



Raquel P. Herrera was born in Alicante, Spain, in 1977. She received her B.S. (1999) and M.S. degrees (2000) at the University of Alicante, and completed her Ph.D. (1999-2003) under the supervision of Prof. Guijarro and Prof. Yus, at the same university. She then took up a European postdoctoral contract with Prof. Ricci (Bologna, Italy) until March 2006, at which time she joined Prof. Lassaletta's and Fernández's group at the IIQ-CSIC (Seville, Spain). She was appointed to her present position at the ISQCH-University of

Zaragoza in January 2008, first as ARAID Researcher, since 2012 as Tenured Scientist and currently, as Scientific Researcher since 2021. In 2012 she was awarded with the Lilly Prize for the best young scientist less than 40 years, in Spain. Her research focuses on asymmetric organocatalysis and its applications. She is the head of the *Asymmetric Organocatalysis* research group: <https://asymmetricorganocatalysis.com/>

Academics and Professional Career

02.2021-Present	<i>Scientific Researcher.</i> ISQCH (CSIC)-University of Zaragoza. (Spain)
07.2012-02.2021	<i>Tenured Scientist.</i> ISQCH (CSIC)-University of Zaragoza. (Spain)
01.2008-07.2012	<i>Young Research Group Leader.</i> ARAID. ISQCH (CSIC)-University of Zaragoza. (Spain)
02.2010-08.2010	<i>Alexander von Humboldt Fellow for Experienced Researcher.</i> TU Dortmund (Germany)
10.2009-01.2010	<i>Part-time Teaching Assistant.</i> Organic Chemistry. University of Zaragoza. Huesca (Spain)
10.2008-01.2009	<i>José Castillejo Fellow</i> at TU Dortmund (Germany)
03.2006-12.2007	<i>I3P Postdoctoral Researcher.</i> IIQ (CSIC)-University of Seville. Seville (Spain)
11.2003-02.2006	<i>Postdoctoral Researcher</i> RTN (Marie Curie actions). Organic Chemistry. University of Industrial Chemistry. Bologna (Italy)
11.2002-10.2003	<i>Assistant Professor.</i> Organic Chemistry. University of Alicante. Alicante (Spain)
12.2000-11.2002	<i>Part-time Teaching Assistant.</i> Organic Chemistry. University of Alicante. Alicante (Spain)
01.2000-09.2000	<i>Honorary Collaborator.</i> Organic Chemistry. University of Alicante. Alicante (Spain)
1997-1998	<i>Teaching collaborator.</i> Department of Physics. University of Alicante (Spain)
09.1999-10.2003	<i>Ph.D.</i> 'On the Mechanism of the Arene-Catalysed Lithiation: The Role of the Arene Dianions'. Prof. Dr. Miguel Yus and Prof. Dr. Albert Guijarro. Department of Organic Chemistry. University of Alicante. Spain. Dissertation: 24 th Oct. 2003 (Summa Cum Laude)
09.1999-12.2000	<i>Master in Advanced Studies of Chemistry.</i> "Mechanistic Study of the Arene-Catalysed Lithiation Reaction. The Role of the Dianion". University of Alicante (Spain)
12.2000-7.2001	<i>Diploma in Advanced Studies (DEA).</i> Prof. Dr. Miguel Yus and Prof. Dr. Albert Guijarro. Department of Organic Chemistry. University of Alicante (Spain)
09.1995-09.1999	<i>Bs. Chemistry.</i> University of Alicante (Spain)

Fellowships and Awards

- ✓ *Young Research Group Leader. ARAID Researcher. Zaragoza (Spain, 2008-2012)*
- ✓ *Alexander von Humboldt Fellow for Experienced Researcher (Germany, 2010)*
- ✓ *José Castillejo Program for Stays of Research for Young Doctors. Spanish Ministry of Education and Science. (Germany, 2009-2010)*
- ✓ *Fellowship CAI-EUROPA XXI Program for Stays of Research. (Spain, 2008)*
- ✓ *José Castillejo Program for Stays of Research for Young Doctors. Spanish Ministry of Education and Science. (Germany, 2008-2009)*
- ✓ *I3P Contract for Postdoctoral Researcher. IIQ (CSIC) Seville (Spain, 2006-2007)*
- ✓ *Postdoctoral Researcher. RTN (Marie Curie Actions) Bologna (Italy, 2003-2006)*

