

CV

PERSONAL INFORMATION

Family name, First name: **Francisco Juliá-Hernández**

Place and date of birth: Cieza (Murcia). Spain. 11th January 1984.

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SUMMARY

Francisco was born and raised in Cieza, a small town located in the south east of Spain. He studied Chemistry at the University of Murcia (Spain) and obtained his BSc in 2007 and his MSc in 2008.

PhD Studies

In 2012, Francisco obtained his PhD degree under the supervision of Prof Vicente and Prof Arcas in the Department of Inorganic Chemistry at the University of Murcia. In Murcia, he worked in the synthesis of high-valent organometallic palladium complexes.

Postdoctoral Studies

After receiving his PhD degree, Francisco moved to the UK to join the group of Prof Igor Larrosa at Queen Mary University of London. In London, Francisco worked in the development of novel catalytic methods for the direct arylation of aromatic compounds.

In 2014, Francisco was awarded a COFUND postdoctoral fellowship (Marie Curie Actions) and joined the group of Prof Ruben Martin at the Institute of Chemical Research of Catalonia (ICIQ) in Spain. His work focused on catalytic organic synthesis including C-H and C-C functionalization, carboxylation with carbon dioxide and photocatalysis.

Independent Career

In November 2018, Francisco was appointed Assistant Professor in Synthetic Organic Chemistry in the Department of Organic Chemistry at Stockholm University (Sweden).

In June 2020, Francisco received a "Ramon y Cajal" position and joined the Department of Inorganic Chemistry at the University of Murcia (Spain), where he leads a research group ([FJH Research](#)) on the development of synthetic methodologies using Earth-abundant metal photocatalysis.

ACADEMIC CAREER

<u>2020/06–</u>	Ramon y Cajal Researcher (Assistant Professor). Department of Inorganic Chemistry. University of Murcia (Spain).
<u>2018/11–2020/05</u>	Assistant Professor in Synthetic Organic Chemistry. Department of Organic Chemistry. Stockholm University (Sweden).
<u>2014/07–2018/08</u>	Postdoctoral Research Fellow (COFUND). Institute of Chemical Research of Catalonia (ICIQ, Spain). Supervisor: Prof Ruben Martin.

- 2012/05–2014/05 **Postdoctoral Research Assistant.** Queen Mary University of London (UK).
Supervisor: Prof Igor Larrosa.
- 2007/09–2012/03 **PhD in Chemistry.** University of Murcia (Spain).
Supervisors: Prof Jose Vicente and Prof Aurelia Arcas.
- 2007/09–2008/09 **MSc in Molecular Chemistry.** University of Murcia (Spain).
Supervisors: Prof Jose Vicente and Prof Aurelia Arcas by the University of
- 2002/09–2007/07 **BSc in Chemistry.** University of Murcia (Spain).

PUBLICATIONS

- (26) *Photocatalytic pathways for hydrochlorination.*
F. Juliá-Hernández*
Nature Synth. **2025**, doi:10.1038/s441160-024-00703-5.
- (25) *Attaching CF₃ groups to organic molecules using trifluoroacetates via ion-shielding photoelectrocatalysis.*
P. Visiedo-Jiménez, **F. Juliá-Hernández***
Sci. China Chem. **2024**, doi:10.1007/s11426-024-2477-6.
- (24) *Kinetically-controlled Ni-catalyzed direct carboxylation of unactivated secondary alkyl bromides without chain walking*
J. Davies, J. R. Lyonnet, B. Carvalho, B. Sahoo, C. S. Day, **F. Juliá-Hernández**, Y. Y. Duan, A. Velasco-Rubio, M. Obst, P.-O. Norrby,* K. H. Hopmann,* R. Martin*
J. Am. Chem. Soc. **2024**, 146, 1753.
- (23) *Direct decarboxylation of trifluoroacetates enabled by iron photocatalysis*
S. Fernández-García, V. O. Chantzakou, **F. Juliá-Hernández***
Angew. Chem. Int. Ed. **2024**, 63, e202311984.
(Among the most accessed articles in 2024 in Angew Chem)
- (22) *Ligand-Controlled Regiodivergent Catalytic Amidation of Unactivated Secondary Alkyl Bromides*
A. Tortajada, J. Correira, E. Serrano, A. Monleon, A. Tampieri, C. S. Day, **F. Juliá-Hernández**, R. Martin.*
ACS Catal. **2021**, 11, 10223-10227.
- (21) *Site-Selective, Remote C(sp³)-H Carboxylation Enabled by the Merger of Photoredox and Nickel Catalysis*
B. Sahoo, P. Bellotti, **F. Juliá-Hernández**, Q.-Y. Meng, S. Crespi, B. König,* R. Martin.*
Chem. Eur. J. **2019**, 25, 9001-9005.
- (20) *Transition Metal-Catalyzed Carboxylation Reactions with Carbon Dioxide.*
A. Tortajada, **F. Juliá-Hernández**, M. Borjesson, T. Moragas, R. Martin.*
Angew. Chem. Int. Ed. **2018**, doi: 10.1002/anie.201803186.

