

Curriculum vitae

Rubén Martín

February 2025

Name: Rubén Martín

Born: 16th December 1976; Barcelona (Spain)

Current Position *Group Leader (since Sept. 2008)*
ICREA Professor (since October 2013)

Address: Institute of Chemical Research of Catalonia (ICIQ)
Av. Països Catalans, 16
43007, Tarragona (Spain)
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rmartinromo@iciq.es

Research ID: www.researcherid.com/rid/M-2905-2014

Previous positions:

Massachusetts Institute of Technology (MIT), Cambridge, MA (USA) **05/2005 - 08/2008**
M.E.C-Fulbright Postdoctoral Fellow; Advisor: Prof. Stephen L. Buchwald
Title: "Cu-catalyzed C-N and Pd-catalyzed C-C Bond-forming Reactions"

Max-Planck-Institut für Kohlenforschung, Mülheim an der Ruhr (Germany) **01/2004 - 04/2005**
Alexander von Humboldt Postdoctoral Fellow; Advisor: Prof. Alois Fürstner
Title: "Low-valent Iron Complexes in Cycloadditions and Cross-coupling Reactions"

Max-Planck-Institut für Kohlenforschung, Mülheim an der Ruhr (Germany) **01/2003 - 04/2003**
Visiting Fellow; Advisor: Prof. Alois Fürstner
Title: "Iron-catalyzed Reactions of Vinyl Epoxides and Grignard Reagents"

University of Barcelona, Barcelona (Spain) **01/1999 - 1/2003**
Ph.D Research Fellow; Advisor: Prof. Antoni Riera Escalé
Title: "Enantioselective Total Synthesis of Glycosidases Inhibitors" (*Summa Cum Laude*)

Distinctions, Awards & Lectureship Awards

- **2024** Tito Scaiano Lectureship Award
- **2023** BMS/UNC Lectureship Award
- **2023** Novartis/Columbia Lectureship Award
- **2021** Forbes Top 50 Awarded Spaniards
- **2021** ERC Advanced Grant
- **2020** Premio a la Mejor Publicación del Año de Cartas Orgánicas 2020
- **2019** Arthur C. Cope Scholar Award
- **2019** Parazapharma Lectureship Award
- **2019** Boehringer Ingelheim/Yale Award
- **2019** MIT-Merck Lectureship Award
- **2019** Novartis Chemistry Lectureship Award
- **2018** Il Banc de Sabadell Award to Sciences and Engineering
- **2018** IOCF Lectureship Award
- **2018** Hirata Award
- **2018** ChemSocRev Pioneering Investigator Lectureship Award
- **2018** Genentech Lectureship in Organic Chemistry
- **2018** Bristol-Myers-Squibb Lectureship
- **2018** Pharmaron Lectureship
- **2017** Liebig-Lectureship Award
- **2017** OMCOS Award
- **2017** Marcial Moreno Lectureship Award
- **2015** RSEQ Excellent Research Award
- **2011** ERC Starting Grant Award
- **2011** Eli Lilly Young Research Investigator Award
- **2011** Thieme Chemistry Journal Award
- **2010** Sigma Aldrich RSEQ Young Research Investigator Award
- **2008** Ramon y Cajal Award
- **2005** MEC/Fulbright Postdoctoral Fellow
- **2004** Alexander von Humboldt Postdoctoral Fellow

Teaching Experience

- 2000-2002 “Organic Synthesis”; 2nd year Chemistry Degree; University of Barcelona.
Credits given: 1.5 (15h)
- 2009-2013 “Stereoselective and Asymmetric Synthesis”; Master Synthesis and Catalysis; Universitat Rovira i Virgili. Credits given: 3 (30 h)
- 2013-present “Methods in Synthesis”; Master Synthesis and Catalysis; Universitat Rovira i Virgili.
Credits given: 3 (30 h)

Organization of scientific meetings:

- 2023 ICIQ School
Tarragona (Spain)
- 2022 SISOC XIII
Tarragona (Spain)
- 2018 ICIQ-INTECAT School
Montbrío del Camp (Spain); Participants: 74
Main speakers: Peter R. Schreiner (Germany), Timothy Noël (The Netherlands), Philippe Renaud (Switzerland), Keary M. Engle (USA)
- 2017 ICIQ School
Tarragona (Spain); Participants: 113
Main speakers: Shu-Li You (Shanghai), Matthew Sigman (Utah), Jeffrey Bode (ETH)
- 2015 Co-organization.
Organometallic chemistry directed towards organic synthesis – OMCOS18
Sitges (Barcelona); Participants: 820
Main speakers: Bergman (Berkeley), Schwarz (Berlin), Sanford (Michigan). Hashmi (Heidelberg), Chatani (Osaka), Marer (Würzburg), Chang (KAIST), Zhu (EPFL), Szabó (Stockholm).
- 2014 *ICIQ 10th anniversary symposium*
Tarragona (Spain); Participants: 237
Main speakers: Buchwald (MIT), Baran (Scripps), Yu (Scripps), MacMillan (Princeton), Carell (Münich), Rebek (Scripps), Pfaltz (Basel), Stang (Utah), Smith (Upenn)
- 2013 *ICIQ-UNICAT Summer School (organized between ICIQ and TU-Berlin)*
Tarragona (Spain); Participants: 174

- Main speakers:** Snyder (Scripps), Dixon (Oxford), Oestereich (TU-Berlin), Nakamura (Tokyo), Driess (TU-Berlin)
- 2012 *7th Asian-European Symposium on metal-mediated efficient organic synthesis*
Tarragona (Spain); *Participants:* 141
- Main speakers:** Chatani (Osaka), Sigman (Utah), Sanford (Michigan), Beller (Rostock), Itami (Nagoya), Hayashi (Nanyang), Plietker (Stuttgart), Fensterbank (Paris)
- 2011 *ICIQ Summer School*
Tarragona (Spain); *Participants:* 157
- Main speakers:** Knochel (München), Toste (Berkeley), Bode (ETH), Hartwig (Berkeley)

Institutional Responsibilities:

- 2019-present Committee Member of the Gender Equality Commission
- 2017 Associate Editor Synlett
- 2013- Associate Professor (ICIQ)
- 2008-2013 Assistant Professor (ICIQ)
- 2010 Seminar Manager (ICIQ)
In charge of the 2010 seminar program at ICIQ: <http://www.iciq.org/agenda/?pyear=2010>
- 2008- Member of the jury of 15 PhD thesis at Spanish & International universities
- 2008- Board academic affairs (ICIQ)

Commissions of Trust:

- 2023-present Consultant of Janssen Cilag
- 2022 Member of the Advisory Board for the Barluenga Conference
- 2021 Member of the Advisory Board for new journal Tetrahedron Chem
- 2021 Member of the Advisory Board for ACS Organic & Inorganic Au
- 2019 Member of the Advisory Board (Chemical Society Reviews)
- 2019 Early Career Advisory Board of "Organic Letters" (ACS)
- 2019 Early Career Advisory Board of "Organic Letters"
- 2019 Advisory Board of "FET Open Flix" (H2020)
- 2019 Advisory Board of "Nordic Consortium for CO₂ conversion – NordCO₂
- 2017 External Advisory Board (ACS Catalysis)

2015	International advisory board of Grant-in-aid for scientific research on innovative areas by JSPS (Japan society for the promotion of science)
2015	International advisory board of Chem (Cell Press)
2013	International advisory board of European Journal of Organic Chemistry (EurJOC)
2013	Consultant of Catalyst Group Resources TCGR S.A
2013	Consultant Galchimia S.A
2013	Committee Member of the Catalan Agency for Research (AGAUR)
2012 - present	Board member of the Catalan Section of the National Society of Chemistry – RSEQ
2009 - 2011	Committee member of the Spanish National Agency for Projects Evaluation – ANEP