National and International Prizes

- **“Most Cited Paper 2003-2006 Award”** Published in *Tetrahedron Letters*
Herrera, R. P.; Guijarro, A.; Yus, M. *Tetrahedron Lett.* **2003**, *44*, 1309.
- **“Most Cited Paper 2005-2008 Award”** Published in *Tetrahedron*
Bernardi, L.; Fini, F.; Herrera, R. P.; Ricci, A.; Sgarzani, V. *Tetrahedron* **2006**, *62*, 375.
- **Lilly Prize 2012** for the *Best Young Researcher under 40 Ages in Spain*.
- **Accesit Tercer Milenio 2021 Award** in the category **“Research and Future”** to the Research Group Asymmetric Organocatalysis and to the project *“New sustainable multifunctional catalysis strategies for the synthesis of products of industrial interest”*

Publications

Bibliometric analysis: h-index = 38. Citations: >6400.

128.- Multicomponent Cyanation of 2-Amino-3-cyano-4H-chromenes in Aqueous Media

Sandra Ardevines, Miryam Garcés-Marín, Paula Cervantes-Cerrada, Subhan AAmir, Raquel P. Herrera and Eugenia Marqués-López
Asian J. Org. Chem. **2024**, *13*, e202400443.

127.- New Twists in the Chemistry of Thioureas: 1,3-Thiazolidines as a Vector of Sustainability

Guillermo Canudo-Barreras, Raquel P. Herrera and M. Concepción Gimeno
Chem. Eur. J. **2024**, *30*, e202402812.

126.- The Potential of Self-Activating Au(I) Complexes in Gold Catalysis

Juan Carlos Pérez-Sánchez, Raquel P. Herrera and M. Concepción Gimeno
Chem. Eur. J. **2024**, *30*, e202401825.

Hot Topic: Gold

125.- Exploring Ferrocenyl Imine-Phosphane Complexes in Gold(I) Redox Switchable Catalysis and the Role of the “Magic Blue” Oxidant

Juan Carlos Pérez-Sánchez, Raquel P. Herrera and M. Concepción Gimeno
Adv. Synth. Catal. **2024**, *366*, 3845–385.

VIP

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Hot Topic: Gold

124.- Chemoenzymatic one-pot cascade for the construction of asymmetric C-C and C-P bonds via formal C-H activation

Christian Ascaso-Alegre, Raquel P. Herrera and Juan Mangas-Sánchez

ChemCatChem **2024**, 16, e202400817.

ChemRxiv **2024**. DOI: 10.26434/chemrxiv-2024-s8m73

123.- Unlocking the Catalytic Potential of Gold(II) Complexes: A Comprehensive Reassessment

Juan Carlos Pérez-Sánchez, Raquel P. Herrera and M. Concepción Gimeno

Dalton Trans. **2024**, 53, 382–393.

122.- Ferrocenyl Dinuclear Gold(I) Complexes. Study of their Structural Features and the Influence of Bridging and Phosphane Ligands in a Catalytic Cyclization Reaction

Juan Carlos Pérez-Sánchez, Raquel P. Herrera and M. Concepción Gimeno

Chem. Eur. J. **2024**, 30, e202303585

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Hot Topic: Gold

121.- L-proline-based deep eutectic solvents as green and enantioselective organocatalyst/media for aldol reaction

Silvia Zárate-Roldán, María J. Trujillo-Rodríguez, M. Concepción Gimeno and Raquel P. Herrera

J. Mol. Liq. **2024**, 396, 123971.

120.- Unravelling the role of triisopropylphosphane telluride in Ag(I) complexes

Juan Carlos Pérez-Sánchez, Carmen Ceamanos, Raquel P. Herrera and M. Concepción Gimeno

Inorg. Chem. Front. **2023**, 10, 6519–6525.

Cover under invitation

119.- Asymmetric Organocatalyzed Phospha-Michael Addition for the Direct Synthesis of Biologically Active Chromenylphosphonates

Eugenia Marqués-López, Isaac G. Sonsona, Miryam Garcés-Marín, M. Concepción Gimeno and Raquel P. Herrera

Adv. Synth. Catal. **2023**, 3234–3240.

