R. Saladino, R. Nicoletti* "One step synthesis of 5-bromo-2-chloro-6-hydroxy-4-[N-(2,3-dibromopropyl)-N-alkylamino]pyrimidines, useful intermediates for the preparation of pteridine derivatives and related analogues" *Heterocycles*, (1992)34, 729-737.

7. R. Saladino,* P. Lupattelli, E. Mincione "Oxidation of uracil derivatives and pyrimidine nucleosides by dimethyldioxirane: a new and mild synthesis of 5,6-oxiranyl-5,6-dihydro and 5,6-dihydroxy-5,6-dihydro-derivatives" *Tetrahedron Letters*(1993)34, 6313-6316.

- 8.R. Saladino, *C. Crestini, R. Nicoletti* "Ozonation of substituted 2-thiouracils and pyrimidine-2-thione" *Tetrahedron Letters*, (1993) 34,1631-1634.
- R. Saladino,*C. Crestini, R. Bernini, E. Mincione*"Dimethyldioxirane oxidations: a new and efficient desulfurization of thiopyrimidine and thiopurine nucleosides" *Tetrahedron Letters*, (1993)34, 7785-7788.
- 10.M. Botta,* R. Saladino, D. Lamba, R. Nicoletti* "Researches on antiviral agents. 3. Synthesis and transformations of racemic and chiral 6-oxyranil pyrimidinones" *Tetrahedron*, (1993)49, 6053-6070.
- 11.R. Saladino,* C. Crestini, E. Mincione, R. Nicoletti "Oxidation of substituted 2-thiouracils and pyrimidine-2-thione with ozone and 3,3-dimethyl-1,2-dioxirane" *Tetrahedron*, (1994) 50, 3259-3272.
- 12.R. Saladino, C. Crestini,* R. Nicoletti* "1H-indazoles as synthetic auxiliaries for the synthesis of secondary aromatic amines" *Heterocycles*(1994)38, 567-573.
- 13.M. Botta,* R. Saladino, G. Gentile, V. Summa, R. Nicoletti,* A. Verri, F. Foher, S. Spadari "Researches on antiviral agents. 4. Studies on the chemistry of 6-methyl-2-methoxy-4-O-acyloxy and 6-methyl-2,4-di-O-acyloxy pyrimidine derivatives as new acylation reagents and inhibitors of uracil DNA Glycosylases" *Tetrahedron*(1994)50, 3603-3618.
- 14.M. Botta,* R. Saladino, G.P. Noy, R. Nicoletti* "Synthesis of 4-(alkyl-N-[4-hydroxypropyl] aminopyrimidine and 4-(alkyl-N-[4-2',3'-dihydroxypropyl] aminopyrimidine derivatives. Structural analogs of 9-(2',3'-dihydroxypropyl)adenine [(S)-DHPA] as inhibitors of Human DNA methyltransferase" *Med. Chem. Res.* (1994)4, 323-334.
- 15.M. Botta,* R. Saladino, M. Anzini, F. Corelli* "Simplified analogues of acyclonucleosides. Synthesis of 6-[N-alkyl-N-(4-hydroxybutyl)amino]pyrimidine derivatives" *Nucleosides & Nucleotides*(1994)13, 1769-1777.
- 16.C. Crestini,* R. Saladino "A new and mild synthesis of 2-oxindoles by one-pot Wolff-Kishner like reduction of isatin derivatives" *Synthetic Communication*(1994)24, 2835-2841.
- 17.R. Saladino,* G. Frachey, C. Crestini, R. Bernini, E. Mincione "Oxidation of 2-mercaptobenzo heterazoles by dimethyldioxirane. A new method for the synthesis of C-2 substituted benzimidazole, benzoxazole and benzothiazole derivatives" *Heterocycles*(1994)38, 2621-2630.
- 18.R. Saladino,* C. Crestini, R. Bernini, G. Frachey, E. Mincione* "A new efficient synthesis of cytidine and adenosine derivatives by dimethyldioxirane oxidation of thiopyrimidine and thiopurine nucleosides" *J. Chem. Soc.Perkin Trans 1*(Organic & Biomolecular Chemistry) (1994) 3053-3054.
- 19.R. Saladino,* C. Crestini, F. Occhionero, R. Nicoletti* "Ozonation of thionucleosides. A new chemical transformation of 4-thiouracil and 6-thioguanine nucleosides to cytosine and adenosine counterparts" *Tetrahedron*, (1995)51, 3607-3616.
- 20.R. Saladino,* C. Crestini, R. Bernini, R. Ciafrino, E. Mincione "A new and efficient synthesis of 8-Hydroxypurine derivatives by dimethyldioxirane oxidation" *Tetrahedron Letters*(1995)36, 2665-2668.
- 21.R. Saladino,* C. Crestini, R. Bernini, E. Mincione, A. Bergamini, S. Marini, A. T. Palamara "Studies on the chemistry of pyrimidine derivatives with dimethyldioxirane: synthesis, cytotoxic effect and antiviral activity of new 5,6-oxiranyl-5,6-dihydro and 5-hydroxy-5,6-dihydro-6-substituted uracil derivatives and pyrimidine nucleosides" *Tetrahedron*(1995)51, 7561-7578.
- 22.R. Saladino,* R. Bernini, E. Mincione,* P. Tagliatesta, T. Boschi "Dimethyldioxirane-Mn(Cl₁₆)TDMPPCl porphyrin as efficient and chemoselective epoxidizing reagent of uracil derivatives." *Tetrahedron Lett.*(1996)37, 15, 2647-2650.
- 23.R. Saladino,* E. Mincione, C. Crestini, M. Mezzetti "Transformations of thiopyrimidine and thiopurine nucleosides" *Tetrahedron*(1996)52, 19, 6759-6780.
- 24.R. Saladino,* C. Crestini, F. Occhionero, R. Nicoletti* "Ozonation of thioamide containing heterocycles. A new general and selective procedure for the synthesis of C-2 substituted heterazole derivatives" *Synth. Comm.* (1996)26, 3241-3251.
- 25.R. Saladino,* E. Mincione, C. Crestini, R. Negri, G. Costanzo, E. Di Mauro "Mechanism of degradation of purine nucleosides by formamide. Implications for chemical DNA sequencing procedures" *J. Am. Chem. Soc.*(1996) 118, 24.
- 26.M. Botta,* R. Saladino, G. delle Monache, G. Gentile, R. Nicoletti*"Researches on antiviral agents.5. Lithiation of 6-methyluracil as a new and efficient entry to C(6)-substituted uracils" *Heterocycles*(1996) 943, 8, 1687-1697.
- 27.R. Negri, G. Costanzo, R. Saladino, E. Di Mauro "One-step one-lane chemical DNA sequencing by N-methylformamide in the presence of metal ions." *BioTechniques*(1996)21, 910-917.
- 28.M. Botta,* C. Crucianelli, R. Saladino, C. Mozzetti, R. Nicoletti* "Studies on the reactivity of cephalosporins. 4. Ozonolysis of 2-cephem derivatives as new entry to highly functionalized 2-oxoazetidine and 2-oxoazetidine-4-sulphenic acid derivatives" *Tetrahedron* (1996)52, 10205-10214.
- 29.S. Hanessian,* R. Saladino, J.C. Nunez "On the binding site of Quinolone antibacterials. An attempt to probe the Shen model" *Bioorganic & Medicinal Chemistry Letters* (1996)6, 2333-2338.
- toward the 5,6-double bond of uracil and uridine derivatives" *Tetrahedron*(1997)53, 20, 7045-7056.
- 31.M. Mezzetti, E. Mincione,* R. Saladino,* "Regioselective oxyfunctionalization of peptides by dimethyldioxirane: tertiary C-H bond oxygen atom insertion into leucine derivative and leucine containing dipeptides" *Chem. Communications*(1997) 1063-1064.
- 32.R. Saladino*, C. Crestini, E. Mincione, G. Costanzo, E. Di Mauro, R. Negri* "Mechanism of degradation of 2'-deoxycytidine by formamide. Implications for chemical DNA sequencing procedures" *Bioorganic & Medicinal Chemistry*, (1997)5, 2041-2048.
- 33.M. Botta,* F. Occhionero, R. Saladino, C. Crestini, R. Nicoletti,* "An unexpected and efficient direct nucleophilic C-4 hydroxy substitution on 2-methoxy- and 2-methylthio-4(3H)-pyrimidinones bearing a diethylamino moiety on the C-6 side chain" *Tetrahedron Lett.*, (1997)38(47), 8249-8252.
- 34.E. Di Mauro*, R. Saladino, P. Tagliatesta, V. de Sanctis, R. Negri,"Manganese water-soluble porphyrin senses DNA conformation" *J. Mol. Biol.*,(1998)282, 43-57.
- 35.R. Saladino,* M. C. Danti, E. Mincione, C. Crestini, A. T. Palamara, P. Savini, S. Marini, M. Botta,* "A potent and selective inhibition of parainfluenza 1 (sendai) virus by new 6-oxiranyl-, 6-methyloxiranylluracils, and 4(3H)-pyrimidinone derivatives" *Bioorganic & Medicinal Chemistry Letters*, (1998) 8, 1833-1838.