Memberships of Scientific Societies:

2021	Panel Member of ANEP-Proyectos de Investigación MICIU
Since 2020	Panel Member GEQOR
Since 2020	Panel Member of the GOQO
Since 2019	Panel Member of The Catalan Section of the RSEQ
2019	Member of the Grupo Especializado de Química Orgánica de la RSEQ (GEQOR)
2019	Member of the Sección Territorial Catalana de la RSEQ
2008-	Member of the National Society of Chemistry in Spain – RSEQ
2006-	Member of the American Chemical Society – ACS
2005-	Member of the Alexander von Humboldt Society – AvH

Spin-Off:

2020	Trellum Technologies S.L
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Publications:

→ As graduate student & postdoc:

- 1) *A concise enantioselective entry to the synthesis of deoxyzasugars*
Martín, R.; Moyano, A.; Pericàs, M. A.; Riera, A.
Org. Lett. **2000**, 2, 93.
- 2) *A new method for the enantioselective synthesis of N-Boc-disubstituted α -amino acids*
Martín, R.; Islas, G.; Moyano, A.; Pericàs, M. A.; Riera, A.

- Tetrahedron* **2001**, 57, 6367.
- 3) *Ring-closing metathesis of chiral allylamines. Enantioselective synthesis of (2S,3R,4S)-3,4-dihydroxyproline*
Martín, R.; Alcón, M.; Pericàs, M. A.; Riera, A.
J. Org. Chem. **2002**, 67, 6896.
- 4) *Cross-coupling of alkyl halides with aryl Grignard reagents catalyzed by a low-valent iron complex*
Martín, R.; Fürstner, A.
Angew. Chem., Int. Ed. **2004**, 43, 3955 (**VIP paper**).
- 5) *General approach to glycosidase inhibitors. Enantioselective synthesis of deoxymannojirimycin and Swainsonine*
Martín, R.; Murruzzu, C.; Pericàs, M. A.; Riera, A.
J. Org. Chem. **2005**, 70, 2325.
- 6) *Advances in iron-catalyzed cross-coupling reactions*
Fürstner, A.; Martín, R.
Chem. Lett. **2005**, 34, 624.
- 7) *Cycloisomerization of enynes catalyzed by iron(0)-ate complexes*
Fürstner, A.; Martín, R.; Majima, K.
J. Am. Chem. Soc. **2005**, 127, 12236.
- 8) *Domino Cu-catalyzed C-N coupling/hydroamidation: a highly efficient synthesis of nitrogen heterocycles*
Martín, R.; Rivero, M. R.; Buchwald, S. L.
Angew. Chem., Int. Ed. **2006**, 45, 7079 (**Hot paper**).
- **Highlighted in SynFacts 2007**, Issue 1
- 9) *Pd-catalyzed Kumada-Corriu cross-coupling reactions at low temperatures allow the use of Knochel-type Grignard reagents*
Martín, R.; Buchwald, S. L.
J. Am. Chem. Soc. **2007**, 129, 3844.
- **Highlighted at** <http://www.tcieurope.eu/en/catalog/B1374.html>
 - **Highlighted in SynFacts 2007**, Issue 6
- 10) *Cu-catalyzed tandem C-N bond formation for the synthesis of pyrroles and heteroarylpyrroles*
Martín, R.; Larsen, C. H.; Cuenca, A.; Buchwald, S. L.
Org. Lett. **2007**, 9, 3379.
- 11) *Sequential copper-catalyzed vinylation/cyclization: an efficient synthesis of functionalized oxazoles*

- Martín, R.; Cuenca, A.; Buchwald, S. L.
Org. Lett., **2007**, *9*, 5521.
- 12) *A general method for the direct α -arylation of aldehydes with aryl bromides and chlorides*
Martín, R.; Buchwald, S. L.
Angew. Chem., Int. Ed. **2007**, *38*, 7236 (**Hot paper**).
- 13) *A cheap metal for a “noble” task: preparative and mechanistic aspects of cycloisomerization and cycloaddition reactions catalyzed by low-valent iron complexes*
Fürstner, A.; Majima, K.; Martín, R.; Krause, H.; Kattnig, E.; Goddard, R.; Lehmann, C. W.
J. Am. Chem. Soc. **2008**, *130*, 1992.
- 14) *Preparation, structure, and reactivity of nonstabilized organoiron compounds. Implications for iron-catalyzed cross-coupling reactions*
Fürstner, A.; Martín, R.; Krause, H.; Seidel, G.; Goddard, R.; Lehmann, C. W.
J. Am. Chem. Soc. **2008**, *130*, 8773.
- 15) *Palladium-catalyzed Suzuki-Miyaura cross-coupling reactions employing dialkylbiaryl phosphine ligands*
Martín, R.; Buchwald, S. L.
Acc. Chem. Res. **2008**, *41*, 1461.
- 16) *An improved protocol for the Pd-catalyzed α -arylation of aldehydes with aryl halides*
Martín, R.; Buchwald, S. L.
Org. Lett., **2008**, *10*, 4561.

→ **As group leader at ICIQ (since October 2008):**

- 17) *Metal-catalyzed carboxylation of organometallic reagents with carbon dioxide*
Correa, A.; Martín, R.
Angew. Chem. Int. Ed. **2009**, *48*, 6201.
- 18) *Palladium-catalyzed direct carboxylation of aryl bromides with carbon dioxide*
Correa, A.; Martín, R.
J. Am. Chem. Soc. **2009**, *131*, 15974.
- **Highlighted in SynFacts 2010**
 - **Highlighted in Nature Chem. 2010**, *2*, 710
 - **Highlighted** <http://www.plataformasinc.es/index.php/esl/Noticias/Una-via-para-reciclar-el-CO2>
- 19) *Pd-catalyzed intramolecular acylation of aryl bromides via C-H functionalization: a highly efficient synthesis of benzocyclobutenones*

- Alvarez-Bercedo, P.; Flores-Gaspar, A.; Correa, A.; Martin, R.
J. Am. Chem. Soc. **2010**, *132*, 466.
- 20) *Ni-catalyzed reduction of inert C-O bonds: a new strategy for using aryl ethers as easily removable directing groups*
Alvarez-Bercedo, P.; Martin, R.
J. Am. Chem. Soc. **2010**, *132*, 17352.
- **Selected to be the cover page of *J. Am. Chem. Soc.***
 - **Highlighted in *SynFacts* 2011, Issue 3**
 - **Highlighted in *SynForm* 2011, Issue 4**
 - **Most read article in November 2011**
- 21) *Mechanistic switch via subtle ligand modulation: palladium-catalyzed synthesis of α -substituted styrenes via C-H bond functionalization*
Flores-Gaspar, A.; Martin, R.
Adv. Synth. Cat. **2011**, *353*, 1223.
- 22) *Pd-catalyzed α -arylation and related compounds: recent developments and perspectives*
Novák, P.; Martin, R.
Curr. Org. Chem. **2011**, *15*, 3233.
- 23) *Myth of reality? Fixation of carbon dioxide into complex organic matter under mild conditions*
Kleij, A.; Martin, R.
ChemSusChem. **2011**, *4*, 1259.
- 24) *Synergistic palladium-catalyzed C(sp³)-H activation/C(sp³)-O bond formation: a direct, step-economical route to benzolactones*
Novák, P.; Correa, A.; Gallardo-Donaire, J.; Martin, R.
Angew. Chem. Int. Ed. **2011**, *50*, 12236.
- 25) *Synthesis of 8,8-dipropylbicyclo[4.2.0]octa-1,3,5-trien-7-one via Pd-catalyzed intramolecular C-H bond-acylation*
Flores-Gaspar, A.; Martin, R.
Org. Synth. **2012**, *89*, 159.
- 26) *Ligand-free Ni-catalyzed reductive cleavage of inert carbon-sulfur bonds*
Barbero, N.; Martin, R.
Org. Lett. **2012**, *14*, 796.
- 27) *Ligand-accelerated Pd-catalyzed ketone γ -arylation via C-C cleavage with aryl chlorides*