ChemRxiv **2023**. DOI: 10.26434/chemrxiv-2023-dpm20

Cover under invitation

Hot Topic: “Organocatalysis”

118.- Understanding chiral proton organocatalysis using cinchonium derivatives

Fernando Auria-Luna, Eugenia Marqués-López, M. Concepción Gimeno, Juan Vicente Alegre-Requena and Raquel P. Herrera

ChemRxiv **2023**. DOI: 10.26434/chemrxiv-2023-8jzsp

117.- Enantioselective C–P Bond Formation through C(sp³)–H Functionalization

Sandra Ardevines, Devan Horn, Juan Vicente Alegre-Requena, Marta González-Jiménez, M. Concepción Gimeno, Eugenia Marqués-López and Raquel P. Herrera

Adv. Synth. Catal. **2023**, 365, 2152–2158.

ChemRxiv **2023**. DOI: 10.26434/chemrxiv-2023-v3vl0

Hot Topic: “C-H Activation”

116.- Free-Catalysed Synthesis of Thiazolidine-Thiourea Ligands for Metal Coordination (Au and Ag) and Preliminary Cytotoxic Studies

Daniel Salvador, Raquel P. Herrera and M. Concepción Gimeno
Dalton Trans. **2023**, 52, 7797–7808.

Cover under invitation

115.- Alkylation of amines with allylic alcohols and deep eutectic solvents as metal-free and green promoter

Silvia Zárate-Roldán, M. Concepción Gimeno and Raquel P. Herrera
Green Chem. **2023**, 25, 5601–5612.

ChemRxiv **2023** DOI:[10.26434/chemrxiv-2023-9p1d9](https://doi.org/10.26434/chemrxiv-2023-9p1d9)

114.- 1-Benzamido-1,4-dihydropyridine derivatives as anticancer agents: *in vitro* and *in vivo* assays

Sandra Ardevines, Fernando Auria-Luna, Eduardo Romanos, Vane Fernández-Moreira, Aandre Benedi, M. Concepción Gimeno, Isabel Marzo, Eugenia Marqués-López and Raquel P. Herrera
Arab. J. Chem. **2023**, 16, 104514.

113.- Stereoselective three-step one-pot cascade combining amino- and biocatalysis to access chiral γ -nitro alcohols

Christian Ascaso-Alegre, Raquel P. Herrera and Juan Mangas-Sánchez
Angew. Chem. Int. Ed. **2022**, 61, e202209159.

Highlighted in Nat. Prod. Rep. **2022**, 29, 2209. **Hot of the press article**

ChemRxiv **2022**. <https://doi.org/10.26434/chemrxiv-2022-hlkgf>

112.- Gold catalyzed 1,3-thiazinane formation and uncommon tautomer isolation

Guillermo Canudo-Barreras, Daniel Salvador, Raquel P. Herrera and M. Concepción Gimeno
J. Org. Chem. **2022**, 16, 10747–10754.

Highlighted in Org. Process Res. Dev. **2022**, 26, 2997–3009.

111.- Ferrocenyl gold complexes as efficient catalysts

Juan Carlos Pérez-Sánchez, Raquel P. Herrera and M. Concepción Gimeno
Eur. J. Inorg. Chem. **2022**, 2022, e202101067.

Invitation special issue "Ferrocene chemistry". Hot Topic: "Gold"

110.- Horizons in asymmetric organocatalysis: *en route* to the sustainability and new applications

Sandra Ardevines, Eugenia Marqués-López and Raquel P. Herrera
Catalysts **2022**, 12, 101.

Invitation special issue "Organocatalysis: Advances, Opportunity, and Challenges"

109.- Heterocycles in Breast Cancer Treatment: The use of Pyrazole Derivatives

S. Ardevines, E. Marqués-López and R. P. Herrera
Curr. Med. Chem. **2022**, 30, 1145–1174.

108.- Investigation of Squaramide Catalysts in the Aldol Reaction *en Route* to Funapide

Isaac G. Sonsona, Andrea Vicenzi, Marco Guidotti, Giorgia D. Bisag, Mariafrancesca Fochi, Raquel P. Herrera and Luca Bernardi
Eur. J. Org. Chem. **2022**, 2022, e202101254.