- (19) *Walking Metals for Remote Functionalization.*
F. Juliá-Hernández,[†] H. Sommer,[†] R. Martin*, I. Marek.*
[†] Equal contribution
ACS Cent. Sci. **2018**, *4*, 153-165.
- (18) *Kinetics and Mechanistic Insights into the Acetate-Assisted Dimerization of Terminal Alkynes under Ruthenium and Acid Promoted (RAP) Catalysis.*
R. Salvio, **F. Juliá-Hernández**, L. Pisciotanni, R. Mendoza-Meroño, S. García-Granda, M. Bassetti.*
Organometallics **2017**, *36*, 3830-3840.
- (17) *Site-Selective Catalytic Carboxylation of Unsaturated Hydrocarbons with CO₂ and Water.*
F. Juliá-Hernández,[†] T. Moragas,[†] M. Gaydou,[†] R. Martin.*
[†] Equal contribution
J. Am. Chem. Soc. **2017**, *139*, 12161-12164.
(Among the most read JACS articles in September 2017)
- (16) *Remote Carboxylation of Halogenated Aliphatic Hydrocarbons with CO₂.*
F. Juliá-Hernández, T. Moragas, J. Cornella, R. Martin.*
Nature **2017**, *545*, 84-89.
(Highlighted in [C&EN](#), [Chemistry World](#), [Chemistry Views](#) and [Nature News and Views](#))
- (15) *Visible Light-Promoted Atom Transfer Radical Cyclization of Unactivated Alkyl Iodides.*
Y. Shen, J. Cornella, **F. Juliá-Hernández**,* R. Martin.*
ACS Catal. **2017**, *7*, 409-412.
(* F.J.-H. and R.M. as corresponding authors. Among the most accessed articles in January 2017)
- (14) *Ni- and Fe-catalyzed Carboxylation of Unsaturated Hydrocarbons with CO₂.*
F. Juliá-Hernández, M. Gaydou, E. Serrano, M. van Gemmeren, R. Martin.*
Top. Curr. Chem. (Z) **2016**, *374*, 45.
- (13) *Pd-catalyzed C(sp³)-H Functionalization/Carbenoid Insertion: Quaternary Carbon Stereocenters via Multiple C–C Bond-Formation.*
A. Gutiérrez-Bonet, **F. Juliá-Hernández**, B. de Luis, R. Martin.*
J. Am. Chem. Soc. **2016**, *138*, 6384-6387.
(Among the most read JACS articles in May 2016)
- (12) *Ru-Catalyzed C–H Arylation of Fluoroarenes with Aryl Halides.*
M. Simonetti, G. J. P. Perry, X. C. Cambeiro, **F. Juliá-Hernández**, J. N. Arokianathar, I. Larrosa.*
J. Am. Chem. Soc. **2016**, *138*, 3596-3606.
- (11) *Room Temperature Direct β -Arylation of Thiophenes and Benzo[b]thiophenes and Kinetic Evidence for a Heck-type Pathway.*
C. Colletto, S. Islam, **F. Juliá-Hernández**, I. Larrosa.*
J. Am. Chem. Soc. **2016**, *138*, 1677-1683.
- (10) *Nickel-catalyzed Chemo-, Regio- and Diastereoselective Bond Formation through Proximal C–C Cleavage of Benzocyclobutenones.*
F. Juliá-Hernández, A. Ziadi, A. Nishimura, R. Martin.*
Angew. Chem. Int. Ed. **2015**, *54*, 9537-9541.