- Ziadi, A.; Martin, R.
Org. Lett. **2012**, *14*, 1266.
- 28) *N-heterocyclic carbene dichotomy in Pd-catalyzed acylation of aryl chlorides via C-H bond functionalization*
Flores-Gaspar, A.; Gutiérrez-Bonet, A.; Martin, R.
Org. Lett. **2012**, *14*, 5234.
- 29) *Formal γ -alkynylation of ketones via Pd-catalyzed C-C cleavage*
Ziadi, A.; Correa, A.; Martin, R.
Chem. Commun. **2013**, *49*, 4286.
- 30) *Ni-catalyzed direct carboxylation of benzyl halides with CO₂*
Leon, T.; Correa, A.; Martin, R.
J. Am. Chem. Soc. **2013**, *135*, 1221.
- **Most read article in January 2013**
- 31) *Combined experimental and theoretical study on the reductive cleavage of inert C-O bonds with silanes: ruling out a classical Ni(0)/Ni(II) catalytic couple and evidence for Ni(I) intermediates*
Cornellà, J.; Gómez-Benigoa, E.; Martín, R.
J. Am. Chem. Soc. **2013**, *135*, 1997.
- 32) *Nickel-catalyzed decarbonylative C-H coupling reaction: a strategy for preparing bis(heteroaryl)backbone*
Correa, A.; Cornellà, J.; Martín, R.
Angew. Chem. Int. Ed. **2013**, *52*, 1878.
- **Most read article in January 2013**
- 33) *Recent advances in the synthesis and application of benzocyclobutenones and related compounds*
Flores-Gaspar, A.; Martin, R.
Synthesis **2013**, *45*, 563.
- 34) *Cu-catalyzed mild C(sp²)-H functionalization assisted by carboxylic acids en route to hydroxylated arenes*
Gallardo Donaire, J.; Martin, R.
J. Am. Chem. Soc. **2013**, *135*, 9350.
- **Most read article in June 2013**
- 35) *Fe-catalyzed regiodivergent [1,2]-shift of α -aryl aldehydes*
Gutiérrez-Bonet, A.; Flores-Gaspar, A.; Martin, R.
J. Am. Chem. Soc. **2013**, *135*, 12576.

- **Most read article in August 2013**
- 36) *Ni-catalyzed stereoselective arylation of inert C-O bonds at low temperatures*
Cornellà, J.; Martin, R.
Org. Lett. **2013**, *15*, 6298.
- **Highlighted in SynFacts 2014, Issue 3**
- 37) *Stereoselective synthesis of 2-acetamido-1,2-dideoxyallonojirimycin (DAJNAc), a new potent hexosaminidase inhibitor*
de la Fuente, A.; Martin, R.; Mena-Barragán, T.; Verdaguer, X.; García-Fernández, J. M.; Mellet, C. O.; Riera, A.
Org. Lett. **2013**, *15*, 3638.
- 38) *Ni-catalyzed carboxylation of C(sp²)- and C(sp³)-O bonds with CO₂*
Correa, A.; León, T.; Martin, R.
J. Am. Chem. Soc. **2014**, *136*, 1062.
- **Most read article in January 2014**
- 39) *A mild Ni/Cu-catalyzed silylation via C-O cleavage*
Zarate, C.; Martin, R.
J. Am. Chem. Soc. **2014**, *136*, 223.
- **Most read article in February 2014**
- 40) *Ni-catalyzed direct reductive amidation via C-O bond-cleavage*
Correa, A.; Martin, R.
J. Am. Chem. Soc. **2014**, *136*, 7253.
- **Most read article in May 2014**
- 41) *Metal-catalyzed reductive coupling reactions of organic halides with carbonyl-type compounds*
Moragas, T.; Correa, A.; Martin, R.
Chem. Eur. J. **2014**, *20*, 8242.
- **Most accessed paper in June 2014**
- 42) *Ni-catalyzed carboxylation of unactivated primary alkyl bromides and sulfonates with CO₂*
Liu, Y.; Cornellà, J.; Martin, R.
J. Am. Chem. Soc. **2014**, *136*, 11212.
- **Most accessed paper in August 2014**
- 43) *Ni-catalyzed reductive cleavage of methyl 3-methoxy-2-naphthoate*

- Cornellà, J.; Zarate, C.; Martin, R.
Org. Synth. 2014, 91, 260.
- 44) *Mild Aryl-catalyzed C(sp²)-H or C(sp³)-H functionalization/C-O formation: a intriguing catalyst-controlled selectivity switch*
Wang, X.; Gallardo-Donaire, J.; Martin, R.
Angew. Chem. Int. Ed. 2014, 53, 11084.
- **Highlighted in SynFacts 2014, Issue 2**
- 45) *Metal-catalyzed activation of ethers via C-O bond-cleavage: a new strategy for molecular diversity*
Cornellà, J.; Zarate, C.; Martin, R.
Chem. Soc. Rev. 2014, 43, 8081.
- **Most read article in August 2014**
- 46) *Ligand-controlled regiodivergent Ni-catalyzed reductive carboxylation of allyl esters with CO₂*
Moragas, T.; Cornellà, J.; Martin, R.
J. Am. Chem. Soc. 2014, 136, 17702.
- **Most read article in December 2014**
- 47) *Nickel-catalyzed enantioselective C-C bond-formation through C(sp²)-O cleavage in aryl esters*
Cornella, J.; Jackson, E.; Martin, R.
Angew. Chem. Int. Ed. 2015, 54, 4075.
- **Highlighted in Synfacts 2015, issue 4, 389**
- 48) *Nickel-catalyzed chemo-, regio- and diastereoselective bond-formation through proximal C-C cleavage of benzocyclobutenones*
Juliá-Hernández, F.; Ziadi, A.; Nishimura, A.; Martin, R.
Angew. Chem. Int. Ed. 2015, 54, 9537.
- 49) *Ni-catalyzed divergent cyclization/carboxylation of unactivated primary and secondary alkyl halides with CO₂*
Wang, X.; Liu, Y.; Martin, R.
J. Am. Chem. Soc. 2015, 137, 6476.
- **Most read article in May 2015**
- 50) *Ipsoborylation of aryl ethers via Ni-catalyzed C-OMe cleavage*
Zarate, C.; Manzano, R.; Martin, R.
J. Am. Chem. Soc. 2015, 137, 6754.
- **Most read article in May 2015**