Part of the "Organocatalysis" Special Collection

107.- Synthesis of new thiourea-metal complexes with promising anticancer properties

Guillermo Canudo-Barreras, Lourdes Ortego, Anabel Izaga, Isabel Marzo, Raquel P. Herrera and M. Concepción Gimeno

Molecules, **2021**, 26, 6891.

Invitation special issue "Metal-Based Drugs: Bioinorganic Chemistry and Modes of Action—Dedicated to the Research Activity of Professor Luigi Messori"

106.- Single-crystal-to-single-crystal transformation and catalytic properties of new organically template perhalidometallates

Ali Rayes, Silvia Zárate-Roldán, Irene Ara, Manel Moncer, Necmi Dege, M. Concepción Gimeno, Brahim Ayed and Raquel P. Herrera

Catalysts **2021**, 11, 758.

105.- Unconventional gold-catalyzed one-pot/multicomponent synthesis of propargylamines starting from aromatic alcohols

Silvia Zárate-Roldán, M. Concepción Gimeno and Raquel P. Herrera

Catalysts **2021**, 11, 513.

104.- Main Avenues in Gold Coordination Chemistry

Raquel P. Herrera and M. Concepción Gimeno

Chem. Rev. **2021**, 121, 8311–8363.

103.- Fluorination Reactions promoted by Asymmetric Hydrogen Bonding-based Organocatalysts

Fernando Auria-Luna, Somayeh Mohammadi, Masoumeh Divar, M. Concepción Gimeno and Raquel P. Herrera

Adv. Synth. Catal. **2020**, 362, 5275–5300.

Very Important Paper VIP

102.- Self-assembly of hollow organic nanotubes driven by arene regioisomerism

Juan V. Alegre-Requena, Raquel P. Herrera and David D. Díaz

ChemPlusChem **2020**, 85, 2372–2375.

Cover under invitation

101.- Novel ureido-dihydropyridine scaffolds as theranostic agents

Fernando Auria-Luna, Eugenia Marqués-López, E. Romanos, Vanesa Fernández-Moreira, M. Concepción Gimeno, Isabel Marzo and Raquel P. Herrera

Bioorg. Chem. **2020**, 105, 104364.

100.- Ultrasound-assisted multicomponent synthesis of 4H-pyrans in water and DNA binding studies

Fernando Auria-Luna, Vanesa Fernández-Moreira, Eugenia Marqués-López, M. Concepción Gimeno and Raquel P. Herrera

Sci. Rep. **2020**, 10, 11594.

99.- Sulfonamide as amide isostere for fine-tuning the gelation properties of physical gels

Juan V. Alegre-Requena, Santiago Grijalvo, Diego Sampedro, Judith Mayr, César Saldías, José Juan Marrero-Tellado, Ramón Eritja, Raquel P. Herrera and David D. Díaz

RSC Adv. **2020**, 10, 11481–11492.

98.- Asymmetric organocatalyzed aza-Henry reaction of hydrazones: experimental and computational

Isaac G. Sonsona, Juan V. Alegre-Requena Eugenia Marqués-López, M. Concepción Gimeno and Raquel P. Herrera

Chem. Eur. J. **2020**, 26, 5469–5478.

97.- Synthesis, structural determination and catalytic study of a new 2-D chloro-substituted zinc phosphate, (C₈N₂H₂₀)[ZnCl(PO₃(OH))]₂

Ali Rayes, Raquel P. Herrera, Francesco Mezzadri, Manel Moncer, Irene Ara, Gianluca Calestani and Brahim Ayed

J. Mol. Struct. **2020**, 1202, 127216.

96.- Simple iodoalkyne-based organocatalysts for the activation of carbonyl compounds

Juan V. Alegre-Requena, Alberto Valero-Tena, Isaac G. Sonsona, Santiago Uriel and Raquel P. Herrera

Org. Biomol. Chem. **2020**, 18, 1594–1601.

Cover under invitation

95.- Hydrogen bonding and Internal or External Lewis or Brønsted Acid Assisted (Thio)urea Catalysts

M. Concepción Gimeno and Raquel P. Herrera

Eur. J. Org. Chem. **2020**, 1057–1068.

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Cover Feature invitation

94.- Functionalization of π-Activated Alcohols by Trapping Carbocations in Pure Water Under Smooth and Green Conditions

Rosa Ortiz, Alessandro Koukouras, Eugenia Marqués-López and Raquel P. Herrera

Arab. J. Chem. **2020**, 13, 1866–1873.