36. R. Saladino,* L. Stasi, G. Volpe, R. Nicoletti, M. Botta "Reactivity of dimethylphenyl silyllithium toward 5-, and 6 - substituted uracil derivatives" *Heterocycles*, (1998) 48, 2601-2610.
37. P. Tagliatesta*, T. Boschi, E. Mincione, R. Bernini, C. Crestini, D. Monti, R. Saladino* "Manganese tetraphenylporphyrins catalyzed stereoselective epoxidation of nucleosides" *J. Organic Chemistry*, (1999) 64, 5361-5365.
38. S. Hanessian,* R. Saladino, R. Margarita, M. Simard "Crystal engineering with supramolecular chirons based on enantiodifferentiating self-assembly between amines and alcohols (Supraminols)" *Chemistry: A European J.*, (1999) 5, 2169-2183.
39. R. Saladino,* P. Carlucci, C. Crestini, P. Tagliatesta,* D. Monti, T. Boschi "Manganese tetraphenylporphyrins catalyzed selective oxidation of purine derivatives" *Nucleosides & Nucleotides* (1999) 18, 1123-1124.
40. M. Botta*, R. Saladino,* L. Stasi, U. Ciambecchini, R. Nicoletti "Recent advances in the synthesis of 6-vinyl-N,N-dialkylcytosine derivatives" *Nucleosides & Nucleotides*, (1999) 18, 555-556.
41. C. Crestini,* R. Saladino, P. Tagliatesta, T. Boschi "Biomimetic degradation of lignin model compounds by synthetic anionic and cationic water soluble manganese and iron porphyrins" *Bioorganic & Medicinal Chemistry*, (1999) 7, 1897-1905.
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Firma

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