- 51) *Ni-catalyzed regioselective hydrocarboxylation of alkynes with CO₂ by using simple alcohols as proton sources*
Wang, X.; Nakajima, M.; Martin, R
J. Am. Chem. Soc. **2015**, *137*, 8924.
• **Most read article in July 2015**
- 52) *Ni-catalyzed borylation of aryl fluorides via C-F cleavage*
Liu, X.-W.; Echavarren, J.; Zarate, C.; Martin, R
J. Am. Chem. Soc. **2015**, *137*, 12470.
• **Most accessed article in September 2015**
- 53) *Ni-catalyzed carboxylation of benzylic C-N bonds with CO₂*
Moragas, T.; Gaydou, M.; Martin, R*
Angew. Chem. Int. Ed. **2016**, *55*, 5053.
• **Most read article in March 2016**
- 54) *Pd-catalyzed C(sp³)-H functionalization/carbenoid insertion: all-carbon quaternary centers via multiple C-C bond formation*
Gutiérrez-Bonet, A.; Juliá-Hernández, F.; de Luis, B.; Martin, R
J. Am. Chem. Soc. **2016**, *138*, 6384.
• **Most read article in May 2016**
- 55) *Nickel-catalyzed reductive amidation of unactivated alkyl bromides*
Serrano, E.; Martin, R
Angew. Chem. Int. Ed. **2016**, *55*, 11207.
• **Selected as very Important Paper**
• **Most accessed articles in July 2016**
- 56) *Ni-catalyzed carboxylation of unactivated alkyl chlorides with CO₂*
Börjesson, M.; Moragas, T.; Martin, R
J. Am. Chem. Soc. **2016**, *138*, 7504.
• **Most read article in June 2016**
• **Highlighted in Science, vol.353, issue 6295, pp.134**
- 57) *Ni-catalyzed reductive carboxylation of cyclopropyl motifs with carbon dioxide*

- Moragas, T.; Martin, R
Synthesis. **2016**, *48*, 2816.
- 58) *Ni- and Fe-catalyzed carboxylation of unsaturated hydrocarbons with CO₂*
Juliá-Hernández, F; Gaydou, M; Serrano, E; Van Gemmeren, M.; Martin, R
Top Curr Chem. **2016**, *374*, 45
- 59) *Metal-catalyzed carboxylation of organic (pseudo)halides with CO₂*
Börjesson, M.; Moragas, T.; Gallego, D.; Martin, R
ACS Catal. **2016**, 6739.
- **ACS Editor's Choice**
 - **Most read article in October 2016**
- 60) *Phenol derivatives: modern electrophiles in cross-coupling reactions*
Zárate, C.; van Gemmeren, M.; Somerville, R.J.; Martin, R
Advances in Organometallic Chemistry, Elsevier, 2016, *66*, 143.
- 61) *Alkyl bromides as mild hydride sources in Ni-catalyzed hydroamidation of alkynes with isocyanates*
Wang, X.; Nakajima, M.; Serrano, E.; Martin, R
J. Am. Chem. Soc. **2016**, *138*, 15531.
- **Most read article in December 2016**
- 62) *Visible light-promoted atom transfer radical cyclization of unactivated alkyl iodides*
Shen, Y.; Cornella, J.; Juliá-Hernández, F.; Martin, R
ACS Catal. **2017**, *7*, 409.
- **Most read article in January 2017**
- 63) *Versatile synthesis and enlargement of functionalized distorted heptagon-containing nanographenes*
Marquez, I; Fuentes, N; Cruz, C; Puente-Muñoz, V; Sotorrios, L; Marcos, M.L; Choquesillo-Lazarte, D; Biel, B; Crovetto, L; Gomez-Bengoia, E; Gonzalez, M.T; Martín, R; Cuerva, J .M; G.Campaña, A.
Chem. Sci. **2017**, *8*, 1068.
- **Highlighted in SynFacts, Issue 13, 34**
- 64) *A mild and ligand-free Ni-catalyzed silylation via C-OMe cleavage*

Zarate, C.; Nakajima, M.; Martin, R.

J. Am. Chem. Soc. **2017**, *139*, 1191.

- **Most read article in January 2017**

- 65) *Ni-catalyzed stannylation of aryl esters via C-O bond cleavage*

Gu, Y.; Martin, R.

Angew. Chem. Int. Ed. **2017**, *56*, 3187.

- **Most accessed articles in February 2017**

- 66) *Switchable Site-Selective Catalytic Carboxylation of Allylic Alcohols with CO₂*

van Gemmeren, M.; Börjesson, M.; Tortajada, A.; Sun, S-Z.; Okura, K.; Martin, R.

Angew. Chem. Int. Ed. **2017**, *56*, 6558.

- **Most accessed articles in May 2017**

- 67) *Forging C-C bonds through decarbonylation of aryl ketones*

Somerville, R.J.; Martin, R.

Angew. Chem. Int. Ed. **2017**, *56*, 6708.

- **Most accessed articles in May 2017**

- 68) *Remote Carboxylation of Halogenated Aliphatic Hydrocarbons with Carbon Dioxide*

Juliá-Hernández, F.; Moragas, T.; Martin, R.

Nature **2017**, *545*, 84.

- **Highlighted in C&EN, Chemistry World, Chemistry Views and Nature News and Views.**

- 69) *Visible-Light-Driven Carboxylation of Aryl Halides by the Combined Use of Palladium and Photoredox Catalysts*

Shimomaki, K.; Murata, K.; Martin, R.; Iwasawa, N.

J. Am. Chem. Soc. **2017**, *139*, 9467.

- **Most accessed articles in July 2017**

- 70) *Catalytic Intermolecular Dicarbonylation of Styrenes with CO₂ and Radical Precursors*

Yatham, V.R.; Shen, Y.; Martin, R.

Angew. Chem. Int. Ed. **2017**, *56*, 10915.

- **Most accessed articles in August 2017**

- 71) *Site-Selective Catalytic Carboxylation of Unsaturated Hydrocarbons with CO₂ and Water*
Gaydou, M.; Moragas, T.; Juliá-Hernandez, F.; Martin, R.
J. Am. Chem. Soc. **2017**, *139*, 12161.
• **Most accessed articles in August 2017**
- 72) *Stereospecific Nickel-Catalyzed Borylation of Secondary Benzyl Pivalates*
Martin-Montero, R.; Krolikowski, T.; Zárate, C.; Martin, R.
Synlett **2017**, *28*, 2604.
• **Invited article for the “Cluster C-O Activation”**
- 73) *Author Profile-Rubén Martin*
Angew. Chem. Int. Ed. **2017**, *57*, 1444
- 74) *Walking Metals for Remote Functionalization*
Sommer, H.; Juliá-Hernandez, F.; Martin, R.; Marek, I.
ACS Cent. Sci. **2018**, *4*, 2, 153.
• **Most read article in February 2018**
- 75) *Ni-Catalyzed Site-Selective Dicarboxylation of 1,3-Dienes with CO₂*
Tortajada, A.; Ninokata, R.; Martin, R.
J. Am. Chem. Soc. **2018**, *140*, 2050.
• **Most read article in February 2018**
• **Highlighted in Chemistry Views**
- 76) *Nickel-Catalyzed Umpolung Arylation of Ambiphilic α -Bromoalkyl Boronic Esters*
Sun, S.Z.; Martin, R.
Angew. Chem. Int. Ed. **2018**, *57*, 3622.
- 77) *Forging Amide Bonds via Metal-Catalyzed Cross-Coupling*
Serrano, E.; Martin, R.
Eur. J. Org. Chem. **2018**, *24*, 3051.
- 78) *Transition metal-catalyzed carboxylation reactions with carbon dioxide*
Tortajada, A.; Juliá-Hernández, F.; Börjesson, M.; Moragas, T.; Martin, R.
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- 79) *Intermediacy of Ni–Ni species in sp² C–O bond cleavage of aryl esters: relevance in catalytic C–Si Bond Formation*
Somerville, R.; Hale, L.; Gomez-Bengoa, E.; Burés, J.; Martin, R.