- (9) *Pd(II)-catalyzed deprotection of acetals and ketals containing acid sensitive functional groups.*
F. Juliá-Hernández, A. Arcas, J. Vicente.*
Tetrahedron Lett. **2014**, 55, 1141-1144.
- (8) *Metalation dictates remote regioselectivity: Ruthenium-catalyzed functionalization of meta aryl C–H bonds.*
F. Juliá-Hernández, M. Simonetti, I. Larrosa.*
Angew. Chem. Int. Ed. **2013**, 52, 11458-11460.
- (7) *Synthesis and hydrolysis of cationic Palladium(II) 2,6-diacetylpyridine dimethyl ketal complexes. Cyclopalladation of 2,6-diacetylpyridine. Palladium-catalyzed synthesis of a 1,5-benzodiazepine.*
F. Juliá-Hernández, A. Arcas, D. Bautista, J. Vicente.*
Organometallics **2012**, 31, 3736-3744.
- (6) *Providing support in favour of the existence of a Pd(II)/Pd(IV) catalytic cycle in a Heck-type reaction.*
F. Juliá-Hernández, A. Arcas, J. Vicente.*
Chem. Eur. J. **2012**, 18, 7780-7786.
- (5) *Synthesis of a Palladium(IV) complex by oxidative addition of an aryl halide to Palladium(II) and its use as precatalyst in a C–C coupling reaction.*
 J. Vicente,* A. Arcas, **F. Juliá-Hernández**, D. Bautista.
Angew. Chem. Int. Ed. **2011**, 50, 6896-6899.
 (Selected as Hot Paper in Angewandte Chemie)
- (4) *Synthesis, isolation and characterization of a triiodo organometallic Palladium(IV) complex. Quantitative and regioselective synthesis of two C–I reductive elimination products.*
 J. Vicente,* A. Arcas, **F. Juliá-Hernández**, D. Bautista.
Inorg. Chem. **2011**, 50, 5339-5341.
- (3) *Quantitative synthesis and full characterization of the first isolated and stable pincer Palladium(IV) complexes. Quantitative and regioselective synthesis of the C–X (X = Cl, Br) reductive elimination products.* J. Vicente,* A. Arcas, **F. Juliá-Hernández**, D. Bautista.
Chem. Commun. **2010**, 46, 7253-7255.
- (2) *Organometallic complexes of Palladium(II) derived from 2,6-diacetylpyridine dimethylketal.*
 J. Vicente,* A. Arcas, **F. Juliá-Hernández**, D. Bautista, P. G. Jones.
Organometallics **2010**, 29, 3066-3076.
- (1) *Synthesis of bis(2,6-dinitroaryl)palladium(II) and mono(2,6-dinitroaryl)platinum(II) complexes. A new example of the transphobia effect and of transmetalation from Pt to Hg.*
 J. Vicente,* A. Arcas, M. D. Gálvez-López, **F. Juliá-Hernández**, D. Bautista, P. G. Jones.
Organometallics **2008**, 27, 1582-1590.

PATENTS

- (2) *Catalytic Carboxylation of Activated Alkanes and/or Olefins.*
F. Juliá-Hernández, J. Cornella, R. Martín. EP16382336 (2016).

- (1) *Organometallic Pd(II) complex and its use in the hydrolysis of ketals and acetals.*
J. Vicente, A. Arcas, **F. Juliá-Hernández**. ES20100031021 20100702.

INVITED TALKS

- (6) II Gregorio Asensio Symposium. Valencia. 10/01/2025.
- (5) Organic Synthesis seminars. University of Greenwich (UK). 03/04/2024.
- (4) Kekulé Institute of Organic Chemistry. University of Bonn (Germany). 24/10/2023.
- (3) Trends in Photocatalysis seminar series. Oulu University (Norway). 16/02/2023.
- (2) XV Symposium Young Researchers RSEQ/JIQ-Merck. Toledo (Spain). November 2018.
- (1) Department of Organic Chemistry Seminar Series. Stockholm University (Sweden).
12/06/2018.

FELLOWSHIPS and AWARDS

- 2020 2020 Thieme Chemistry Journals Award.
- 2019 Ramon y Cajal Programme Awardee (Spanish State Research Agency).
- 2019 Swedish Research Council (Vetenskapsrådet) Starting Research Grant.
- 2018 Assistant Professorship at Stockholm University (Sweden).
- 2018 “X SusChem Young Chemists Awards” in the category PostDoc.
- 2014 COFUND-IPMP (European Research Council–Marie Curie Actions).
- 2014 Best PhD Thesis in Chemistry Award. University of Murcia (Spain).
- 2012 Finalist in the “IV SusChem Young Chemists Awards” in the category PreDoc.
- 2009 Travel Scholarship for visiting foreign research institutions. Fundación Séneca-Región de Murcia (Spain).
- 2007 Research Scholarship. Fundación Séneca-Región de Murcia (Spain).
- 2007 Research Scholarship. University of Murcia (Spain).