93.- Thiolate Bridged Gold(I) NHC Catalysts: New Approach for Catalyst Design and its Application Trapping Pioneering Catalytic Intermediates

Renso Visbal, Raquel P. Herrera and M. Concepción Gimeno

Chem. Eur. J. **2019**, 25, 15837–15845.

HOT PAPER

92.- First aromatic amine organocatalyzed activation of ketones

Isaac G. Sonsona, Eugenia Marqués-López, M. Concepción Gimeno and Raquel P. Herrera

New J. Chem. **2019**, 43, 12233–12240.

Back cover under invitation

91.- Proline bulky substituents consecutively act as steric hindrances and directing groups in a Michael/Conia-ene cascade reaction under synergistic catalysis

Salil Putatunda, Juan V. Alegre-Requena, Marta Meazza, Michael Franc, Dominika Rohal'ová, Pooja Vemuri, Ivana Císarová, Raquel P. Herrera, Ramon Rios and Jan Veselý

Chem. Sci. **2019**, 10, 4107–4115.

[This paper has been selected as one of the best organocatalytic papers published in *Chemical Science* to celebrate the Nobel Prize in Organocatalysis](#)

90.- Anticancer Properties of Gold Complexes with Biologically Relevant Ligands

Vanessa Fernández-Moreira, Raquel P. Herrera and M. Concepción Gimeno

Pure Appl. Chem. **2019**, 91, 247.

89.- Bioactive and luminescent indole and isatin based gold(I) derivatives

Vanessa Fernández-Moreira, Cinthya Val-Campillo, Isaura Ospino, Raquel P. Herrera, Isabel Marzo and Antonio Laguna and M. Concepción Gimeno
Dalton Trans. **2019**, 48, 3098-3108.

88.- First organocatalytic asymmetric synthesis of 1-benzamido-1,4-dihydropyridine derivatives

Fernando Auria-Luna, Eugenia Marqués-López and Raquel P. Herrera
Molecules **2018**, 23, 2692. <https://doi.org/10.3390/molecules23102692>.
Special Issue “Stereogenic Centers”

87.- Gold Catalyzed Multicomponent Reactions beyond A³ Coupling

Renso Visbal, Sara Graus, Raquel P. Herrera and M. Concepción Gimeno
Molecules **2018**, 23, 2255.

86.- Efficient Gold(I) Acyclic Diaminecarbenes for the Synthesis of Propargylamines and Indolizines

Mélanie Aliaga-Lavrijsen, Raquel P. Herrera, Dolores Villacampa and M. Concepción Gimeno
ACS Omega **2018**, 3, 9805–9813.

85.- Urea Activation by an External Brønsted Acid: Breaking Self-Association and Tuning Catalytic Performance

Isaac G. Sonsona, Eugenia Marqués-López, Marleen Häring, David D. Díaz and R. P. Herrera
Catalysts **2018**, 8, 305.

84.- Synthesis and Supramolecular Self-assembly of Glutamic Acid-based Squaramides

Juan V. Alegre-Requena, Marleen Häring, Isaac G. Sonsona, Alex Abramov, Eugenia Marqués-López, Raquel P. Herrera and David D. Díaz
Beilstein J. Org. Chem. **2018**, 14, 2065–2073.

83.- Hydrothermal synthesis of Co^{II} chiral inorganic-organic complex: Structural, thermal and catalytic evaluation

Assila Maatar Ben Salah, Raquel P. Herrera and Houcine Naïli
J. Mol. Struct. **2018**, 1165, 356–362.

82.- Synthesis, Structural Determination and Antimicrobial Evaluation of Two Novel Co^{II} and Zn^{II} Halogenometallates as Efficient Catalysts for the Acetalization Reaction of Aldehydes

Assila Maatar Ben Salah; Lilia Belghith Fendri, Thierry Bataille, Raquel P. Herrera and Houcine Naïli
Chem. Central J. **2018**, 12, 24.

81.- Organocatalyzed Enantioselective Aldol and Henry Reactions starting from Benzylic Alcohols

Juan V. Alegre-Requena, Eugenia Marqués-López and Raquel P. Herrera
Adv. Synth. Catal. **2018**, 360, 124–129.