- J. Am. Chem. Soc.* **2018**, *140*, 8771.
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 - **Highlighted in Organic Process & Development**
- 80) *sp³ C-H Arylation and Alkylation Enabled by the Synergy of Triplet Excited Ketones and Nickel Catalysts*
Shen, Y.; Gu, Y.; Martin, R.
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- 81) *Site-Selective Ni-Catalyzed Reductive Coupling of α -Haloboranes with Unactivated Olefins*
Sun, S.Z.; Börjesson, M.; Martin-Montero, R.; Martin, R.
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- 82) *Base-Mediated Defluorosilylation of sp^2 & sp^3 C-F Bonds*
Liu, X.W.; Zarate, C.; Martin, R.
Angew. Chem. Int. Ed. **2019**, *58*, 2064.
- 83) *A Mild and Direct Site-Selective sp^2 C-H Silylation of (Poly)Azines*
Gu, Y.; Shen, Y.; Zarate, C.; Martin, R.
J. Am. Chem. Soc. **2019**, *141*, 127.
- **Most read article in January 2019**
- 84) *N-Containing Heterocycles on Demand by Merging Ni Catalysis and Photoredox PCET*
Börjesson, M.; Tortajada, A.; Martin, R.
Chem. **2019**, *5*, 254.
- 85) *Ni-catalyzed Reductive Deaminative Arylation at sp^3 Carbon Centers*
Martin-Montero, R.; Reddy Yatham, V.; Yin, H.; Davies, J.; Martin, R.
Org. Lett. **2019**, *21*, 2947.
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 - **ACS Editor's Choice**
- 86) *Site-Selective, Remote sp^3 C-H Carboxylation Enabled by the Merger of Photoredox and Nickel Catalysis*
Martin, R.; Sahoo, B.; Bellotti, P.; Julià-Hernández, F.; Meng, Q.Y.; Crespi, S.; König, B.
Chem. Eur. J. **2019**, *25*, 9001.
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Tortajada, A.; Duan, Y.; Sahoo, B.; Cong, F.; Toupallas, G.; Sallustrau, A.; Loreau O.; Audisio, D.; Martin, R.

ACS Catal. **2019**, *9*, 5897.

- **Most read ACS Catal. article in June 2019**

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Sun, S.Z.; Romano, C.; Martin, R.

J. Am. Chem. Soc. **2019**, *141*, 16197.

- **Most read article in September 2019**

- **Highlighted in the October 2019 Spotlights on Recent JACS Publications**

89) *Tackling Remote sp³ C-H Functionalization via Ni-Catalyzed “chain-walking” Reactions*

Janssen-Müller, D.; Sahoo, B.; Sun, S.Z.; Martin, R.

Isr. J. Chem. **2020**, *60*, 195.

90) *Dual Catalytic Platform for Enabling sp³ a C-H Arylation & Alkylation of Benzamides*

Rand, A.W.; Yin, H; Xu, L.; Giacoboni, J.; Martin-Montero, R.; Romano, C.; Montgomery, J.; Martin, R.

ACS Catal. **2020** *10*, 4671.

91) *Ni(I)-Alkyl Complexes Bearing Phenanthroline Ligands: Experimental Evidence for CO₂ Insertion at Ni(I) Centers*

Somerville, R.; Odena, C.; Obst, M.; Hazari, N.; Hopmann, K.; Martin, R.

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- **Most read article in July 2020**

92) *Ni-Catalyzed Carboxylation of C(sp²)-S Bonds with CO₂: Evidence for the Multifaceted Role of Zn*
Yanagi, T.; Somerville, R.J.; Nogi, K.; Martin, R.; Yorimitsu, H.

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Sun, S.Z.; Duan, Y.; Mega, R.S.; Somerville, R.J.; Martin, R.

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Gu, Y.; Duan, Y.; Shen, Y.; Martin, R.

Angew. Chem. Int. Ed. **2020**, *59*, 2061.

- **Among the 10% most download paper in Angewandte Chemie International**

95) *Remote sp² C-H Carboxylation via Catalytic 1,4-Ni Migration with CO₂*

Börjesson, M.; Janssen-Müller, D.; Sahoo, B.; Duan, Y.; Wang, X.; Martin, R.

J. Am. Chem. Soc. **2020**, *142*, 16234.

- **Most read article in September 2020**

- **Highlights in Chemical Synthesis**

- 96) *Dual Catalytic Strategy for Forging sp^2 - sp^3 and sp^3 - sp^3 Architectures via β -Scission of Aliphatic Alcohol Derivatives*

Cong, F.; Lyv, X.Y.; Day, C.S.; Martin, R.

J. Am. Chem. Soc. **2020**, *142*, 20594.

- **Most read article in November 2020**

- **Highlights in Synfacts**

- 97) *Deciphering the dichotomy exerted by Zn(II) in the catalytic sp^2 C-O bond functionalization of aryl esters at the molecular level*

Day, C.S.; Somerville, R.J.; Martin, R.

Nat Catal. **2021**, *4*, 124.

- 98) *Ni-Catalyzed Carboxylation of Aziridines en route to β -Amino Acids*

Davies, J.; Janssen-Müller, D.; Zimin, D.P.; Day, C.S.; Yanagi, T.; Elfert, J.; Martin, R.

J. Am. Chem. Soc. **2021**, *143*, 4949.

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- 99) *sp^3 Bis-Organometallic Reagents via Catalytic 1,1-Difunctionalization of Unactivated Olefins*

Sun, S.Z.; Talavera, L.; Spiess, P.; Day, C.S.; Martin, R.

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- 100) *Nickel-catalyzed Photodehalogenation of aryl Bromides*

Higginson, B.; Sanjosé-Orduna, J.; Gu, Y.; Martin, R.

Synlett **2021**, *32*, 1633.

- 101) *Site-Selective Defluorinative sp^3 C-H Alkylation of Secondary Amides*

Yue, W.J.; Day, C.S.; Gu, Y.; Martin, R.

J. Am. Chem. Soc. **2021**, *143*, 6395.

- **Most read article in May 2021**

- 102) *Ligand-Controlled Regiodivergent Catalytic Amidation of Unactivated Secondary Alkyl Bromides*

Tortajada, A.; MenezesCorreia, J.T.; Serrano, E.; Monleón, A.; Tampieri, A.; Day, C.S.; Juliá-Hernandez, F.; Martin, R.

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- 103) *Low-valent tungsten catalysis enables site-selective isomerization/hydroboration of unactivated alkenes*

Jankins, T.; Martin-Montero, R.; Cooper, P.; Martin, R.; Engle, K.
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- 104) *Nickel-catalyzed reductive carboxylation and amidation reactions*
Tortajada, A.; Börjesson, M.; Martin, R.
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- 105) Cluster Preface: Modern Nickel-Catalyzed Reactions
Martin, R.; Molander, G. A.
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- 106) *Mechanistic studies into visible light-driven carboxylation of aryl halides/triflates by the combined use of Palladium and photoredox catalysis*
Toriumi, N.; Shimomaki, K.; Caner, J.; Murata, K.; Martin, R.; Iwasawa, N.
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Davies, J.; Lyonett, J.; Zimin, D.; Martin, R.
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Sau, M.; Pericas, M. A.; Martin, R.
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 Yue, W. J.; Day, C. S.; Brenes Rucinski, A. J.; Martin, R.
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- **ACS Editor's Choice**

- **Most read article in 2022**

- **Highlights in Organic Chemistry**

- 117) *Room-temperature stable magnesium electride via Ni(II) reduction*
 Day, C. S.; Dat Do, C.; Odena, C.; Benet-Buchholz, J.; Xu, L.; Foroutan-Nejad, C.; Hopmann, K. H.; Martin, R.
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- **Highlights in Chemistry World**

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- Organometallics* **2022**, 41, 2662.
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- 129) *1,2-Arylsulfonylation of Vinyl Ethers and Esters Enabled by Dual Ni Catalysis*

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- 135) *Recent Advances in Ni-Catalyzed 1,1-difunctionalization of Unactivated Olefins*
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Dedicated to Prof. Miquel A. Pericàs
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Davies, J.; Lyonnet, J.; Carvalho, B.; Sahoo, B.; Day, C.S.; Juliá-Hernández, F.; Duan, Y.; Velasco-Rubio, A.; Obst, M.; Norrby, P.O.; Hopmann, K.H.; Martin, R.
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- Chen, J.; Tan-Kang, C.; Rodrialvarez, J.; Zhang, S.; Martin, R.
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Nat. Synth. **2024**, 3, 1188 <https://doi.org/10.1038/s44160-024-00586-6>
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Romano, C.; Martin, R.
Nat Rev Chem **2024**, 8, 833 <https://doi.org/10.1038/s41570-024-00649-4>
- 144) *Regiodivergent Radical-Relay Alkene Dicarbofunctionalization*
Liu, Z.; D'Amico, F.; Martin, R.
J. Am. Chem. Soc. **2024**, 146, 28624 <https://doi.org/10.1021/jacs.4c10204>
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Chen, J.; Martin, R.
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- 144) *Photocatalytic Multicomponent Carboxylation of Olefins and Sulfinate Salts with ¹³CO₂*
Lyonnet, J.; VelascoRubio, A.; Abrams, R.; Phan, H.; Mühlfenzi, K.; Chen, X.; Cerveri, A.; MenezesCorreia, J.T.; Paixão, M. W.; Elmore, C.S.; Martin, R.
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- 145) *Catalytic Deoxygenation of Unactivated 1,2-Diol Motifs via Light-Induced Spin-Center Shift*
Ordonez, J.; Brenes Rucinski, A. J.; Romano, C.; Martin, R.
ACS Catalysis **2025**, 15, 3499. <https://doi.org/10.1021/acscatal.4c07260>

Patents:

Palladium-catalyzed direct carboxylation of aryl bromides with carbon dioxide

Correa, A.; Martin, R

Institut Català d'Investigació Química (2009)

EP0938227

Catalytic carboxylation of activated alkanes and/or olefins

Juliá-Hernández, F.; Cornella, J; Martin, R.

Institut Català d'Investigació Química (2016)

163823362-1451

Photocatalyst system and use thereof in a photocatalytic process

Shen, Y.; Gu, Y.; Martin, R

Institut Català d'Investigació Química (2017)

EP17382772

Production of adipic acid and derivatives thereof

Tortajada, A.; Martin, R

Institut Català d'Investigació Química (2017)

EP17382245

Invited Presentations as Group Leader at ICIQ:

1. Universidad de Barcelona; Barcelona (Spain) May 2009
2. Instituto Universitario Química Organometálica "Enrique Moles"; Oviedo (Spain) July 2009
3. 2nd Annual New Year's Symposium; Aachen (Germany) January 2010
4. Max-planck Institut für Kohlenforschung; Mülheim an der Ruhr (Germany) January 2010
5. Universidad Rovira y Virgili; Tarragona (Spain) March 2010
6. Universidad Jaume I; Castellón (Spain) May 2010
7. 2nd Young EUCHEM Workshop; Regensburg (Germany) August 2010
8. GEQO-XXVIII Organometallic Meeting; Huelva (Spain) September 2010
9. 1st USA-Spanish Workshop; Benicassim (Spain) September 2010
10. 2nd China-Spain Bilateral Symposium (ICIQ); Tarragona (Spain) October 2010
11. 7th Young Researcher RSEQ-Sigma Aldrich Symposium; Valencia (Spain) November 2010
12. Bayer Cropscience; Frankfurt (Germany) December 2010
13. Universidad de Barcelona; Barcelona (Spain) February 2011
14. Queen Mary, University of London; London (England) March 2011
15. Instituto de Química Orgánica General (IQOG); Madrid (Spain) March 2011
16. Universidad de Santiago de Compostela; Santiago de Compostela (Spain) April 2011
17. Universidad de Huelva; Huelva (Spain) May 2011
18. ICIQ Summer School; Tarragona (Spain) July 2011 – 1st talk
19. ICIQ Summer School; Tarragona (Spain) July 2011 – 2nd talk
20. XXXIII Bienal de la Real Sociedad Española de Química; Valencia (Spain) July 2011
21. "New Frontiers in Organic Chemistry"; Beijing (China) September 2011

22. "ISIS-7 International Symposium on Integrated Synthesis"; Kobe (Japan) October 2011
23. Osaka University; Osaka (Japan) October 2011
24. Aarhus University; Aarhus (Denmark) November 2011
25. Eli Lilly; Alcobendas (Madrid) November 2011
26. Oxford University; London (UK) February 2012
27. Universidad Autónoma de Madrid (UAM); Madrid (Spain) February 2012
28. Universidad A Coruña; A Coruña (Spain) February 2012
29. Burgenstock Conferences; Brunnen (Switzerland) May 2012
30. Janssen Pharmaceutica-Toledo June 2012
31. 7th Asian European Symposium; Tarragona (Spain) July 2012
32. GRC Conference in Organometallic Chemistry; Newport (Rhode Island)(USA) July 2012
33. Novartis Pharmaceuticals; Boston (USA) July 2012
34. 244 ACS Meeting; Philadelphia (USA) August 2012
35. 5th International Forum on Homogeneous Catalysis SIOC; Shanghai (China) October 2012
36. East China Normal University (ECNU); Shanghai (China) October 2012
37. Wuhan University; Whuan (China) October 2012
38. École Polytechnique Fédérale de Lausanne (EPFL); Lausanne (Switzerland) October 2012
39. X SEQT MINI-SYMPOSIUM Segovia; Segovia (Spain) October 2012
40. 4^a Jornadas Red CASI; Palma de Mallorca (Spain) October 2012
41. BASF Symposium; Frankfurt (Germany) November 2012
42. Sanofi-Aventis; Frankfurt (Germany) Desember 2012
43. IGER-RCMS International Nagoya Symposium; Nagoya (Japan) January 2013
44. Kyoto University; Kyoto (Japan) January 2013
45. Munster University; Munster (Germany) January 2013
46. Syngenta; Stein (Switzerland) February 2013
47. Institute of Organic Chemistry (OCI); Zurich (Switzerland) February 2013
48. University of Liverpool; Liverpool (United Kingdom) March 2013
49. Université de Genève; Geneve (Switzerland) April 2013
50. University of Girona; Girona (Spain) April 2013
51. GRC Conference in Organic Reactions & Processes; Rhode Island (USA) July 2013
52. Silqcom-Polyomat 2013 Conference; Huatulco (Mexico) October 2013
53. New Perspectives in Asymmetric and Organometallic Chemistry;Valencia (Spain) November 2013
54. Consejo Superior Investigaciones Científicas (CSIC); Sevilla (Spain) April 2014
55. University Of Toulouse ;Toulouse (France) May 2014