80.- Highly Active Group 11 Metal Complexes with α -Hydrazidophosphonate Ligands

Daniel Salvador-Gil, Lourdes Ortego, Raquel P. Herrera, Isabel Marzo and M. Concepción Gimeno
Dalton Trans. **2017**, 46, 13745–13755.

79.- Optimizing Accuracy and Computational Cost in Theoretical Squaramide Catalysis: the Henry Reaction

Juan V. Alegre-Requena, Eugenia Marqués-López and Raquel P. Herrera
Chem. Eur. J. **2017**, 23, 15336–15347.
HOT PAPER and Frontispiece invitation

78.- “Push-Pull π^+/π^- ” (PP $\pi\pi$) Systems in Catalysis

Juan V. Alegre-Requena, Eugenia Marqués-López and Raquel P. Herrera

ACS Catal. **2017**, 7, 6430–6439.

Cover invitation

77.- Organocatalytic Enantioselective Synthesis of 1,4-Dihydropyridines

Fernando Auria-Luna, Eugenia Marqués-López and Raquel P. Herrera

Adv. Synth. Catal. **2017**, 359, 2161–2175.

76.- Direct Substitution of Alcohols in Pure Water by Brønsted Acid Catalysis

Rosa Ortiz and Raquel P. Herrera

Molecules **2017**, 22, 574–585.

Invitation special issue “Women in Organic Chemistry”

75.- Organocatalytic Asymmetric Synthesis of Highly Substituted Chiral 1,4-Dihydropyridine Derivatives

Fernando Auria-Luna, Eugenia Marqués-López, M. Concepción Gimeno, Roghayeh Heiran, Somayeh Mohammadi and Raquel P. Herrera

J. Org. Chem. **2017**, 82, 5516–5523.

74.- Organocatalytic Hydrophosphonylation Reaction of Carbonyl Groups

Raquel P. Herrera

Chem. Rec. **2017**, 17, 833–840.

73.- Gold(I) Mediated Thiourea Organocatalyst Activation: A Synergic Effect for Asymmetric Catalysis

Anabel Izaga, Raquel P. Herrera and M. Concepción Gimeno

ChemCatChem **2017**, 9, 1313–1321.

72.- Synergistic Catalysis: Asymmetric Synthesis of Cyclopentanes bearing 4 Stereogenic Centers

Kaiheng Zhang, Marta Meazza, Anabel Izaga, Clotilde Contamine, M. Concepción Gimeno, Raquel P. Herrera and Ramon Rios

Synthesis **2017**, 49, 167–174.

71.- Hydrogen Bonding Networks in Chiral Thiourea Organocatalysts. Evidence on the Importance of the Aminoindanol Moiety

M. Concepción Gimeno and Raquel P. Herrera

Crys. Growth Des. **2016**, 16, 5091–5099.

70.- Crystallisation, Thermal Analysis and Acetal Protection Activity of New Layered Zn(II) Hybrid Polymorphs

Salem Saïd, Houcine Naïli, Thierry Bataille and Raquel P. Herrera

CrystEngComm **2016**, 18, 5365–5374.

69.- Highly Selective Fluoride Anion Recognition by a Multifunctional Urea

Jana Schiller, Raúl Pérez-Ruiz, Diego Sampedro, Eugenia Marqués-López, Raquel P. Herrera and David D. Díaz

Sensors **2016**, 16, 658.

68.- Regulatory Parameters of Self-healing Alginate Hydrogel Networks prepared via Mussel-inspired Dynamic Chemistry

Juan V. Alegre-Requena, Marleen Häring, Raquel P. Herrera and David D. Díaz
New J. Chem. **2016**, 40, 8493–8501.

67.- Metal-Organic Frameworks (MOFs) bring New Life to Hydrogen-Bonding Organocatalysts in Confined Spaces

Juan V. Alegre-Requena, Eugenia Marqués-López, Raquel P. Herrera and David D. Díaz
CrystEngComm, **2016**, 18, 3985–3995.

Invitation special issue “New Talent themed issue”

66.- Organocatalytic Transfer Hydrogenation Reactions

Raquel P. Herrera

Top. Curr. Chem. **2016**, 374, 29.

65.- Aminoindanol Core as Key Scaffold in Bifunctional Organocatalysts

Isaac G. Sonsona, Eugenia Marqués-López and Raquel P. Herrera

Beilstein J. Org. Chem. **2016**, 12, 505–523.