56. Aachen University; Aachen (Germany) June 2014
57. Michigan University; Michigan (United States) July 2014
58. Challenges in Organic Chemistry (ISACS-14); Shanghai (China) August 2014
59. University of Shanghai; Shanghai (CHINA) August 2015
60. International Symposium on C-C Bond Cleavage; Kyoto (Japan) November 2014
61. 2nd International Conference on Organometallics and Catalysis; Nara (Japan) November 2014
62. University of Cambridge; Cambridge (United Kingdom) February 2015
63. ICIQ-Technion Symposium; Tarragona (Spain) February 2015
64. Bayer Healthcare workshop; Berlin (Germany) February 2015
65. Utah University; Utah (USA) April 2015
66. Indiana University; Indiana (USA) April 2015
67. UNICAT-ICIQ Summer School; Berlín (Germany) July 2015
68. ESOC; Lisboa (Portugal) July 2015
69. XXXV Reunión Bienal RSEQ; A Coruña (Spain) July 2015
70. Cambridge MIT Institute of Technology (MIT); Cambridge (USA) August 2015
71. University of Zaragoza; Zaragoza (Spain) September 2015
72. ETH-Zürich; Zürich (Switzerland) October 2015
73. University of Toulouse; Toulouse (France) October 2015
74. University of Köln; Köln (Germany) November 2015
75. Max-Planck Institut für Kohlenforschung; Mülheim an der Ruhr (Germany) November 2015
76. Aarhus University; Aarhus (Denmark) December 2015
77. Stratingh Institute for Chemistry; Groningen (Netherlands) February 2016
78. The Scripps Research Institute; San Diego (EEUU) March 2016
79. University of California; Irvine (EEUU) March 2016
80. 251st ACS National Meeting & Exposition; San Diego (EEUU) March 2016
81. University of Basel; Basel (Switzerland) April 2016
82. Janssen; Beerse (Belgium) April 2016
83. Actelion; Basel (Switzerland) May 2016
84. EPFL; Lausanne (Switzerland) May 2016
85. 9^{ème} Recontres de Chimie Organique de Marseille; Marseille (France) June 2016
86. SISOC XI; San Sebastian (Spain) July 2016
87. Princeton University; Princeton (EEUU) September 2016
88. Merck; Rahway (EEUU) September 2016
89. Pfizer Worldwide Research & Development; Groton (EEUU) September 2016

90. Upenn; Philadelphia (EEUU) September 2016
91. Symposium on C-O activation; Himeji (Japan) October 2016
92. Osaka University; Osaka (Japan) October 2016
93. Technion University; Haifa (Israel) January 2017
94. Weizman Institute; Rehobot (Israel) January 2017
95. Manchester University; Manchester (United Kingdom) March 2017
96. Münster University; Münster (Germany) April 2017
97. Green Chemistry Symposium Stockholm; Stockholm (Sweden) April 2017
98. University of Copenhagen; Copenhagen (Denmark) May 2017
99. Firmenich; Geneva (Switzerland) May 2017
100. OMCOS-19 Jeju; Jeju (South Korea) June 2017
101. Université Pierre and Marie Curie; Paris (France) June 2017
102. EUCOMC Amsterdam; Amsterdam (Netherlands) July 2017
103. ISOC 2017; San Benedetto del Tronto (Italy) September 2017
104. Geneva University; Geneva (Switzerland) September 2017
105. Symposium on nickel chemistry; Shanghai (China) October 2017
106. Chengdu University; Chengdu (China) October 2017
107. Liebig Lectureship.Bochum University; Bochum (Germany) November 2017
108. Liebig Lectureship.Heidelberg University; Heidelberg (Germany) November 2017
109. Liebig Lectureship.TU München; München (Germany) November 2017
110. Liebig Lectureship.Köln University; Köln (Germany) November 2017
111. Liebig Lectureship.TU Berlin; Berlin (Germany) November 2017
112. Liebig Lectureship.MPI Mülheim; Mülheim (Germany) November 2017
113. Einstein Workshop; Berlin (Germany) November 2017
114. Universität Regensburg; Regensburg (Germany) January 2018
115. Ludwig-Maximilians-Universität; Munich (Germany) January 2018
116. Trinity College; Dublin (Ireland) February 2018
117. University of Wisconsin; Madison (EEUU) February 2018
118. University of Illinois; Chicago (EEUU) February 2018
119. University of Urbana-Champaign; Champaign (EEUU) February 2018
120. 255th ACS National Meeting; New Orleans (EEUU) March 2018
121. Industrial Reserche Center Oril Industrie; Bolbec (France) April 2018
122. UCB Celltech; Slough (United Kingdom) April 2018
123. 53rd Burgenstock Conferences; Brunnen (Switzerland) May 2018

124. Universidad Autónoma de Madrid; Madrid (Spain) May 2018
125. XI International School on Organometallic Chemistry Marcial Moreno; Oviedo (Spain) June 2018
126. Balticum Organic Syntheticum; Tallin (Estonia) July 2018
127. Bristol-Myers Squibb Lecture; Boston (EEUU) July 2018
128. Osaka University; Osaka (Japan) October 2018
129. Kyoto University-Katsura campus; Kyoto (Japan) October 2018
130. Nagoya University; Nagoya (Japan) October 2018
131. University of Toronto; Toronto (Canada) October 2018
132. Barluenga Lectureship Symposium; Oviedo (Spain) November 2018
133. Autumn meeting French Chemical Society; Paris (France) November 2018
134. Novartis Chemistry Lectureship Cycle; Cambridge (EEUU) January 2019
135. Novartis Chemistry Lectureship Cycle; Basel (Switzerland) January 2019
136. Université de Montréal; Montréal (Canada) February 2019
137. Química para la Sociedad; Córdoba (Spain) March 2019
138. University of Bologna; Bologna (Italy) March 2019
139. Cambridge MIT Institute of Technology (MIT); Cambridge (USA) May 2019
140. Wolf Symposium in Chemistry; Haifa (Israel) May 2019
141. Markovnikov Congress on Organic Chemistry; Moscow (Rusia) June 2019
142. 26th International Symposium Synthesis in Organic Chemistry; Cambridge (UK) July 2019
143. Telluride Science Research Center; Telluride (EEUU) August 2019
144. Université de Lyon; Lyon (France) September 2019
145. Syngenta; Londres (United Kingdom) October 2019
146. University of Yale; Yale (EEUU) November 2019
147. 25th Conference Félix Serratosa; ICIQ (Spain) January 2020
148. CSIC ; Madrid (Spain) March 2020
149. Chemistry & Catalysis Research; Rome (Italy) March 2020
150. RCOM'11 Conference ; Marseille (France) May 2020
151. Universitu of Wuhan, Wuhan (China) May 2020
152. Bienal; Tenerife (Spain) June 2020
153. Boss XVII Congress; Namur (Belgium) July 2020
154. 11th Asian-European Symposium, Haifa (Israel) september 2020
155. CEFIPRA/IFCPAR Virtual Symposium on Organometallic Chemistry December 2020
156. Sanofi Aventis September 2020
157. School of Biomedical Engineerreing (United Kingdom) october 2020

158. Serratosa Lecture (Spain) April 2020
159. ACS Spring Meeting (EEUU) April 2021
160. IQOG (Spain) April 2021
161. ACS Fall Meeting (EEUU) August 2021
162. EUCOMC XXIV Meeting (Alcala de Henares, Spain), September 2021
163. EPFL (Lausanne, Switzerland), November 2021
164. 3M (St. Paul, United States), November 2021
165. EPFL (Lausanne, Switzerland), November 2021
166. 3rd Alpine Winter Conference (Vienna, Austria), January 2022
167. Paul Knochel's symposium (München, Germany), February 2022
168. University of Girona (Girona, Spain), May 2022
169. University of Kyoto (Kyoto, Japan), June 2022
170. University of Osaka (Osaka, Japan), June 2022
171. 22nd Tetrahedron symposium (Lisbon, Portugal), June 2022
172. BOSS XVII Meeting (Namur, Belgium), July 2022
173. Ischia Advanced School of Organic Chemistry (Ischia, Italy), September 2022
174. Barluenga Conference (Oviedo, Spain), October 2022
175. Chem Reaxys Meeting (virtual talk – China), October 2022
176. University of Shanghai (virtual talk – China), November 2022
177. CIQUS (Santiago, Spain). January 2023
178. 1st SCQ Meeting of Inorganic & Organometallic Chemistry (Barcelona, Spain), January 2023
179. Asian/European Symposium on Metal-Mediated Reactions (Haifa, Israel), February 2023
180. University of Columbia (New York, USA), February 2023
181. University of North Carolina Chapel Hill (Raleigh, USA), February 2023
182. Signature Discovery (London, UK), March 2023
183. Institute of Organic Chemistry (Warsaw, Poland), April 2023
184. Imperial College London (London, UK), May 2023
185. Adam Mickiewicz University (Warsaw, Poland), June 2023
186. 27th International Symposium (Oxford, UK), July 2023
187. Synthesis & Catalysis Workshop (Lisbon, Portugal), November 2023
188. Janssen-Cilag (Toledo, Spain), November 2023
189. Nanyang Technological University (Singapore), November 2023
190. National University of Singapore (Singapore), November 2023
191. University of Liverpool (Liverpool, UK), January 2024

192. University of Ottawa (Ottawa, Canada), February 2024
193. FloHet Meetings (University of Florida, USA), March 2024

Supervised PhD thesis:

- 1) **Selectivity Control in Pd-Catalyzed C-H functionalization reactions** (16/04/2013)
Areli Flores; Universitat Rovira i Virgili
- 2) **Synthesis of phthalides and benzolactones via catalytic C-H functionalization/C-O bond-formation** (12/06/2014)
Juan Gallardo; Universitat Rovira i Virgili
- 3) **Metal-catalyzed carbon-carbon bond-activation of strained molecules** (10/11/2014)
Asraa Ziadi; Universitat Rovira i Virgili
- 4) **Pd-catalyzed C-H Functionalization Reactions via the Intermediacy of Strained Metallacycles** (15/01/2016)
Álvaro Gutiérrez; Universitat Rovira i Virgili
- 5) **Ni-catalyzed Fixation of Heterocumulenes into Organic Matter and C-H Functionalization Reactions** (15/11/15)
Xueqiang Wang; Universitat Rovira i Virgili
- 6) **From Click Chemistry to Catalytic Cleavage of Unstrained C-C Bonds** (22/07/2016)
Míriam Sau; Universitat Rovira i Virgili
- 7) **C-heteroatom bond-formation via Ni-catalyzed C-O bond-cleavage** (27/01/2017)
Cayetana Zárata; Universitat Rovira i Virgili
- 8) **Amide Formation via Ni-Catalyzed Reductive Coupling Reactions with Isocyanates** (30/05/2018)
Eloísa Serrano; Universitat Rovira i Virgili
- 9) **Visible Light Photoredox Promoted Transformations of Inert Chemical Bonds** (12/11/2018)
Yangyang Shen; Universitat Rovira i Virgili
- 10) **C-H & C-O Functionalization by Silicon-Heteroatom Interelement Linkage** (25/11/19)
Yiting Gu; Universitat Rovira i Virgili
- 11) **Mechanisms of ni-Catalysed C-O Functionalisation and Carboxylation Reactions** (13/02/2020)
Rosemarie Somerville
- 12) **Ni-Catalyzed Reductive Carboxylation Reactions with Carbon Dioxide** (20/02/2020)
Marino Börjesson

- 13) **New strategies for C(sp³)-H functionalization (2/10/2020)**
Daniel Bafaluy
- 14) **Nickel-Catalyzed Reductive Carboxylation and Amidation of Organic Matter (24/11/2020)**
Andreu Tortajada
- 15) **Design of new C(sp³)-H functionalization through halogen catalysis (25/11/2020)**
Thomas Duhamel
- 16) **Ni-Catalyzed Reductive Coupling Reactions to Forge sp³ Carbon Linkages (15/12/2020)**
Shang-Zheng Sun
- 17) **Functionalization of Strong Sigma by Nickel and Tungsten Catalysis (15/01/2021)**
Raúl Martín
- 18) **Understanding Nickel Catalysis at the Molecular Level: Insights into C-O Functionalization and Electron Transfer Events (1/07/2022)**
Craig S. Day
- 19) **Catalytic transformations enabled by dual nickel/photoredox manifolds (17/11/2022)**
Bradley Higginson
- 20) **Forging sp³ Architectures via sp³ C-C Bond-Cleavage and 1,2-Alkylboration strategies (16/01/2023)**
Fei Cong
- 21) **Functionalisation of sp³ C-O Bonds and Olefins Enabled by Nickel Catalysis (21/09/2023)**
Laura Talavera
- 22) **Nickel/Copper-Catalyzed C-C and C-N Bond Forming Reactions to Forge sp³ Carbon Linkages (16/10/2023)**
Xinyang Lyu
- 23) **Unravelling Mechanistic Underpinnings of Organometallic Nickel Chemistry and Applications into Medicinal Chemistry (17/10/2023)**
Carlota Odena
- 24) **New Platforms for Incorporation of Fluorine-Containing Motifs (30/10/2023)**
Wenjun Yue
- 25) **Development of Novel Ni-Catalyzed Reductive Coupling Reactions of Aziridines (13/05/2024)**
Dmitry Zimin

26) **Carboxylative Methodologies via Photoredox Catalysis** (26/09/2024)

Julien Lyonnet

27) **Synthesis of Advanced Aliphatic Amines via Catalytic C (sp³) – N Bond-Formation or C(sp³)-H Functionalization** (12/12/2024)

Jinhong Chen

Mentorship

Former group members currently in academia:

1. Josep Cornella (MPI, Germany)
2. Arkaitz Correa (Universidad País Vasco, San Sebastian, Spain)
3. Chris Sandford (University of Darmouth, USA)
4. Yu Liu (Changchun University, China)
5. Areli Flores (Antonio Nariño University, Colombia)
6. Xueqiang Wang (Hunan University, China)
7. Manuel van Gemmeren (Kiel University, Germany)
8. Ciro Romano (Manchester University, UK)
9. Daniel Janssen-Müller (University of Göttingen, Germany)
10. Franz-Lucas Haut (Freie Universität Berlin, Germany)
11. Yasuhiro Okuda (Okayama University, Japan)
12. Francisco Juliá (University of Murcia, Spain)
13. Xiang-Wei Liu (Chengdu University, China)
14. Daniel Gallego (Universidad Tecnológica de Colombia, Colombia)
15. Veera Reddy (CSIR Indian Institute of Chemical Technology, India)
16. Yangyang Shen (Xi'an Jiaotong University, China)
17. Basudev Sahoo (CSIR Indian Institute of Chemical Technology, India)
18. Yiting Gu (Xi'an Jiaotong University, China)
19. Juzeng Ann (Baylor College of Medicine, China)
20. Andreu Tortajada (University of Freiburg, Germany)
21. Ruben Manzano (Universidad de Valladolid, Spain)
22. Jose Tiago Menezes (University of Sao Paulo, Brazil)
23. Craig Day (University of Copenhagen, Denmark)
24. ShangZheng Sun (School of Chemistry and Material Science, Hefei, China)

Awards Received by Group Members:

Arkaitz Correa (2011-2014) –Ramon y Cajal 2014

Cayetana Zárata (2015)- Suschem PhD Award

Xueqiang Wang (2015) -Eli Lilly PhD Award

Cayetana Zárata (2016) -Eli Lilly PhD Award

Eloísa Serrano (2017) -Eli Lilly PhD Award

Andreu Tortajada (2017) –Extraordinary Master Prize

Cayetana Zárata (2018) -Extraordinary PhD prize, Universitat Rovira i Virgili

Andreu Tortajada (2018) –Reaxys-RSEQ Early Research Award

Francisco Julià-Hernández (2018) –Suschem Postdoc Award

Andreu Tortajada (2019) – Suschem Predoc Award

Shangzheng Sun (2021) – Extraordinary PhD prize, Universitat Rovira I Virgili

Craig S. Day (2022) – Extraordinary PhD prize, Universitat Rovira I Virgili

Craig S. Day (2022) – Eli Lilly PhD Award

Carlota Odena (2024) – Extraordinary PhD prize, Universitat Rovira I Virgili