This article is part of the Thematic Series “Bifunctional catalysis”

64.- Self-Assembled Fibrillar Networks of a Multifaceted Chiral Squaramide: Supramolecular Multistimuli-Responsive Alkogels

Jana Schiller, Juan V. Alegre-Requena, Eugenia Marqués-López, Raquel P. Herrera, Jordi Casanovas, Carlos Alemán and David D. Díaz

Soft Matter **2016**, 12, 4361–4374.

63.- Trifunctional Squaramide Catalyst for Efficient Enantioselective Henry Reaction Activation

Juan V. Alegre-Requena, Eugenia Marqués-López and Raquel P. Herrera

Adv. Synth. Catal. **2016**, 358, 1801–1809. *Highlighted in Synfacts* **2016**, 12, 743

62.- Luminescent and Biologically Active Squaramide Monoesters for Cell Imaging Applications

Vanesa Fernández-Moreira, Juan V. Alegre-Requena, Raquel P. Herrera, Isabel Marzo and M. Concepción Gimeno

RSC Adv. **2016**, 6, 14171–14177.

61.- Squaramides with Cytotoxic Activity against Human Gastric Carcinoma Cells HGC-27: Synthesis and Mechanism of Action

Mireia Quintana, Juan V. Alegre-Requena, Eugenia Marqués-López, Raquel P. Herrera and Gemma Triola

Med. Chem. Commun. **2016**, 7, 550–561.

Invitation special issue “New Talents in Medicinal Chemistry”

60.- New Organocatalytic Asymmetric Synthesis of Highly Substituted Chiral 2-Oxospiro-[indole-3,4'-(1',4'-dihydropyridine)] Derivatives

Fernando Auria-Luna, Eugenia Marqués-López, Somayeh Mohammadi, Roghayeh Heiran and Raquel P. Herrera

Molecules **2015**, 20, 15807–15826.

Editor special issue “Organocatalysis 2015”

59.- Enantioselective Organocatalyzed Synthesis of 2-Amino-3-cyano-4H-chromene Derivatives

Isaac G. Sonsona, Eugenia Marqués-López and Raquel P. Herrera

Symmetry **2015**, 7, 1519–1535.

Invitation special issue “Asymmetric Organocatalysis”

58.- Thiourea-Catalyzed Addition of Indoles to Aliphatic β,γ -Unsaturated α -Ketoesters

Verónica Juste-Navarro, Eugenia Marqués-López and Raquel P. Herrera

Asian J. Org. Chem. **2015**, 4, 884–889.

57.- Essential Multicomponent Reactions I

Raquel P. Herrera and Eugenia Marqués-López

Chapter 12 in *Multicomponent Reactions. Concepts and Applications for Design and Synthesis*. (Eds. Herrera, R. P. and Marqués-López, E.). Wiley-VCH; **2015**, pp. 382–415.

56.- Unusual Approach for Multicomponent Reactions

Eugenia Marqués-López, Raquel P. Herrera, and Ramón Rios

Chapter 11 in *Multicomponent Reactions. Concepts and Applications for Design and Synthesis*. (Eds. Herrera, R. P. and Marqués-López, E.). Wiley-VCH; **2015**, pp. 358–381.

55.- Bucherer-Bergs and Strecker Multicomponent Reactions

Eugenia Marqués-López and Raquel P. Herrera

Chapter 10 in *Multicomponent Reactions. Concepts and Applications for Design and Synthesis*. (Eds. Herrera, R. P. and Marqués-López, E.). Wiley-VCH; **2015**, pp 331–357.

54.- Biginelli Multicomponent Reactions

Eugenia Marqués-López and Raquel P. Herrera

Chapter 9 in *Multicomponent Reactions. Concepts and Applications for Design and Synthesis*. (Eds. Herrera, R. P. and Marqués-López, E.). Wiley-VCH; **2015**, pp 306–330.

53.- Passerini Multicomponent Reactions

Eugenia Marqués-López and Raquel P. Herrera

Chapter 8 in *Multicomponent Reactions. Concepts and Applications for Design and Synthesis*. (Eds. Herrera, R. P. and Marqués-López, E.). Wiley-VCH; **2015**, pp 283–305.

52.- Multicomponent Reactions in the Synthesis of Target Molecules

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